

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs					Data for ARIDs					Reports			Remarks					
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID		SF	English (Summary/Full)	Japanese	Date of latest evaluation	
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value
1	Abamectin (consists of avermectin B1a and B1b)	71751-41-2	Agricultural products : Abamectin, 8-Z avermectin B1a	Pesticides & Veterinary Medicinal Products	Insecticide	16 membered macrolide	Inhibition of neural transmission	Negative	Tremor, Mydriasis	Oral(gavage)	Developmental neurotoxicity study	6 days of pregnancy - 21 days postnatal	Rat	Low body weight : Offspring	LOAEL: 0.12 mg/kg bw per day	ADI: 0.0006 mg/kg bw	SF:200 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI:2	(a)Oral(gavage) (b)Oral(feed)	(a)Acute neurotoxicity study (b)Subacute and Chronic toxicity study	(a)Rat (b)Dog	(a)Reduced leg spread reflex (b)Tonic convulsion, Loss of pupillary reflex, Salivation, Ataxic gait, Vomiting, Anorexia	NOAEL: 0.5 mg/kg bw per day	0.005 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20150623388&fileId=202	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20150623388&fileId=202	2015/12/22	—
2	Acephate	30560-19-1	Agricultural and livestock products : Acephate, Methamidophos	Pesticides	Insecticide	Organophosphorus	Inhibition of acetylcholinesterase activity	Negative	Inhibition of brain and erythrocyte CHE activity(more than 20%), Blood(Anemia), Nasal cavity(Degeneration / Regeneration of olfactory epithelium) / Tumorigenesis of nasal cavity : Rat, Increased incidence of liver tumor : Female mouse / Decreased number of implantation : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Inhibition of brain and erythrocyte CHE activity(more than 20%)	NOAEL: 0.24 mg/kg bw per day	ADI: 0.0024 mg/kg bw	SF:100	Oral(capsule)	Single-dose toxicity study	Human	No adverse effect observed at highest level(1 mg/kg bw)	NOAEL: 1 mg/kg bw	0.1 mg/kg bw	SF:10	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a201602094956&fileId=202	2016/12/13	—
3	Acequinocyl	57960-19-7	Agricultural products : Acequinocyl, 3-dodecyl-2-hydroxy-1,4-naphthoquinone	Pesticides	Insecticide (Acaricide)	Quinone	Inhibition of electron transfer system in photosynthesis	Negative	Blood clotting (coagulation) disorders	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Enlargement of eyeball : Male	NOAEL: 2.25 mg/kg bw per day	ADI: 0.022 mg/kg bw	SF:100	Oral(feed)	Two-generation reproductive activity study	Rat	Hemorrhage, Swelling, Death : Offspring	NOAEL: 7.3 mg/kg bw per day	0.073 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20121208245&fileId=210	2012/5/10	—
4	Acetamidiprid	135410-20-7	Agricultural products : Acetamidiprid(Parent compound only) Livestock products : Acetamidiprid, N1-[(6-chloro-3-pyridyl)methyl]-N2-cyanoacetamide	Pesticides	Insecticide	Neonicotinoid	Action as an agonist at the nicotinic acetylcholine receptor, affecting the synapses	Negative	Suppressed body weight gain, Hepatocellular hypertrophy	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Hepatocellular hypertrophy : Male	NOAEL: 7.1 mg/kg bw per day	ADI: 0.071 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Decreased locomotor activity : Male	NOAEL: 10 mg/kg bw	0.1 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20140702188&fileId=201	2014/12/16	—
5	Acetochlor	34256-82-1	Agricultural products : Acetochlor(Parent compound only)	Pesticides	Herbicide	Acid amide	Inhibition of very long chain fatty acid synthesis	Negative	Liver(Hepatocellular atrophy, Hepatocellular necrosis), Thyroid(Increased organ weights), Kidney(Basophilic tubule, Chronic nephrosis), Testis(Seminiferous tubular degeneration, Polyarteritis), Central nervous system(Convulsion)/Increased liver, thyroid and nasal cavity tumor : Rat, Increased liver, lung, kidney and uterus tumor : Mouse./Reduced implantation rate : Rat	Oral(feed)	Carcinogenicity study	18 months	Mouse	Hyperplasia of bronchiolar epithelium : Male	NOAEL: 1.1 mg/kg bw per day	ADI: 0.011 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a201312180036&fileId=201	2013/7/29	—
6	Acibenzolar-S-methyl	135158-54-2	Agricultural products : Acibenzolar-S-methyl(Parent compound only)	Pesticides	Fungicide	Benzothiazole	Induction of systemic acquired resistance	Negative	Suppressed body weight gain, Blood(Hemolytic anemia), Liver(Hemosiderin deposition in Kupffer cell), Spleen(Pigment deposition, Hemosiderin deposition, Extramedullary hematopoiesis)/External, internal and skeletal abnormalities : Rat(Fetus), Caudal vertebral anomaly : Rabbit(Fetus), High amplitude of auditory startle reaction : Rat(Offspring)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Pigment deposition of spleen	NOAEL: 7.77 mg/kg bw per day	ADI: 0.077 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Suppressed body weight gain, Decreased feed intake : Maternal, Increased incidence of skeletal variation : Fetus	NOAEL: 50 mg/kg bw per day	0.5 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20111011233&fileId=901	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20111011233&fileId=901	2018/2/13	The English report is the first edition published on March 24, 2015
7	Acifluorfen (Acifluorfen-sodium)	62476-59-9	Food products : Acifluorfen-sodium, Acifluorfen, Acifluorfen amine	Pesticides	Herbicide	Diphenyl ether	Inhibition of protoporphyrinogen oxidase activity	Negative	Liver(Hepatocellular hypertrophy), Kidney(Increased organ weights, Nephritis), Stomach(Ulcer), Blood(Anemia)/Increased incidence of liver tumors and forestomach papillomas : Mouse	Oral(feed)	Carcinogenicity study	2 years	Mouse	Increased ALP : Female	NOAEL: 1 mg/kg bw per day	ADI: 0.01 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20100311018&fileId=021	2010/7/29	—
8	Acrinathrin	101007-06-1	Agricultural products : Acrinathrin(Parent compound only)	Pesticides	Insecticide	Pyrethroid	Inhibition of neural transmission	Negative	Suppressed body weight gain, Decreased feed intake, Skin(Crust formation)/Increased incidence of benign ovarian granulosa and theca cell tumors : Female rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain, Decreased feed intake	NOAEL: 1.61 mg/kg bw per day	ADI: 0.016 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Hypothermia : Male, Suppressed body weight gain : Female	NOAEL: 3 mg/kg bw	0.03 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20111011230&fileId=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20111011230&fileId=211	2018/2/27	—
9	Acynonyapyr	1332838-17-1	Agricultural products : Acynonyapyr, 3-ends-(2-proxyoxy-4-(trifluoromethyl)phenoxy)-9-azabicyclo[3.3.1]nonane Fishery products : Acynonyapyr(Parent compound only)	Pesticides	Insecticide (Acaricide)	—	Action on the inhibitory glutamate receptor	Negative	Suppressed body weight gain, Blood(Anemia), Liver(Hepatocellular hypertrophy), Kidney(Basophilic tubule), Accumulation/Vacuolization of foam cell(Lung, Lymph node, Thyroid and Liver)/Mesenteric lymph node hemangioma, Thyroid follicular cell adenoma : Male rat, Increased incidence of malignant lymphoma : Male mouse./ Decreased number of implantation, Reduced copulation rate and Reduced conception rate : Rat	Oral(capsule)	Chronic toxicity study	1 year	Dog	Increased sternal bone marrow hematopoiesis	NOAEL: 4 mg/kg bw per day	ADI: 0.04 mg/kg bw	SF:100	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20170927101&fileId=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20170927101&fileId=211	2022/3/9	The English report is the first edition published on April 17, 2018
10	Afidopropen	915972-17-7	Agricultural products : Afidopropen(Parent compound only) Livestock products : Afidopropen, (2R)-3-carboxy-2-(cyclopropylcarbonyloxy)-N,N,N-trimethylpropan-1-aminium	Pesticides	Insecticide	Pyropene	Suppression of eating behavior	Negative	Suppressed body weight gain, Heart(Myocardial vacuolation), Liver(Increased organ weights, Fatty degeneration), Cerebrum(Vacuolation of white matter and neuropil : Dog), Uterus(Hyperplasia of endometrium)/Increased incidence of uterine adenocarcinoma : Rat./Decreased number of implantation and infant, Decrease of prolactin, Decreased ovary weight : Rat	Oral(capsule)	Chronic toxicity study	1 year	Dog	Hepatocellular hyaline droplet deposition	NOAEL: 8 mg/kg bw per day	ADI: 0.08 mg/kg bw	SF:100	Oral(feed)	Measurement of prolactin	Rat	Decrease of prolactin in the blood : Female	NOAEL: 18.2 mg/kg bw per day	0.18 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20210630143&fileId=210	2021/10/5	—
11	Alachlor	15972-60-8	Agricultural, livestock and fishery products : Alachlor(Parent compound only)	Pesticides	Herbicide	Acid amide	Inhibition of very long chain fatty acid synthesis	Negative	Liver(Fatty degeneration), Eye(Retinopathy), Nasal cavity(Inflammation), Glandular stomach(Mucosal atrophy), Thyroid(Follicle epithelium cyst)/Increased glandular stomach, nasal cavity and thyroid tumors : Rat	Oral(feed)	Chronic toxicity study	1 year	Dog	Diarrhea, Mucous feces, Salivation	NOAEL: 1 mg/kg bw per day	ADI: 0.01 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130123009&fileId=201	2013/3/18	—
12	Aldicarb	116-06-3	Agricultural and livestock products : Aldicarb, Aldicarb sulfonate, Aldicarb sulfone	Pesticides	Insecticide	Carbamate	Inhibition of cholinesterase activity	Negative	Inhibition of brain and erythrocyte CHE activity(more than 20%)	Oral(unspecified)	Acute toxicity study	Single	Human	Inhibition of erythrocyte CHE activity(more than 20%)	LOAEL: 0.025 mg/kg bw	ADI: 0.00025 mg/kg bw	SF:100 interspecies variation:1 interindividual variation:10 LOAEL is used to estimate the ADI:10	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20111011999&fileId=201	2013/9/30	—
13	Aldoxycarb	1646-88-4	Agricultural products : Aldoxycarb(Parent compound only)	Pesticides	Insecticide	Carbamate	Inhibition of cholinesterase activity	Negative	Inhibition of erythrocyte CHE activity(more than 20%)	Oral(feed)	Chronic toxicity study	1 year	Dog	Inhibition of erythrocyte CHE activity(more than 20%) : Female	NOAEL: 0.11 mg/kg bw per day	ADI: 0.00036 mg/kg bw	SF:300 interspecies variation:10 interindividual variation:10 insufficiency of data:3	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20110821002&fileId=201	2011/7/14	—
14	Aldrin	309-00-2	Agricultural and livestock products : Aldrin, Dieldrin	Pesticides	Insecticide	Organochlorine	Effects on GABA receptors	Negative	Liver(Centriobular hepatocellular hypertrophy), Kidney(Distal tubular vacuolation), Nervous system(Tremor, Convulsion, Ataxia)/Increased thyroid follicular cell adenoma/carcinoma : Rat, Increased hepatocellular carcinoma : Mouse./Reduced incisor eruption time, Prolongation of testicular descent time : Rat and Hamster, Syndactyly, Cleft palate and Open eyelid : Mouse	Oral(feed)	Chronic toxicity study	2 years	Rat	Histopathological change : Liver	LOAEL: 0.025 mg/kg bw per day	TDI: 0.000025 mg/kg bw	UF:1000 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI:10	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2013061224&fileId=201	2013/8/5	Currently prohibited for production and use
15	Ametoctradin	865318-97-4	Agricultural and livestock products : Ametoctradin(Parent compound only)	Pesticides	Fungicide	Pyrimidinylamine	Inhibition of electron transfer system in photosynthesis	Negative	Suppressed body weight gain	Oral(feed)	Chronic toxicity study	1 year	Dog	Suppressed body weight gain	NOAEL: 273 mg/kg bw per day	ADI: 2.7 mg/kg bw	SF:100	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20190123007&fileId=212	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20190123007&fileId=212	2022/10/26	The English report is the second edition published on July 9, 2019

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs					Data for ARIDs					Reports			Remarks						
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID		SF	English (Summary/Full)	Japanese	Date of latest evaluation		
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value	
43	Bifenthrin	82657-04-3	Agricultural and livestock products : Bifenthrin(Parent compound only)	Pesticides	Insecticide	Pyrethroid	Inhibition of neural transmission	Negative	Nervous system(Tremor)/Increased incidence of urinary bladder leiomyosarcoma (subcutaneous tumor) : Male mouse	Oral(gavage)	Developmental toxicity study	6 - 15 days of pregnancy	Rat	Tremor : Maternal	NOAEL: 1 mg/kg bw per day	ADI: 0.01 mg/kg bw	SF:100	Oral(capsule)	Subacute toxicity study	Dog	Tremor : Male	NOAEL: 5 mg/kg bw per day	0.05 mg/kg bw	SF:100	-	https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a20190619026&field=211	2022/8/24	-	
44	Bixafen	581809-46-3	- Agricultural products : Bixafen(Parent compound only) - Livestock products : Bixafen, N-(3',4'-dichloro-5-fluorophenyl)-2-yl)-3-(difluoromethyl)-1H-pyrazole-4-carboxamide	Pesticides	Fungicide	Pyrazolocarboxamide	Inhibition of electron transfer system in photosynthesis	Negative	Liver(Hepatocellular hypertrophy), Thyroid(Hypertrophy of follicular cell)/Increased retroesophageal right subclavian artery, Increased skeletal anomaly : Rabbit(Fetus)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Centrilobular hepatocellular hypertrophy	NOAEL: 1.98 mg/kg bw per day	ADI: 0.019 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Decreased body weight, Suppressed body weight gain, Decreased feed intake : Maternal	NOAEL: 20 mg/kg bw per day	0.2 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a20190619026&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a20190619026&field=211	2020/2/25	-	
45	Boscalid	188425-85-6	Agricultural products : Boscalid(Parent compound only)	Pesticides	Fungicide	Anilide	Inhibition of electron transfer system in photosynthesis	Negative	Thyroid(Diffuse hypertrophy of follicular cell), Liver(Centrilobular hepatocellular hypertrophy)/Trend in increased thyroid follicular cell adenoma : Rat	Oral(feed)	Chronic toxicity study	2 years	Rat	Increased GGT : Male	NOAEL: 4.4 mg/kg bw per day	ADI: 0.044 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Decreased body weight and feed intake, Suppressed body weight gain : Maternal	NOAEL: 300 mg/kg bw per day	3 mg/kg bw	SF:100	Report https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a2003117033&field=06_001_003	2016/9/27	The English report is the first edition published on May 20, 2004		
46	Broflanilide	120727-04-5	- Agricultural products : Broflanilide(Parent compound only) - Livestock products : Broflanilide, 3-benzamide-N-(2-bromo-4-(perfluoropropyl)-2-yl)-6-(trifluoromethyl)phenyl)-2-fluorobenzamide	Pesticides & Veterinary Medicinal Products	Insecticide	-	Disturbance of chloride channel	Negative	Suppressed body weight gain, Blood(Anemia : Rat), Adrenal gland(Increased organ weight, Cortical vacuolization), Ovary(Increased organ weight, Vacuolization of stromal cell : Rat), Uterus(Glandular hyperplasia : Rat)/Increased incidence of testicular interstitial cell tumor : Male rat, Increased incidence of total of endometrium adenoma, luteoma, theca cell tumor, granulosa tumor and sex cord stromal tumor : Female rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	1 year	Rat	Cortical vacuolization of adrenal gland : Male	NOAEL: 1.7 mg/kg bw per day	ADI: 0.017 mg/kg bw	SF:100	-	-	-	-	-	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	-	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a20190220026&field=212	https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a20190220026&field=212	2023/10/4	The English report is the first edition published on October 8, 2019
47	Bromacil	314-40-9	Agricultural products : Bromacil(Parent compound only)	Pesticides	Herbicide	Uracil	Inhibition of Hill reaction	Negative	Suppressed body weight gain, Liver(Increased organ weight, Hepatocellular hypertrophy), Testis(Testis atrophy, Spermatozoic necrosis : Mouse)/Increased incidence of total of hepatocellular adenoma and carcinoma : Mouse	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain	NOAEL: 1.96 mg/kg bw per day	ADI: 0.019 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Suppressed body weight gain, Decreased feed intake : Maternal	NOAEL: 20 mg/kg bw per day	0.2 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a20130612179&field=202	2016/5/17	-		
48	Brombutide	74712-19-9	Food products : Brombutide, N-(α , α -dimethylbenzyl)-3,3-dimethylbutyramide	Pesticides	Herbicide	Amide	Inhibition of cell division	Negative	Liver(Increased organ weight)	Oral(feed)	Two-generation reproductive activity study	-	Rat	Suppressed body weight gain : Parent	NOAEL: 4 mg/kg bw per day	ADI: 0.04 mg/kg bw	SF:100	-	-	-	-	-	Not evaluated	-	-	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a20130612179&field=202	https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a20130612179&field=202	2008/1/10	-
49	Buprofezin	953030-84-7	Agricultural, livestock and fishery products : Buprofezin(Parent compound only)	Pesticides	Insecticide	Thiadiazine	Inhibition of chitin synthesis	Negative	Suppressed body weight gain, Liver(Increased organ weight, Hepatocellular hypertrophy), Thyroid(Increased organ weight, Hypertrophy of follicular epithelial cell)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Hypertrophy and hyperplasia of follicular epithelial cell in thyroid	NOAEL: 0.9 mg/kg bw per day	ADI: 0.009 mg/kg bw	SF:100	(a)Oral(capsule) (b)Oral(gavage)	(a)Subacute toxicity study (b)Developmental toxicity study	(a)Dog (b)Rabbit	(a)Sedation, Slight ataxic gait (b)Decreased body weight, Trend in decreased feed intake : Maternal	NOAEL: 50 mg/kg bw per day	0.5 mg/kg bw	SF:100	-	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a2019052&field=210	2019/6/18	-	
50	Butachlor	23184-66-9	Agricultural and fishery products : Butachlor(Parent compound only)	Pesticides	Herbicide	Acid amide	Inhibition of very long chain fatty acid synthesis	Negative	Liver(Hepatocellular hypertrophy), Kidney(Weight changing, Chronic nephrosis), Glandular stomach(mucosal atrophy), Nasal cavity(Hyperplasia of goblet cell), Thyroid(Hyperplasia), Blood(Anemia)/Increased incidence of stomach, thyroid and nose tumor : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Chronic nephrosis	NOAEL: 1 mg/kg bw per day	ADI: 0.01 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Decreased body weight, Suppressed body weight gain : Maternal	NOAEL: 49 mg/kg bw per day	0.49 mg/kg bw	SF:100	-	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a20230303&field=06_001_001	2023/11/1	-	
51	Butamifos	36335-67-8	Food products : Butamifos(Parent compound only)	Pesticides	Herbicide	Organophosphorus	Inhibition of cell division	Negative	Inhibition of brain erythrocyte CHE activity(more than 20%)/Decreased number of offspring during lactation	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Inhibition of erythrocyte CHE activity(more than 20%)	NOAEL: 0.8 mg/kg bw per day	ADI: 0.008 mg/kg bw	SF:100	-	-	-	-	-	Not evaluated	-	-	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a20090401003&field=02	2009/2/12	-	
52	Cadusafos	95465-99-9	Agricultural products : Cadusafos(Parent compound only)	Pesticides	Nematicide	Organophosphorus	Inhibition of acetylcholinesterase activity	Negative	Inhibition of brain and erythrocyte CHE activity(more than 20%)	Oral(feed)	Two-generation reproductive activity study	-	Rat	Suppressed body weight gain, Inhibition of erythrocyte CHE activity(more than 20%) : Parent	NOAEL: 0.025 mg/kg bw per day	ADI: 0.00025 mg/kg bw	SF:100	Oral(gavage)	CHE inhibitor study	Rat	Inhibition of erythrocyte CHE activity(more than 20%)	NOAEL: 0.5 mg/kg bw	0.005 mg/kg bw	SF:100	-	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a2009014&field=210	2015/5/18	-	
53	Cafenstrole	125306-83-4	- Agricultural products : Cafenstrole(Parent compound only) - Fishery products : Cafenstrole, 3-(2,4,6-trimethylphenylsulfonyl)-1,2,4-triazole	Pesticides	Herbicide	Triazole	Inhibition of very long chain fatty acid synthesis	Negative	Small intestine(Vacuolation of jejunal villus epithelium, Opalescence change of jejunal mucosa), Liver(Decreased absolute/relative weight, Fatty degeneration of biliary epithelial cell), Degeneration of nerve fiber	Oral(capsule)	Chronic toxicity study	1 year	Dog	Decreased Hb, Ht and RBC : Female	NOAEL: 0.3 mg/kg bw per day	ADI: 0.003 mg/kg bw	SF:100	-	-	-	-	-	Not evaluated	-	-	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a20081030037&field=06_001_001	2008/2/21	-	
54_1	Captan	133-06-2	Agricultural and livestock products : Captan(Parent compound only)	Pesticides	Fungicide	Phthalimide	Inhibition of SH-enzymes	Negative	Suppressed body weight gain, Small intestine(Duodenal mucosal hyperplasia : Mouse)/Duodenal adenoma and adenocarcinoma : Mouse/External anomaly, Internal anomaly and Skeletal anomaly : Rabbit and Hamster	Oral(gavage)	Developmental toxicity study	7 - 19days of pregnancy	Rabbit	Suppressed body weight gain, Decreased body weight : Maternal, Skeletal variation : Fetus	NOAEL: 10 mg/kg bw per day	ADI: 0.1 mg/kg bw	SF:100	Oral(unspecified)	Pharmacological study	Mouse	Reduced motor activity and Soft feces	NOEL: 300 mg/kg bw (for general population)	3 mg/kg bw (for general population)	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a20120123003&field=202	https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a20120123003&field=202	2021/2/16	The English report is the first edition published on March 7, 2017	
54_2	Captan	133-06-2	Agricultural and livestock products : Captan(Parent compound only)	Pesticides	Fungicide	Phthalimide	Inhibition of SH-enzymes	Negative	Suppressed body weight gain, Small intestine(Duodenal mucosal hyperplasia : Mouse)/Duodenal adenoma and adenocarcinoma : Mouse/External anomaly, Internal anomaly and Skeletal anomaly : Rabbit and Hamster	Oral(gavage)	Developmental toxicity study	7 - 19days of pregnancy	Rabbit	Suppressed body weight gain, Decreased body weight : Maternal, Skeletal variation : Fetus	NOAEL: 10 mg/kg bw per day	ADI: 0.1 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Increased of postimplantation loss rate and number of dead embryos : Maternal, External anomaly, Internal anomaly and Skeletal anomaly : Fetus	NOAEL: 30 mg/kg bw per day (for women of childbearing age)	0.3 mg/kg bw (for women of childbearing age)	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a20120123003&field=202	https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a20120123003&field=202	2021/2/16	The English report is the first edition published on March 7, 2017	
55	Carbaryl	63-25-2	Agricultural and livestock products : Carbaryl(Parent compound only)	Pesticides & Veterinary Medicinal Products	Insecticide	Carbamate	Inhibition of acetylcholinesterase activity	Negative	Inhibition of CHE activity(more than 20%), Liver(Centrilobular hepatocellular hypertrophy), Kidney(Hyperplasia of pelvic transitional epithelium), Urinary bladder(Hyperplasia of transitional epithelial : Rat, Protein like intracytoplasmic droplets in the transitional epithelium : Mouse) , Thyroid(Hypertrophy of follicular cell : Rat), Blood(Anemia : Mouse)	Oral(feed)	Carcinogenicity study	2 years	Mouse	Vascular tumors(Hemangiosarcomas)	LOAEL: 14.7 mg/kg bw per day	ADI: 0.0073 mg/kg bw	SF:200 interspecies variation:10 interindividual variation:10 Carcinogenic LOAEL is used to estimate the ADI:20	Oral(gavage)	Acute/Subacute/Developmental neurotoxicity study and CHE inhibitor study	Rat	Inhibition of brain and erythrocyte CHE activity(more than 20%)	NOAEL: 1 mg/kg bw per day	0.01 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a20120918650&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a20120918650&field=211	2018/9/4	-	
56	Carbofuran	1563-66-2	Agricultural and livestock products : Carbofuran, 3-hydroxy-carbofuran(including conjugated form)	Pesticides	Insecticide	Carbamate	Inhibition of acetylcholinesterase activity	Negative	Inhibition of erythrocyte and brain CHE activity(more than 20%), Suppressed body weight gain / Increased number of stillborn infant, Reduced survival rate of offspring, Developmental delay : Rat	Oral(gavage)	CHE inhibitor study	Single	Rat	Inhibition of brain CHE activity(more than 20%) : Juvenile rat(11 days postnatal)	LOAEL: 0.03 mg/kg bw	ADI: 0.00015 mg/kg bw	SF:200 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI:2	Oral(gavage)	CHE inhibitor study	Rat	Inhibition of liver AChE activity (more than 20%) : Maternal, Inhibition of whole blood AChE activity(more than 20%) : Fetus	LOAEL: 0.03 mg/kg bw	0.00015 mg/kg bw	SF:200 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI:2	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a200900505&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?wload?retrieveId=ky-a200900505&field=211	2020/2/4	-	

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs					Data for ARIDs					Reports			Remarks							
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID		SF	English (Summary/Full)	Japanese	Date of latest evaluation			
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value		
57	Carbosulfan	55285-14-8	• Agricultural and livestock products : Carbosulfan, Carbofuran, 3-hydroxy-carbofuran(including conjugated form of either) • Fishery products : Carbosulfan, Carbofuran	Pesticides	Insecticide	Carbamate	Inhibition of acetylcholinesterase activity	Negative	Inhibition of erythrocyte and brain ChE activity(more than 20%). Suppressed body weight gain, Eye/iris atrophy, Retinal degeneration : Rat) / Reduced number of newborn offspring, Decreased survival rate at four days postnatal : Rat	Oral(gavage)	Acute neurotoxicity study	Single	Rat	Inhibition of erythrocyte and brain ChE activity(more than 20%)	NOAEL: 0.5 mg/kg bw	ADI: 0.005 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Inhibition of erythrocyte and brain ChE activity(more than 20%)	NOAEL: 0.5 mg/kg bw	0.005 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20110210005&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20110210005&field=211	2020/2/4	—		
58	Carboxin	5234-68-4	• Agricultural products : Carboxin and its sulfoxide	Pesticides	Fungicide	—	Inhibition of electron transfer system in photosynthesis	Negative	Liver(Centriobular hepatocellular hypertrophy), Kidney(Chronic nephritis, Inflammatory and Degenerative changes)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	unspecified	Rat	Suppressed body weight gain, Increased BUN : Male	NOAEL: 0.8 mg/kg bw per day	ADI: 0.008 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20070306005&field=002	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20070306005&field=002	2008/9/25	—	
59	Carpropamid	104030-54-8	Food products : Carpropamid(Parent compound only)	Pesticides	Fungicide	Cyclopropanecarboxamide	Inhibition of melanin biosynthesis	Negative	Liver(Increased absolute/relative weight, Hepatocellular hypertrophy)	Oral(feed)	Chronic toxicity study	1 year	Dog	Increased relative liver weight : Female	NOAEL: 1.43 mg/kg bw per day	ADI: 0.014 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20070527006&field=002	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20070527006&field=002	2007/12/13	—	
60	Cartap hydrochloride ⅹ2	15263-52-2	Agricultural products : Cartap hydrochloride, Cartap, Nereistoxin(including metabolites that are composed to Nereistoxin by hydrolysis/oxidation under alkaline condition)	Pesticides	Insecticide	Nereistoxin	Inhibition of acetylcholinesterase activity	Negative	Suppressed body weight gain, Tremor	Oral(gavage)	Chronic toxicity study	2 years	Monkey	Suppressed body weight gain	NOAEL: 3 mg/kg bw per day	ADI: 0.03 mg/kg bw	SF:100	(a)(b) Oral(gavage)	(a)Acute neurotoxicity study (b)Pharmacological study	(a)Rat (b)Mouse	(a)Decreased length of hindlimb's stride : Female (b)Restlessness, Mydriasis and Hypothermia : Male	NOAEL: 10 mg/kg bw	0.1 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20181210142&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20181210142&field=211	2019/6/4	Evaluated as a group of Bensultap, Cartap hydrochloride and Thiocyclam hydrogen oxalate. Please see #61.		
61	Cartap hydrochloride, Thiocyclam hydrogen oxalate, Bensultap ⅹ2	15263-52-2 (as Cartap hydrochloride), 31895-22-4 (as Thiocyclam hydrogen oxalate), 17606-31-4 (as Bensultap)	Agricultural products : Cartap hydrochloride, Cartap, Thiocyclam, Bensultap, Nereistoxin(including metabolites that are composed to Nereistoxin by hydrolysis/oxidation under alkaline condition)	Pesticides	Insecticide	Nereistoxin	Inhibition of acetylcholinesterase activity	Negative	Suppressed body weight gain, Tremor, Convulsion, Blood(Anemia), Liver(Increased organ weights, Centriobular hepatocellular hypertrophy) / Increased incidence of testicular interstitial cell tumors : Rat	Oral(feed)	Two-generation reproductive activity study	—	Rat	Suppressed body weight gain	NOAEL: 2.52 mg/kg bw per day (as Bensultap), 1.6 mg/kg bw per day (as Cartap hydrochloride)	ADI: 0.016 mg/kg bw (as a group ADI of Cartap hydrochloride, Thiocyclam hydrogen oxalate and Bensultap)	SF:100	(a)(b)(c) Oral(gavage)	(a)Acute neurotoxicity study (b) Pharmacological study (c) Developmental toxicity study	(a)Rat (b)Mouse (c)Rabbit	(a)Decreased length of hindlimb's stride : Female (b)Restlessness, Mydriasis and Hypothermia : Male (c)Decreased body weight	NOAEL: (a)(b)10 mg/kg bw (as Cartap hydrochloride) (c)10 mg/kg bw per day (as Thiocyclam hydrogen oxalate), 10.1 mg/kg bw per day (as Cartap hydrochloride)	0.1 mg/kg bw (as a group ARID of Cartap hydrochloride, Thiocyclam hydrogen oxalate and Bensultap)	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20181210142&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20181210142&field=211	2019/6/4	—		
62	Chinomethionat	2439-01-2	Agricultural products : Chinomethionat(Parent compound only)	Pesticides	Acaricide, Fungicide	Quinoxaline	Inhibition of enzyme activity	Negative	Hematopoietic system(Anemia, Extramedullary hematopoiesis in spleen), Liver(Hepatocellular degeneration, Kupffer cell accumulation), Testis(Oligospermia : Rat), Epididymis(Decreased number of spermatozoon : Rat)	Oral(feed)	Chronic toxicity study	1 year	Dog	Kupffer cell accumulation	NOAEL: 0.644 mg/kg bw per day	ADI: 0.0064 mg/kg bw	SF:100	(a)(b) Oral(unspecified)	(a)(b) Pharmacological study	(a)Mouse (b)Rabbit	(a)Reduced reactivity : Female (b)Reduced motility, Hypothermia, Decreased respiration, Lower blood pressure : Male	NOAEL: 150 mg/kg bw	1.5 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20110325739&field=901	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20110325739&field=901	2018/3/6	The English report is the first edition published on November 10, 2015		
63	Chlorantraniliprole	500008-45-7	Agricultural, livestock and fishery products : Chlorantraniliprole(Parent compound only)	Pesticides	Insecticide	Anthranilic acid amide	Activating calcium release channels of ryanodine-sensitive intracellular	Negative	Liver(Centriobular hepatocellular hypertrophy, Altered hepatocellular foci)	Oral(feed)	Carcinogenicity study	18 months	Mouse	Centriobular hepatocellular hypertrophy and Altered hepatocellular foci : Male	NOAEL: 158 mg/kg bw per day	ADI: 1.5 mg/kg bw	SF:100	—	—	—	—	—	—	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2016111440&field=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2016111440&field=201	2017/4/18	—	
64	Chlorethoxyfos	54593-83-8	Agricultural products : Chlorethoxyfos(Parent compound only)	Pesticides	Insecticide	Organophosphorus	Inhibition of cholinesterase activity	Negative	Inhibition of erythrocyte and brain ChE activity(more than 20%)	Oral(feed)	Chronic toxicity study	1 year	Dog	Inhibition of erythrocyte ChE activity(more than 20%)	NOAEL: 0.063 mg/kg bw per day	ADI: 0.00063 mg/kg bw	SF:100	—	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20080311020&field=002	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20080311020&field=002	2009/1/8	—
65	Chlorfenapyr	122453-73-0	Agricultural products : Chlorfenapyr(Parent compound only)	Pesticides	Insecticide (Acaricide)	Pyrrrole	Conjugative inhibition of oxidative phosphorylation	Negative	Nervous system(Vacuolation of myelin sheath), Liver(Hepatocellular hypertrophy)	Oral(feed)	Chronic neurotoxicity study	1 year	Rat	Swelling of cerebellum and myelin sheath in the spinal cord : Male	NOAEL: 2.6 mg/kg bw per day	ADI: 0.026 mg/kg bw	SF:100	—	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2013061215&field=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2013061215&field=201	2013/7/29	—
66	Chlorfluazuron	71422-67-8	Agricultural and livestock products : Chlorfluazuron(Parent compound only)	Pesticides	Insecticide	Benzoylurea	Inhibition of chitin synthesis	Negative	Liver(Increased organ weight, Increased Chol), Thyroid(Hyperplasia of C-cell : Rat)/Increased incidence of endometrial stromal sarcoma : Mouse	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased T.Chol and E.Chol : Female	NOAEL: 3.3 mg/kg bw per day	ADI: 0.033 mg/kg bw	SF:100	—	—	—	—	—	—	Not Applicable	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20120718570&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20120718570&field=211	2023/5/17	The English report is the first edition published on December 12, 2017
67	Chlormequat (Chlormequat chloride)	999-81-5	Agricultural products : Chlormequat(Parent compound only)	Pesticides	Plant Growth Regulator	—	Inhibition of gibberellin biosynthesis	Negative	Suppressed body weight gain, Nervous system(Tremor, Salivation)/ Reduced conception rate, Decreased numbers of infant : Rat	(a)Oral(feed) (b)Oral(gavage)	(a)Chronic toxicity study (b)Developmental toxicity study	(a)1 year (b)7 - 19 days of pregnancy	(a)Dog (b)Rabbit	(a)Salivation (b)Death, Suppressed body weight gain : Maternal	NOAEL: 5 mg/kg bw per day	ADI: 0.05 mg/kg bw	SF:100	Oral(feed)	Chronic toxicity study	Dog	Diarrhea, Salivation	NOAEL: 5 mg/kg bw per day	0.05 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20170524028&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20170524028&field=211	2017/12/12	—		
68	Chloropicrin (Trichloronitromethane)	76-06-2 (as trichloronitromethane)	Agricultural products : Chloropicrin(Parent compound only)	Pesticides	Fungicide, Insecticide, Herbicide	—	Inhibition of SH-enzymes	Negative	Forestomach(Hyperplasia/Hyperkeratosis of mucosal epithelium), Blood(Anemia) / Increased incidence of bronchiolo-alveolar adenoma, bronchiolo-alveolar adenocarcinoma and hardenian gland adenoma : Mouse, Increased incidence of squamous epithelium papilloma and papillary carcinoma of forestomach : Female mouse	Oral(capsule)	Chronic toxicity study	1 year	Dog	Vomiting	NOAEL: 0.1 mg/kg bw per day	ADI: 0.001 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Reduced motor activity : Male, Decreased locomotor activity : Female	NOAEL: 50 mg/kg bw	0.5 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20170615051&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20170615051&field=211	2018/1/12	The English report is the first edition published on December 25, 2018		
69	Chlorothalonil	1897-45-6	• Agricultural products : Chlorothalonil(Parent compound only) • Livestock products : Chlorothalonil, 2,5,6-trichloro-4-hydroxyisophthalonitrile(Metabolite 1)	Pesticides	Insecticide	Phenyl	Action on protoplasm and enzyme protein	Negative	• Chlorothalonil : Kidney(Hyperplasia of proximal tubular epithelium), Forestomach(Hyperplasia of mucosal epithelium, Hyperkeratosis) / Increased incidence of forestomach papilloma/squamous cell carcinoma and renal tubular adenoma/adenocarcinoma : Rat and Mouse • Metabolite 1 : Blood(Anemia), Liver(Hepatocellular necrosis : Dog), Kidney(Tubular degeneration : Dog, Increased organ weight)	(a)(b)Oral(feed)	(a)Carcinogenicity study (b)Chronic toxicity study	(a)2 years (b)1 year	(a)Mouse (b)Dog	(a)Hyperkeratosis of forestomach mucosa, Hyperplasia of forestomach squamous : Male (b)Decreased RBC : Male	NOAEL: (a)1.86 mg/kg bw per day (as Chlorothalonil) (b)0.83 mg/kg bw per day (as Metabolite 1)	ADI: (a)0.018 mg/kg bw (as Chlorothalonil) (b)0.0083 mg/kg bw (as Metabolite 1)	SF:100	(a)(b) Oral(gavage)	(a)Single-dose toxicity study and histopathologic examination for kidney (b)Developmental toxicity study	(a)Rat (b)Rabbit	(a)Vacuolation of proximal tubular epithelium cell : Female (b)Increased number of early resorption : Fetus	NOAEL: (a)60 mg/kg bw (as Chlorothalonil) (b)2.5 mg/kg bw per day (as Metabolite 1)	(a)0.6 mg/kg bw (as Chlorothalonil) (b)0.025 mg/kg bw (as Metabolite 1)	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130612346&field=901	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130612346&field=901	2015/6/9	—		
70	Chlorpropham	101-21-3	Agricultural and livestock products : Chlorpropham(Parent compound only)	Pesticides	Herbicide, Plant Growth Regulator	Carbamate	Inhibition of cell division	Negative	Blood(Hemolytic anemia, Methemoglobinemia), Thyroid(Diffuse hyperplasia of follicular epithelial cell : Dog)/Increased incidence of testicular interstitial cell tumor : Rat	Oral(feed)	Chronic toxicity study	1 year	Dog	Increased absolute/relative thyroid weight	NOAEL: 5 mg/kg bw per day	ADI: 0.05 mg/kg bw	SF:100	Oral(gavage)	Single-dose toxicity study	Dog	Listless, Vomiting, Strong pulse	NOAEL: 50 mg/kg bw	0.5 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130612346&field=901	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130612346&field=901	2015/6/9	—		

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs					Data for ARIDs					Reports			Remarks						
										Point of Departure					Reference value	SF、UF	Point of Departure					ARID		SF	English (Summary/Full)	Japanese	Date of latest evaluation		
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value	
94	Cymoxanil	57966-95-7	Agricultural products : Cymoxanil(Parent compound only)	Pesticides	Fungicide	Cyanoacetamide	Inhibition of DNA and RNA replication	Negative	Testis(Atrophy, Oval degeneration of spermatid, Oligospermia : Dog), Epididymis(Atrophy, Increased polynuclear spermatid, Spermatic granuloma), Thymus(Decreased organ weight, Atrophy : Dog), Eye(Retinal atrophy), Nervous system(Hypersensitivity, Increased aggression : Male rat, Degeneration of sciatic nerve myelin sheath : Female rat/ Decreased number of corpus luteum and implantation : Rat, Dysplasia of stromal segment and Renal pelvic dilatation : Rat(Fetus), Ventricular enlargement, Renal pelvic dilatation, Cleft Palate : Rabbit	Oral(feed)	Chronic toxicity study	1 year	Dog	Testis Atrophy : Male	NOAEL: 1.3 mg/kg bw per day	ADI: 0.013 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Cleft Palate : Fetus	NOAEL: 8 mg/kg bw per day	0.08 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20110124687&field=202	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a201121145&field=210	2019/2/5	The English report is the third edition published on December 16, 2011	
95	Cypermethrin	52315-07-8	Agricultural and livestock products : Cypermethrin(Parent compound only ; including alpha-Cypermethrin and zeta-Cypermethrin)	Pesticides & Veterinary Medicinal Products	Insecticide	Pyrethroid	Inhibition of neural transmission	Negative	Suppressed body weight gain, Nervous system(Tremor)	Oral(feed)	Subacute toxicity study	13 weeks	Dog	Tremor	NOAEL: 2.25 mg/kg bw per day	ADI: 0.022 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Convulsion, Tremor	NOAEL: 4 mg/kg bw	0.04 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a201166&field=210	2018/3/27	—	
96	Cyprodinil	121552-61-2	Agricultural, livestock and fishery products : Cyprodinil(Parent compound only)	Pesticides	Fungicide	Anilino-pyrimidine	Inhibition of methionine biosynthesis	Negative	Liver(Hepatocellular hypertrophy, Spongy degeneration), Kidney(Chronic inflammation), Thyroid(Hypertrophy of follicular epithelial cell)/Increased incidence of mammary fibroadenoma : Female rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Hepatic spongy degeneration : Male	NOAEL: 2.7 mg/kg bw per day	ADI: 0.027 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2010913520&field=201	2012/9/24	—	
97	Cyromazine	66215-27-8	Agricultural products : Cyromazine(Parent compound only)	Pesticides & Veterinary Medicinal Products	Insecticide	Triazine	Inhibition of molting and metamorphosis	Negative	Suppressed body weight gain, Heart(Increased absolute/relative weight, Chronic myocarditis : Dog)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain : Female	NOAEL: 1.81 mg/kg bw per day	ADI: 0.018 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20081000022&field=06_001_001	2007/11/29	—	
98	Daimuron	412928-75-7	Food products : Daimuron(Parent compound only)	Pesticides	Herbicide	Urea	Inhibition of cell division	Negative	Suppressed body weight gain, Liver(Increased absolute/relative weight, Increased ALP)	Oral(feed)	Chronic toxicity study	1 year	Dog	Increased absolute/relative liver weight : Male	NOAEL: 30.6 mg/kg bw per day	ADI: 0.3 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20081030019&field=06_001_001	2007/11/8	—	
99	Dazomet #3	533-74-4	Agricultural products : Methyl isothiocyanate	Pesticides	Nematicide, Fungicide, Insecticide, Herbicide	Dithiocarbamate	Inhibition of SH-enzymes	Negative	Suppressed body weight gain, Blood(Anemia), Liver(Increased organ weight), Spleen(Hemosiderin deposition) / Increased postimplantation loss rate, Decreased the number of viable fetuses	Oral(feed)	Chronic toxicity study	1 year	Dog	Hemosiderin deposition in liver : Female	NOAEL: 0.4 mg/kg bw per day	ADI: 0.004 mg/kg bw	SF:100	Oral(feed)	Subacute toxicity study	Dog	Suppressed body weight gain	NOAEL: 2.8 mg/kg bw per day	0.028 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2010523009&field=210	2019/8/27	Evaluated as a group of Dazomet, Metam and Methyl isothiocyanate. Please see #100.	
100	Dazomet, Metam (Metam-ammonium, Metam-sodium, Metam-potassium), Methyl isothiocyanate (MITC) #3	533-74-4 (as Dazomet), 39680-90-5 (as Metam-ammonium), 137-42-8 (as Metam-sodium), 137-41-7 (as Metam-potassium), 555-61-6 (as Methyl isothiocyanate)	Agricultural products : Methyl isothiocyanate	Pesticides	Nematicide, Fungicide, Insecticide, Herbicide	Dithiocarbamate	Inhibition of SH-enzymes	Negative	Suppressed body weight gain, Liver(Increased organ weight, Hepatocellular fatty degeneration), Forestomach(Thickening)	(a)(b)Oral(gavage)	(a)(b)Subacute and Chronic toxicity study	(a)90 days (b)1 year	(a)(b)Dog	(a)Hepatocellular vacuolation and Periportal hepatocellular fatty degeneration (b)Increased absolute/relative liver weight	NOAEL: 0.4 mg/kg bw per day	ADI: 0.004 mg/kg bw (as a group ADI of Dazomet, Metam and Methyl isothiocyanate)	SF:100	(a)(b)Oral(gavage)	(a)(b)Pharmacological study	(a)Mouse (b)Rabbit	(a)Increased responsiveness and reflex, Hypersensitivity : Male (b)Hypothermia, Abnormal posture, Hypernea : Male	NOAEL: 10 mg/kg bw (as a group ARID of Dazomet, Metam and Methyl isothiocyanate)	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2010523009&field=210	2019/8/27	—		
101	Deltamethrin #4	52918-63-5	Agricultural and livestock products : Deltamethrin(total amount of the isomers)	Pesticides & Veterinary Medicinal Products	Insecticide	Pyrethroid	Inhibition of neural transmission	Negative	Suppressed body weight gain, Nervous system(Convulsion)	(a)(c)Oral(feed) (b)Oral(capsule)	(a)Combined chronic toxicity/carcinogenicity study (b)(c)Chronic toxicity study	(a)(c)2 years (b)1 year	(a)Rat (b)(c)Dog	(a)Suppressed body weight gain (b)Abnormal behavior, Watery stool (c)No toxicological effect	NOAEL: 1 mg/kg bw per day	ADI: 0.01 mg/kg bw	SF:100	Oral(capsule)	Subacute toxicity study	Dog	Pupillary dilation	NOAEL: 1 mg/kg bw per day	0.01 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130808261&field=301	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130808261&field=301	2015/1/13	Evaluated as a group of Deltamethrin and Tralomethrin. Please see #102.	
102	Deltamethrin, Tralomethrin #4	52918-63-5 (as Deltamethrin), 66841-25-6 (as Tralomethrin)	Agricultural and livestock products : Deltamethrin(total amount of the isomers), Tralomethrin	Pesticides & Veterinary Medicinal Products	Insecticide	Pyrethroid	Inhibition of neural transmission	Negative	Suppressed body weight gain, Skin(Dermatitis), Nervous system(Convulsion)	(a)(b)Oral(gavage)	(a)(b)Combined chronic toxicity/carcinogenicity study	(a)(b)2 years	(a)Rat (b)Mouse	(a)Suppressed body weight gain (b)Dermatitis : Male	NOAEL: 0.75 mg/kg bw per day	ADI: 0.0075 mg/kg bw (as a group ADI of Deltamethrin and Tralomethrin)	SF:100	Oral(capsule)	Subacute toxicity study	Dog	Pupillary dilation	NOAEL: 1 mg/kg bw per day	0.01 mg/kg bw (as a group ARID of Deltamethrin and Tralomethrin)	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130808261&field=301	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130808261&field=301	2015/1/13	—	
103	Desmedipham	13684-56-5	Agricultural products : Desmedipham(Parent compound only)	Pesticides	Herbicide	Carbanilate	Inhibition of photosynthesis	Negative	Suppressed body weight gain, Blood(Hemolytic anemia, Methemoglobinemia), Thyroid(Hypertrophy of follicular cell)/External, internal and skeletal anomaly : Rat(Fetus)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased MethB and Ret	NOAEL: 3.2 mg/kg bw per day	ADI: 0.032 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Decreased body weight, Decreased feed intake : Maternal	NOAEL: 90 mg/kg bw per day	0.9 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20171012112&field=202	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20171012112&field=202	2017/7/4	—	
104	Diazinon	333-41-5	Agricultural, livestock and fishery products : Diazinon(Parent compound only)	Pesticides & Veterinary Medicinal Products	Insecticide	Organophosphorus	Inhibition of cholinesterase activity	Negative	Inhibition of erythrocyte and brain AChE activity(more than 20%), Neurological symptoms / Decreased copulation rate and fertility rate : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Inhibition of erythrocyte AChE activity(more than 20%)	NOAEL: 0.1 mg/kg bw per day	ADI: 0.001 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Inhibition of erythrocyte and brain AChE activity(more than 20%)	NOAEL: 2.5 mg/kg bw	0.025 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130312069&field=401	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130312069&field=401	2017/12/12	The English report is the first edition published on August 15, 2014	
105	Dicamba	1918-00-9	Agricultural and livestock products : Dicamba, 3,6-dichloro-2-hydroxybenzoic acid(3,6-dichlorosalicylic acid)	Pesticides	Herbicide	Benzoic acid	Auxin-like effect	Negative	Nervous system(Muscle tone, Abnormal gait), Suppressed body weight gain, Liver(Hepatocellular hypertrophy), Blood(Anemia)	Oral(capsule)	Developmental toxicity study	6 - 18 days of pregnancy	Rabbit	Suppressed body weight gain : Maternal	NOAEL: 30 mg/kg bw per day	ADI: 0.3 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2010813497&field=201	2012/10/29	—	
106	Dichlobenil	1194-65-6	Agricultural and fishery products : Dichlobenil(Parent compound only)	Pesticides	Herbicide	—	Induction of abnormal cell differentiation	Negative	Liver(Increased organ weight, Hepatocellular hypertrophy), Kidney(Increased organ weight, Increased incidence of chronic nephrosis), Blood(Anemia)/Increased hepatocellular tumor : Rat/Extra Rib : Rat, External anomaly or Internal anomaly : Rabbit	Oral(capsule)	Chronic toxicity study	1 year	Dog	Increased absolute/relative liver weight	NOAEL: 1 mg/kg bw per day	ADI: 0.01 mg/kg bw	SF:100	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2010922755&field=201	2014/7/1	—		
107	Dichlobentiaxox	957144-77-3	Agricultural products : Dichlobentiaxox(Parent compound only)	Pesticides	Fungicide	Benzoisothiazole-Isotiazole	Induction of disease resistance	Negative	Suppressed body weight gain, Blood(Anemia : Dog), Liver(Hypertrophy/Hyperplasia of biliary), Duodenum(Hypertrophy/Hyperplasia of villus epithelium)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Hypertrophy/Hyperplasia of duodenal villus epithelium	NOAEL: 5.03 mg/kg bw per day	ADI: 0.05 mg/kg bw	SF:100	—	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20181121129&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20181121129&field=211	2019/5/28	—

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs					Data for ARIDs					Reports			Remarks						
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID		SF	English (Summary/Full)	Japanese	Date of latest evaluation		
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value	
108	Dichlorimid	37764-25-3	Agricultural products : Dichlorimid(Parent compound only)	Pesticides	Herbicide Safeners	—	Acceleration of drug metabolism	Negative	Suppressed body weight gain, Liver(Centrilobular hepatocellular hypertrophy, Pigment deposition of biliary)	Oral(capsule)	Subacute toxicity study	90 days	Dog	Suppressed body weight gain	NOAEL: 5 mg/kg bw per day	ADI: 0.016 mg/kg bw	SF:300 interspecies variation:10 interindividual variation:10 insufficient number of data:3	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky200701120034&field=002	2008/5/15	—	
109	Dichlorodisopropyl ether	108-60-1	Agricultural products : DCIP(Parent compound only)	Pesticides	Nematicide	Organochlorine	Inhibition of enzyme activity by nucleophilic reaction	Negative	Suppressed body weight gain, Blood(Anemia)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain	NOAEL: 2.7 mg/kg bw per day	ADI: 0.027 mg/kg bw	SF:100	(a)(b) Oral(gavage)	(a)Subacute neurotoxicity study (b)Subacute toxicity study	(a)Rat (b)Dog	(a)Suppressed body weight gain : Male, Eyelid closure (b)Reduced motor activity, Decreased body weight and feed intake : Male	NOAEL: 50 mg/kg bw per day	0.5 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20100927563&field=202	https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20100927563&field=202	2017/2/28	—	
110	Dichlorprop (Dichlorprop-P)	120-36-5 (as Dichlorprop), 15165-67-0 (as Dichlorprop-P)	Agricultural products : Dichlorprop(Parent compound only including Dichlorprop-P)	Pesticides	Plant Growth Regulator	Chlorophenyl	Inhibition of ethylene production and cellulase activity	Negative	Suppressed body weight gain, Liver(Hepatocellular hypertrophy, Necrosis), Kidney(Increased organ weight)/Reduced gestation rate, Reduced copulation rate : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Decreased urinary specific gravity	NOAEL: 3.64 mg/kg bw per day	ADI: 0.036 mg/kg bw	SF:100	Oral(unspecified)	Pharmacological study	Mouse	Abnormal gait, Decreased locomotor activity : Male	NOEL: 30 mg/kg bw	0.3 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20130312059&field=202	https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20130312059&field=202	2017/7/4	—	
111	Diclocymet	139920-32-4	Food products : Diclocymet(Parent compound only)	Pesticides	Fungicide	Amide	Inhibition of melanin biosynthesis	Negative	Liver(Hepatocellular hypertrophy, Increased absolute/relative weight)/Increased incidence of hepatocellular adenoma : Male mouse	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Transient suppressed body weight gain	NOAEL: 0.5 mg/kg bw per day	ADI: 0.005 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20080110028&field=002	2008/12/18	—	
112	Dicloromezotiaz	1263629-39-5	Agricultural products : Dicloromezotiaz(Parent compound only)	Pesticides	Insecticide	mesolon	Action on the nicotinic acetylcholine receptor, affecting the synapses	Negative	Suppressed body weight gain/Increased incidence of malignant astrocytoma and testicular interstitial cell tumor : Male rat	Oral(feed)	Two-generation reproductive activity study	—	Rat	Suppressed body weight gain	NOAEL: 122 mg/kg bw per day	ADI: 1.2 mg/kg bw	SF:100	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	—	—	Summary https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20221124209&field=212	https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20221124209&field=212	2023/4/12	—
113	Diclosulam	145701-21-9	Agricultural products : Diclosulam(Parent compound only)	Pesticides	Herbicide	Triazolopyrimidine	Inhibition of acetolactate synthase(ALS)	Negative	Liver(Hepatocellular hypertrophy, Increased relative weight), Kidney(Renal pelvic epithelial hyperplasia, Decreased absolute/relative weight)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain, Decreased urinary specific gravity, Increased urine volume, Renal tubular degeneration	NOAEL: 5 mg/kg bw per day	ADI: 0.05 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky200806050114&field=002	2008/12/11	—	
114	Diclotophos	141-66-2	Agricultural products : Diclotophos(Parent compound only)	Pesticides	Insecticide	Organophosphorus	—	Negative	Inhibition of erythrocyte ChE activity(more than 20%)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Inhibition of brain, plasma and erythrocyte ChE activity(more than 20%)	LOAEL: 0.02 mg/kg bw per day	ADI: 0.000066 mg/kg bw	SF:300 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI:3	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20061219012&field=002	2007/5/24	—		
115	Dieldrin	60-57-1	Agricultural and livestock products : Aldrin, Dieldrin	Pesticides	Insecticide	Organochlorine	Effects on GABA receptors	Negative	Liver(Centrilobular hepatocellular hypertrophy), Nervous system(Tremor, Convulsion)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased liver weight	NOAEL: 0.005 mg/kg bw per day	TDI: 0.00005 mg/kg bw	UF:100	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky2013061224&field=201	2013/8/5	Currently prohibited for production and use		
116	Diethofencarb	87130-20-9	Agricultural products : Diethofencarb(Parent compound only)	Pesticides	Fungicide	N-phenyl carbamate	Inhibition of cell division	Negative	Suppressed body weight gain, Liver(Increased organ weight, Centrlobular hepatocellular hypertrophy)/Increased incidence of total of thyroid follicular cell adenoma/adenocarcinoma : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain	NOAEL: 42.7 mg/kg bw per day	ADI: 0.42 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Hypothermia, Decreased locomotor activity : Male	NOAEL: 200 mg/kg bw	2 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20150113249&field=501	https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20150113249&field=501	2022/8/31	The English report is the first edition published on May 12, 2015	
117	Difenoconazole	119446-68-3	Agricultural products : Difenoconazole(Parent compound only) Livestock products : Difenoconazole, 1-[2-chloro-4-(4-chlorophenoxy)phenyl]-2-(1H-1,2,4-triazole-1-yl) ethanol	Pesticides & Additives	Fungicide	Triazole	Inhibition of ergosterol biosynthesis	Negative	Suppressed body weight gain, Liver(Increased organ weight, Hepatocellular hypertrophy), Eye(Cataract : Dog), Muscle weakness of forelimb or hindlimb : Rat./Hepatocellular adenoma, Hepatocellular carcinoma : Mouse	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Hepatocellular hypertrophy	NOAEL: 0.96 mg/kg bw per day	ADI: 0.0096 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Muscle weakness of forelimb : Male	NOAEL: 25 mg/kg bw	0.25 mg/kg bw	SF:100	https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20220824142&field=210	https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20220824142&field=210	2022/12/14	—	
118	Diflubenzuron	35367-38-5	Agricultural and livestock products : Diflubenzuron(Parent compound only)	Pesticides & Veterinary Medicinal Products	Insecticide	Benzoylurea	Inhibition of chitin synthesis	Negative	Blood(Hemolytic anemia, Increased Methb)	Oral(feed)	Chronic toxicity study	1 year	Dog	Increased Methb and hepatic pigment deposition	NOAEL: 2 mg/kg bw per day	ADI: 0.02 mg/kg bw	SF:100	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	—	—	Summary https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20101210006&field=501	https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20101210006&field=501	2015/7/28	—
119	Diflufenican	83164-33-4	Agricultural products : Diflufenican(Parent compound only)	Pesticides	Herbicide	Phenoxyctic anilide	Inhibition of photosynthesis	Negative	Suppressed body weight gain, Decreased feed intake, Liver(Increased organ weight)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain	NOAEL: 23.3 mg/kg bw per day	ADI: 0.23 mg/kg bw	SF:100	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20160323351&field=201	2014/5/20	—		
120.1	Dimesulfazet	1215111-77-5	Agricultural and fishery products : Dimesulfazet(Parent compound only)	Pesticides	Herbicide	Sulfonanilide	—	Negative	Suppressed body weight gain, Kidney(Increased organ weight : rat), Urinary bladder(Epithelial hyperplasia of urinary tract : Mouse and Dog)/Increased maternal with abnormal fetus : Rabbit	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased relative kidney weight, Increased BUN : Male	NOAEL: 0.39 mg/kg bw per day	ADI: 0.0039 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Listless, Decreased number of rearings, Decreased motor activity : Female	LOAEL: 125 mg/kg bw (for general population)	0.41 mg/kg bw (for general population)	SF:300 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI:3	Summary https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20221124210&field=211	https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20221124210&field=211	2023/5/9	—	
120.2	Dimesulfazet	1215111-77-5	Agricultural and fishery products : Dimesulfazet(Parent compound only)	Pesticides	Herbicide	Sulfonanilide	—	Negative	Suppressed body weight gain, Kidney(Increased organ weight : rat), Urinary bladder(Epithelial hyperplasia of urinary tract : Mouse and Dog)/Increased maternal with abnormal fetus, Increased abnormal fetus : Rabbit	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased relative kidney weight, Increased BUN : Male	NOAEL: 0.39 mg/kg bw per day	ADI: 0.0039 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Increased maternal with abnormal fetus, Increased abnormal fetus	NOAEL: 15 mg/kg bw per day	0.15 mg/kg bw (for women of childbearing age)	SF:100	Summary https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20221124210&field=211	https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20221124210&field=211	2023/5/9	—	
121	Dimethametryn	22936-75-0	Agricultural and fishery products : Dimethametryn(Parent compound only)	Pesticides	Herbicide	Triazine	Inhibition of electron transfer system in photosynthesis	Negative	Liver(Single cell necrosis), Kidney(Pigment deposition of tubular epithelium), Pancreas(Vacuolation of exocrine glands)/Increased pancreatic exocrine glands tumor and testicular interstitial cell tumor : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased absolute/relative pancreas weight : Male	NOAEL: 0.94 mg/kg bw per day	ADI: 0.0094 mg/kg bw	SF:100	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachFile/download?wload=retrievalId=ky20071030002&field=201	2011/12/22	—		

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs						Data for ARIDs						Reports			Remarks					
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID	SF	English (Summary/Full)		Japanese	Date of latest evaluation			
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value		
122	Dimethenamid, Dimethenamid-P	87674-68-8 [as Dimethenamid (racemate)], 163515-14-8 [as Dimethenamid -P(S isomer)]	Agricultural and livestock products : Dimethenamid(Parent compound only)	Pesticides	Herbicide	Acid amide	Inhibition of very long chain fatty acid synthesis	Negative	Suppressed body weight gain, Liver(Hepatocellular hypertrophy)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain	NOAEL: 5.1 mg/kg bw per day	ADI: 0.051mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Suppressed body weight gain and Decreased feed intake : Maternal	NOAEL: 50 mg/kg bw per day	0.5 mg/kg bw	SF:100	-	-	https://www.fsc.go.jp/fscis/attachFile/download?no=1019124&fileId=210	2021/1/12	-	
123	Dimethomorph	110488-70-5	Agricultural and livestock products : Dimethomorph(Parent compound only)	Pesticides	Fungicide	Cinnamamide	Inhibition of hypha growth and sporulation	Negative	Suppressed body weight gain, Liver(Increased organ weight, Hepatocellular vacuolation)	Oral(feed)	Carcinogenicity study	2 years	Rat	Suppressed body weight gain : Female	NOAEL: 11.3 mg/kg bw per day	ADI: 0.11 mg/kg bw	SF:100	(a)(b) Oral(gavage)	(a)Acute neurotoxicity study (b)Developmental toxicity study	(a)(b)Rat	(a)Decreased locomotor activity : Female (b)Suppressed body weight gain, Decreased feed intake : Maternal	NOAEL: 60 mg/kg bw per day	0.6 mg/kg bw	SF:100	-	-	https://www.fsc.go.jp/fscis/attachFile/download?no=0824143&fileId=210	2023/2/24	-	
124	Dinotefuran	165252-70-0	Agricultural and livestock products : Dinotefuran(Parent compound only)	Pesticides & Veterinary Medicinal Products	Insecticide	Neonicotinoid	Action as an agonist at the nicotinic acetylcholine receptor, affecting the synapses	Negative	Suppressed body weight gain	Oral(feed)	Chronic toxicity study	1 year	Dog	Suppressed body weight gain : Female	NOAEL: 22 mg/kg bw per day	ADI: 0.22 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Reduced motor activity, Tremor : Maternal	NOAEL: 125 mg/kg bw per day	1.2 mg/kg bw	SF:100	-	-	https://www.fsc.go.jp/fscis/attachFile/download?no=0713077&fileId=201	2017/2/14	-	
125	Diquat (Diquat dibromide)	85-00-7	Agricultural and livestock products : Diquat(Parent compound only)	Pesticides	Herbicide	Bipyridylum	Cell destruction by peroxide	Negative	Suppressed body weight gain, Eye(Cataract : Rat and Dog), Tongue and Palate(Inflammation : Rat), Kidney(Renal tubular dilatation, Hyaline droplet formation in renal tubule : Mouse)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Cataract	NOAEL: 0.58 mg/kg bw per day (converted value for diquat ion)	ADI: 0.0058 mg/kg bw (converted into diquat ion)	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Diarrhea, Piloerection	NOAEL: 75 mg/kg bw (converted value for diquat ion)	0.75 mg/kg bw (converted value for diquat ion)	SF:100	-	Summary https://www.fsc.go.jp/fscis/attachFile/download?no=0123008&fileId=211	2019/10/8	-		
126	Dithianon	3347-22-6	Agricultural products : Dithianon(Parent compound only)	Pesticides	Fungicide	Quinone	Inhibition of SH-enzymes	Negative	Kidney(Chronic nephrosis, Renal tubular dilatation), Liver(Hepatocellular hypertrophy)/kidney tumor : Female rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased GGT and Glu : Male, Chronic nephrosis : Female	NOAEL: 1 mg/kg bw per day	ADI: 0.01 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Suppressed body weight gain : Maternal	NOAEL: 10 mg/kg bw per day	0.1 mg/kg bw	SF:100	-	-	https://www.fsc.go.jp/fscis/attachFile/download?no=0831241&fileId=210	2018/12/4	-	
127	Dithiopyr	97886-45-8	Food products : Dithiopyr(Parent compound only)	Pesticides	Herbicide	Pyridine	Inhibition of cell division	Negative	Liver(Increased absolute/relative weight, Diffuse hepatocyte swelling)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased Alb and T,Chol	NOAEL: 0.362 mg/kg bw per day	ADI: 0.0036 mg/kg bw	SF:100	-	-	-	-	-	-	-	-	-	-	https://www.fsc.go.jp/fscis/attachFile/download?no=1000039&fileId=06_001_001	2008/1/10	-
128	Emamectin benzoate	155569-91-8	• Agricultural products : Emamectin benzoate, 4'-deoxy-4'-epi-(N-formyl-N-(methyl)liverectin B1a and/or B1b) • Livestock products : Emamectin benzoate(Parent compound only) • Fishery products : Emamectin B1a	Pesticides & Veterinary Medicinal Products	Insecticide	16 membered macrocyclic lactone	Action on inhibitory neurotransmitter receptors	Negative	Suppressed body weight gain, Nervous system(Degeneration of brain, spinal cord and sciatic nerve)/Reduced conception rate and fertilization rate./Reduced auditory startle reaction : Offspring	Oral(gavage)	Acute and Chronic toxicity study	90 days and 1 year	Dog	Degeneration of white matter in brain, Atrophy of muscle, Degeneration of axon in brain and Peripheral nervous	NOAEL: 0.25 mg/kg bw per day	ADI: 0.0005 mg/kg bw (converted into free chlorine)	SF:500 interspecies variation:10 interindividual variation:10 small difference between LOAEL and NOAEL:5	Oral(gavage)	Subacute toxicity study and Repeated-dose neurotoxicity study	Dog	No neurological adverse effect observed at highest level (1.5 mg/kg bw per day) during a one-week dosing period	NOAEL: 1.5 mg/kg bw per day	0.015 mg/kg bw (converted into free chlorine)	SF:100	-	-	https://www.fsc.go.jp/fscis/attachFile/download?no=0326437&fileId=210	2023/7/6	-	
129	EPN	2104-64-5	Agricultural and fishery products : EPN(Parent compound only)	Pesticides	Insecticide	Organophosphorus	Inhibition of acetylcholinesterase activity	Negative	Inhibition of erythrocyte ChE activity(more than 20%)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Inhibition of erythrocyte ChE activity(more than 20%)	NOAEL: 0.14 mg/kg bw per day	ADI: 0.0014 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Slight piloerection and listless	LOAEL: 2 mg/kg bw	0.0066 mg/kg bw	-	SF:300 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI:3	-	-	https://www.fsc.go.jp/fscis/attachFile/download?no=0511022&fileId=201	2017/2/14	-
130	Epoxiconazole	133855-98-8	Agricultural and livestock products : Epoxiconazole(Parent compound only)	Pesticides	Fungicide	Triazole	Inhibition of ergosterol biosynthesis	Negative	Liver(Hepatocellular hypertrophy), Adrenal gland(Fat deposition of adrenal cortex : Rat), Ovary(Ovarian cyst : Rat)/Increased incidence of adrenal cortex tumor and granulosa-theca cell tumor : Female rat, Increased incidence of hepatocellular adenoma and hepatocellular carcinoma : Mouse /Reduced conception rate : Male rat, Hemorrhage of vagina, Extended gestation period, Increased number of stillborn infant and increased placenta weight : Female rat, Increased 14 ribs : Rat(Fetus)	Oral(feed)	Carcinogenicity study	18 months	Mouse	Increased absolute/relative liver weight	NOAEL: 0.69 mg/kg bw per day	ADI: 0.0069 mg/kg bw	SF:100	-	-	-	-	-	-	-	-	-	-	https://www.fsc.go.jp/fscis/attachFile/download?no=1011231&fileId=201	2014/1/20	-
131	Esprocarb	85785-20-2	Agricultural and fishery products : Esprocarb(Parent compound only)	Pesticides	Herbicide	Thiocarbamate	-	Negative	Liver(Increased organ weights), Kidney(Deposition of hyaline droplet)	Oral(capsule)	Chronic toxicity study	1 year	Dog	Hyperplasia and Hypertrophy of adrenal cortex : Male	NOAEL: 1 mg/kg bw per day	ADI: 0.01 mg/kg bw	SF:100	-	-	-	-	-	-	-	-	-	https://www.fsc.go.jp/fscis/attachFile/download?no=0613072&fileId=201	2012/2/23	-	
132	Ethaboxam	162650-77-3	Agricultural products : Ethaboxam(Parent compound only)	Pesticides	Fungicide	Thiazolecarbamamide	-	Negative	Testis(Seminiferous tubular atrophy : Rat), Liver(Hepatocellular hypertrophy), Blood(Anemia : Dog)/Increased incidence of testis interstitial cell adenoma : Rat/Reduced copulation rate, fertilization rate, fertility rate and sperm motility, Increased incidence of visceral malformation, visceral anomaly and skeletal anomaly : Rat	Oral(capsule)	Chronic toxicity study	1 year	Dog	Hepatocellular hypertrophy	NOAEL: 5 mg/kg bw per day	ADI: 0.05 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Decreased body weight, Decreased feed intake : Maternal	NOAEL: 75 mg/kg bw per day	0.75 mg/kg bw	SF:100	-	Summary https://www.fsc.go.jp/fscis/attachFile/download?no=0213026&fileId=210	2020/9/1	-		
133	Ethalfuralin	5523-68-6	Agricultural products : Ethalfuralin(Parent compound only)	Pesticides	Herbicide	Dinitroaniline	Inhibition of cell division	Negative	Liver(Increased ALP and ALT, Increased organ weight, Hepatocellular focal hyperplasia : Mouse)	Oral(feed)	Chronic toxicity study	1 year	Rat	Change of hematological examination results(Unknown details)	NOAEL: 3.9 mg/kg bw per day	ADI: 0.039 mg/kg bw	SF:100	-	-	-	-	-	-	-	-	-	https://www.fsc.go.jp/fscis/attachFile/download?no=0325099&fileId=021	2010/10/14	-	
134	Ethiprole	181587-01-9	Agricultural and fishery products : Ethiprole(Parent compound only)	Pesticides	Insecticide	Phenylpyrazole	Inhibition of neural transmission	Negative	Liver(Hepatocellular hypertrophy)/Increased thyroid tumor : Rat, Increased liver tumor : Mouse	Oral(gavage)	Developmental toxicity study	23 days	Rabbit	Suppressed body weight gain : Maternal, Increased incomplete ossification : Fetus	NOAEL: 0.5 mg/kg bw per day	ADI: 0.005 mg/kg bw	SF:100	-	-	-	-	-	-	-	-	-	Report https://www.fsc.go.jp/fscis/attachFile/download?no=1210413&fileId=201	2014/3/24	The English report is the first edition published on July 22, 2004	
135	Ethofumesate	26225-79-6	Agricultural and livestock products : Ethofumesate(Parent compound only)	Pesticides	Herbicide	Benzofuran	Inhibition of cell division	Negative	Suppressed body weight gain, Liver(Increased organ weight)/Delayed ossification : Rabbit(Fetus)	Oral(gavage)	Developmental toxicity study	6 - 18 days of pregnancy	Rabbit	Delayed vertebral arch ossification : Fetus	NOAEL: 30 mg/kg bw per day	ADI: 0.3 mg/kg bw	SF:100	-	-	-	-	-	-	-	-	-	https://www.fsc.go.jp/fscis/attachFile/download?no=0306004&fileId=201	2012/5/31	-	
136	Ethoprophos	13194-48-4	Food products : Ethoprophos(Parent compound only)	Pesticides	Insecticide	Organophosphorus	Inhibition of cholinesterase activity	Negative	Inhibition of erythrocyte and brain ChE activity(more than 20%), Liver(hepatocellular vacuolation, Pigment deposition : Dog)/Increased incidence of adrenal gland ans thyroid tumors : Male rat, Increased incidence of uterine tumor : FemaleRat	Oral(capsule)	Chronic toxicity study	1 year	Dog	hepatocellular vacuolation	NOAEL: 0.025 mg/kg bw per day	ADI: 0.00025 mg/kg bw	SF:100	-	-	-	-	-	-	-	-	-	-	https://www.fsc.go.jp/fscis/attachFile/download?no=0708003&fileId=021	2010/3/25	-

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs					Data for ARIDs					Reports			Remarks						
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID		SF	English (Summary/Full)	Japanese	Date of latest evaluation		
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value	
137	Ethoxyquin	91-53-2	Agricultural products : Ethoxyquin and its dimer	Pesticides & Additives	Plant Growth Regulator	—	—	Negative	Induce chromosomal aberration, Lipofuscin deposition : Kidney	Oral(feed)	Two-generation reproductive activity study	—	Dog	Lacrimation, Dehydration, Hematological and biochemical change, Pigment deposition of liver	LOAEL: 2.5 mg/kg bw per day	ADI: 0.0083 mg/kg bw	SF:300 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI:3	—	—	—	—	—	Not evaluated	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20120912001&field=204	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20120912001&field=204	2013/11/25	—	
138	Ethoxysulfuron	126801-58-9	Agricultural products : Ethoxysulfuron(Parent compound only)	Pesticides	Herbicide	Sulfonyleurea	Inhibition of acetolactate synthase(ALS)	Negative	Suppressed body weight gain, Chronic hepatitis : Dog, Decreased T3 and T4 /Increased incidence of uterine adenocarcinoma : Rat	Oral(feed)	Subacute toxicity study	90 days	Dog	Hypertrophy of follicular epithelial in thyroid	NOAEL: 5.6 mg/kg bw per day	ADI: 0.056 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20100927564&field=202	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20100927564&field=202	2013/10/21	—	
139	Ethychlozate	27512-72-7	Agricultural products : Ethychlozate, 5-chloro-3(1H)-indazolyl acetate	Pesticides	Plant Growth Regulator	—	Induction of ethylene production	Negative	Kidney(Basophilic change of tubular epithelium, Renal papillary necrosis), Liver(Pigment deposition of kupffer cell : Dog)	Oral(capsule)	Chronic toxicity study	1 year	Dog	Pigment deposition of kupffer cell : Female	NOAEL: 17 mg/kg bw per day	ADI: 0.17 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20090203297&field=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20090203297&field=201	2011/3/3	—	
140	Etobenzanid	79540-50-4	Agricultural and fishery products : Etobenzanid(Parent compound only)	Pesticides	Herbicide	Anilide	Inhibition of protein biosynthesis	Negative	Liver(Increased organ weight, Hepatocellular hypertrophy, Altered hepatocellular foci, Kidney(Tubular epithelium cell degeneration : Rat)/ Increased incidence of hepatocellular adenoma : Female mouse, Increased incidence of total of hepatocellular adenoma and hepatocellular carcinoma : Male mouse./Reduced conception rate, Extended mating period and Delayed vaginal opening : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Centrilobular hepatocellular hypertrophy : Male	NOAEL: 4.4 mg/kg bw per day	ADI: 0.044 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a200806004&field=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a200806004&field=201	2014/1/20	—	
141	Etofenprox	80844-07-1	Agricultural, livestock and fishery products : Etofenprox(Parent compound only)	Pesticides	Insecticide	Pyrethroid	Disturbance of sodium release channels of nervous systems	Negative	Liver(Hepatocellular hypertrophy), Kidney(Tubular basophilia changes), Thyroid(Increased incidence of microfollicles : Rat), Blood(Anemia : Mouse) / Thyroid follicular cell adenoma : Female rat	Oral(feed)	Carcinogenicity study	2 years	Mouse	Renal tubular basophilia changes	NOAEL: 3.1 mg/kg bw per day	ADI: 0.031 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Decreased body weight and feed intake : Maternal	NOAEL: 100 mg/kg bw per day	1 mg/kg bw	SF:100	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2008025173&field=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2008025173&field=210	2021/11/16	—
142	Etozazole	153233-91-1	Agricultural and livestock products : Etozazole(Parent compound only)	Pesticides & Veterinary Medicinal Products	Insecticide (Acaricide)	Oxazoline	Inhibition of chitin synthesis	Negative	Liver(Increased organ weight, Centrilobular hepatocellular hypertrophy), Tooth(Enamel dysplasia : Rat)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased absolute/relative weight : Male	NOAEL: 4.01 mg/kg bw per day	ADI: 0.04 mg/kg bw	SF:100	—	—	—	—	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not Applicable	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20210519114&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20210519114&field=211	2021/7/28	—	
143	Famoxadone	131807-57-3	Agricultural, livestock and fishery products : Famoxadone(Parent compound only)	Pesticides	Fungicide	Oxazolinedione	Inhibition of electron transfer system in photosynthesis	Negative	Blood(Hemolytic anemia), Liver(Centrilobular hepatocellular hypertrophy, Pigment deposition), Eye(Cataract : Dog)	Oral(feed)	Chronic toxicity study	1 year	Dog	Degeneration of lens	NOAEL: 1.2 mg/kg bw per day	ADI: 0.006 mg/kg bw	SF:200 interspecies variation:10 interindividual variation:10 additional:2	—	—	—	—	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not Applicable	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20160323542&field=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20160323542&field=201	2016/9/27	—	
144	Fenamidone	161326-34-7	Agricultural products : Fenamidone, 5-methyl-5-phenyl-3-phenylaminoimidazolidine-2,4-dione	Pesticides	Fungicide	Imidazolinone	Inhibition of electron transfer system in photosynthesis	Negative	Thyroid(Increased absolute/relative weight, Diffuse hypertrophy/hyperplasia of follicular cell), Liver(Increased absolute/relative weight, Hepatocellular hypertrophy)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased absolute/relative kidney weight	NOAEL: 2.83 mg/kg bw per day	ADI: 0.028 mg/kg bw	SF:100	—	—	—	—	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not evaluated	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2008026004&field=002	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2008026004&field=002	2008/4/24	—	
145	Fenamiphos	22224-92-6	Agricultural and livestock products : Fenamiphos, Fenamiphos-sulfoxide, Fenamiphos-sulfone	Pesticides	Insecticide (Nematicide)	Organophosphorus	Inhibition of acetylcholinesterase activity	Negative	Inhibition of erythrocyte ChE activity(more than 20%)	Oral(feed)	Chronic toxicity study	2 years and 1 year	Dog	Inhibition of ChE activity(more than 20%)	NOAEL: 0.08 mg/kg bw per day	ADI: 0.0008 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Dog	Inhibition of ChE activity(more than 20%)	NOAEL: 0.25 mg/kg bw	0.0025 mg/kg bw	SF:100	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20090324012&field=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20090324012&field=210	2023/3/15	—
146.1	Fenarimol	60168-88-9	Agricultural products : Fenarimol(Parent compound only)	Pesticides	Fungicide	Pyrimidin	Inhibition of ergosterol biosynthesis	Negative	Suppressed body weight gain, Liver(Increased organ weight, Hepatocellular hypertrophy, Fatty degeneration)/Reduced copulation rate and reproduction rate, Extended gestation period, Dystocia : Rat(Parent), Decreased numbers of infant and viability rate : Rat(Offspring)	Oral(feed)	three-generation reproductive activity study	—	Rat	Decreased numbers of infant : Offspring	NOAEL: 0.6 mg/kg bw per day	ADI: 0.006 mg/kg bw	SF:100	Oral(feed)	Two-generation reproductive activity study	Rat	Reduced copulation rate and reproduction rate : Parent	NOAEL: 3 mg/kg bw per day	0.03 mg/kg bw (for general population)	SF:100	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20110613082&field=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20110613082&field=210	2021/6/10	—
146.2	Fenarimol	60168-88-9	Agricultural products : Fenarimol(Parent compound only)	Pesticides	Fungicide	Pyrimidin	Inhibition of ergosterol biosynthesis	Negative	Suppressed body weight gain, Liver(Increased organ weight, Hepatocellular hypertrophy, Fatty degeneration)/Reduced copulation rate and reproduction rate, Extended gestation period, Dystocia : Rat(Parent), Decreased numbers of infant and viability rate : Rat(Offspring)	Oral(feed)	three-generation reproductive activity study	—	Rat	Decreased numbers of infant : Offspring	NOAEL: 0.6 mg/kg bw per day	ADI: 0.006 mg/kg bw	SF:100	Oral(feed)	three-generation reproductive activity study	Rat	Reduced copulation rate and reproduction rate : Parent	NOAEL: 1.7 mg/kg bw per day	0.017 mg/kg bw (for women of childbearing age)	SF:100	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20110613082&field=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20110613082&field=210	2021/6/10	—
147	Fenazaquin	120928-09-8	Agricultural products : Fenazaquin, Fenazaquin dimer	Pesticides	Insecticide, Acaricide	Quinazoline	Inhibition of electron transfer system in photosynthesis	Negative	Suppressed body weight gain	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Altered hepatocellular foci : Male	NOAEL: 0.46 mg/kg bw per day	ADI: 0.0046 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Suppressed body weight gain, Decreased feed intake : Maternal	NOAEL: 10 mg/kg bw per day	0.1 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20151117406&field=202	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20151117406&field=202	2021/5/18	The English report is the first edition published on October 25, 2016	
148	Fenbuconazole	114369-43-6	Agricultural and livestock products : Fenbuconazole(Parent compound only)	Pesticides	Fungicide	Triazole	Inhibition of ergosterol biosynthesis	Negative	Liver(Hepatocellular hypertrophy, Vacuolization)/Increased incidence of thyroid tumor : Rat, Increased incidence of hepatic tumor : Mouse./ Reduced gestation rate, Decreased number of neonate and littermate, Increased number of stillborn infant, Extended gestation period	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Centrilobular/Midlobular hepatocellular vacuolation	NOAEL: 3.03 mg/kg bw per day	ADI: 0.03 mg/kg bw	SF:100	(a)(b) Oral(gavage)	(a)(b) Developmental toxicity study	(a)Rat (b)Rabbit	(a)Suppressed body weight gain, Dehairing : Maternal (b)Decreased number of offspring, Embryo death of postimplantation : Fetus	NOAEL: 30 mg/kg bw per day	0.3 mg/kg bw	SF:100	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20200611083&field=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20200611083&field=210	2020/9/1	—
149	Fenhexamid	126833-17-8	Agricultural products : Fenhexamid(Parent compound only)	Pesticides	Fungicide	Hydroxylamide	Inhibition of hypha growth	Negative	Blood(Increased heinz body, Decreased RBC : Dog), Kidney(Renal tubular dilatation)	Oral(feed)	Chronic toxicity study	1 year	Dog	Increased heinz body	NOAEL: 17.5 mg/kg bw per day	ADI: 0.17 mg/kg bw	SF:100	—	—	—	—	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not Applicable	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20150113253&field=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20150113253&field=201	2015/8/18	—	
150	Fenitrothion	122-14-5	Agricultural, livestock and fishery products : Fenitrothion(Parent compound only)	Pesticides & Veterinary Medicinal Products	Insecticide	Organophosphorus	Inhibition of cholinesterase activity	Negative	Inhibition of ChE activity(more than 20%)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Inhibition of erythrocyte and brain ChE activity(more than 20%)	NOAEL: 0.49 mg/kg bw per day	ADI: 0.0049 mg/kg bw	SF:100	Oral(capsule)	Repeated-dose (4 days) toxicity study	Human	No adverse effect observed at highest level(0.36 mg/kg bw per day)	NOAEL: 0.36 mg/kg bw per day	0.036 mg/kg bw	SF:10	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20100927561&field=401	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20100927561&field=401	2023/11/16	The English report is the first edition published on June 3, 2014	
151	Fenobucarb	3766-81-2	Agricultural, livestock and fishery products : Fenobucarb(Parent compound only)	Pesticides & Veterinary Medicinal Products	Insecticide	Carbamate	Inhibition of cholinesterase activity	Negative	Inhibition of ChE activity(more than 20%), Nervous system(Clonic convulsion, Straub tail, Fasciculation), Blood(Decreased WBC), Suppressed body weight gain, Liver(Increased organ weight), Muscle weakness of forelimb or hindlimb : Rat	Oral(feed)	Chronic toxicity study	2 years	Rat	Decreased WBC with increasing neutrophil ratio	NOAEL: 4.1 mg/kg bw per day	ADI: 0.013 mg/kg bw	SF:300 interspecies variation:10 interindividual variation:10 insufficient number of animals for carcinogenicity study:3	—	—	—	—	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not evaluated	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20120521001&field=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20120521001&field=201	2013/9/9	—	

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs						Data for ARIDs						Reports			Remarks				
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID	SF	English (Summary/Full)		Japanese	Date of latest evaluation		
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value	
152	Fenothiocarb	62850-32-2	Agricultural products : Fenothiocarb(Parent compound only)	Pesticides	Insecticide(Acaricide)	Thiocarbamate	Inhibition of metabolic pathway	Negative	Liver(Thickening in branch of intrahepatic portal vein), Blood(Anemia)/Decreased corpus luteum, Reduced implantation rate : Rat(Maternal), External malformation(Encephalocele) : Rat(Fetus)	Oral(capsule)	Chronic toxicity study	1 year	Dog	Decreased body weight : Male	NOAEL: 1.5 mg/kg bw per day	ADI: 0.015 mg/kg bw	SF:100	Oral(feed)	Two-generation reproductive activity study	Rat	Suppressed body weight gain, Decreased feed intake : Male	NOAEL: 13 mg/kg bw per day	0.13 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a201100913530&field=501	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a201100913530&field=501	2014/12/2	—	
153	Fenoxanil	115852-48-7	Food products : Fenoxanil(Parent compound only)	Pesticides	Fungicide	Phenoxyamide	Inhibition of melanin biosynthesis	Negative	Liver(Increased absolute/relative weight, Hepatocellular hypertrophy)/Increased incidence of hepatocellular adenoma : Male mouse	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Diffuse hepatocellular hypertrophy, Increased Glob and calcium	NOAEL: 0.7 mg/kg bw per day	ADI: 0.007 mg/kg bw	SF:100	—	—	—	—	—	—	—	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20050028&field=094	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20050028&field=094	2008/11/27	—
154	Fenoxasulfone	639826-16-7	Agricultural and fishery products : Fenoxasulfone(Parent compound only)	Pesticides	Herbicide	Isoxazoline	Inhibition of very long chain fatty acid synthesis	Negative	Nervous system(Degeneration of peripheral nerve fibers : Dog), Kidney(Papillary necrosis, Chronic nephrosis), Liver(Increased organ weight, Centrilobular hepatocellular hypertrophy)	Oral(feed)	Carcinogenicity study	18 months	Mouse	Renal papillary necrosis : Male	NOAEL: 17.6 mg/kg bw per day	ADI: 0.17 mg/kg bw	SF:100	—	—	—	—	—	—	—	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20120718569&field=202	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20120718569&field=202	2013/10/21	—
155	Fenpicoxamid	517875-34-2	Agricultural and livestock products : Fenpicoxamid(Parent compound only)	Pesticides	Fungicide	Picolinamide	Inhibition of electron transfer system in photosynthesis	Negative	Suppressed body weight gain, Liver(Increased organ weight, Hepatocellular hypertrophy : Mouse), Thyroid(Follicular dilatation : Rat), Kidney(Chronic progressive glomerulonephritis : Rat)	Oral(feed)	Carcinogenicity study	18 months	Mouse	Centrilobular/Midlobular hepatocellular hypertrophy with acidophilic change	NOAEL: 32.1 mg/kg bw per day	ADI: 0.32 mg/kg bw	SF:100	—	—	—	—	FSCJ concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	—	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20180621049&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20180621049&field=211	2019/5/28	—
156	Fenprothrin	39515-41-8	Agricultural and livestock products : Fenprothrin(Parent compound only)	Pesticides	Insecticide	Pyrethroid	Inhibition of neural transmission	Negative	Nervous system(Tremor), Suppressed body weight gain	Oral(feed)	Chronic toxicity study	1 year	Dog	Tremor	NOAEL: 2.79 mg/kg bw per day	ADI: 0.027 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Suppressed body weight gain, Decreased feed intake : Maternal	NOAEL: 3 mg/kg bw per day	0.03 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20190905057&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20190905057&field=211	2020/6/16	—	
157	Fenpyrazamine	473798-59-3	Agricultural products : Fenpyrazamine(Parent compound only)	Pesticides	Fungicide	Pyrazolinone	Inhibition of ergosterol biosynthesis	Negative	Suppressed body weight gain, Liver(Increased organ weight, Hepatocellular hypertrophy), Thyroid(Hypertrophy of follicular cell)/Decreased average number of implantation site, Increased number of postimplantation loss, Internal variation(Multilobular liver, Renal pelvic dilatation), Skeletal variation(Zygomatic arch fusion) : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased absolute/relative liver weight	NOAEL: 12.7 mg/kg bw per day	ADI: 0.12 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Decreased locomotor activity : Male	NOAEL: 80 mg/kg bw	0.8 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20190905057&field=211	2022/3/9	—	
158	Fenpyroximate	111812-58-9	Agricultural products : Fenpyroximate, tert-butyl-(Z)-α-(1,3-dimethyl-5-phenoxypyrazol-4-ylmethylene-aminoxy)-P-toluate Livestock products : Fenpyroximate(Parent compound only)	Pesticides	Insecticide(Acaricide)	Phenoxypyrazole	Inhibition of electron transfer system in photosynthesis	Negative	Suppressed body weight gain, Decreased feed intake, Diarrhea : Dog/Increased incidence of fetuses with retinal anomaly : Rabbit	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain	NOAEL: 0.97 mg/kg bw per day	ADI: 0.0097 mg/kg bw	SF:100	Oral(gavage or capsule)	Comprehensive evaluation of single-dose, repeated-dose, subacute and chronic toxicity study	Dog	Diarrhea	NOAEL: 1.5 mg/kg bw	0.015 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20210119016&field=210	2021/8/24	—	
159	Fenquintrione	1342891-70-6	Agricultural and livestock products : Fenquintrione(Parent compound only)	Pesticides	Herbicide	Triketone	Inhibition of 4-HPPDase	Negative	Eye(keratitis : Rat), Liver(Centrilobular hepatocellular hypertrophy), Gallbladder(Calculus : Mouse)/Corneal squamous cell carcinoma : Rat	Oral(feed)	Two-generation reproductive activity study	—	Rat	keratitis : Parent, Delayed preputial separation : Male offspring	NOAEL: 0.166 mg/kg bw per day	ADI: 0.0016 mg/kg bw	SF:100	—	—	—	—	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not Applicable	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20160323543&field=203	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20160323543&field=203	2020/10/13	The English report is the first edition published on March 7, 2017	
160	Fenthion	55-38-9	Agricultural, livestock and fishery products : Fenthion, O,O-dimethyl O-4-methylsulfanyl-m-tolyl phosphorothioate, O,O-dimethyl O-4-methylsulfanyl-m-tolyl phosphorothioate, O,O-dimethyl O-4-methylthio-m-tolyl phosphate, O,O-dimethyl O-4-methylsulfanyl-m-tolyl phosphate, O,O-dimethyl O-4-methylsulfanyl-m-tolyl phosphate	Pesticides	Insecticide	Organophosphorus	Inhibition of acetylcholinesterase activity	Negative	Inhibition of ChE activity(more than 20%)/Reduced conception rate	Oral(capsule)	Repeated-dose toxicity study	4 weeks	Human	No adverse effect observed at highest level(0.07 mg/kg bw per day)	NOAEL: 0.07 mg/kg bw per day	ADI: 0.0023 mg/kg bw	SF:30 interspecies variation:1 interindividual variation:10 insufficient number of data:3	—	—	—	—	—	—	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20110117003&field=201	2013/9/30	—	
161	Fentrazamide	158237-07-1	Food products : Fentrazamide(Parent compound only)	Pesticides	Herbicide	—	—	Negative	Inhibition of erythrocyte and brain ChE activity(more than 20%), Inhibition of NTE activity, Liver(Hepatocellular hypertrophy), Urinary bladder(Hyperplasia of transitional cell, Transitional cell papilloma/carcinoma)	Oral(feed)	Chronic toxicity study	1 year	Dog	Increased ALP : Female	NOAEL: 0.52 mg/kg bw per day	ADI: 0.0052 mg/kg bw	SF:100	—	—	—	—	—	—	—	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2005004&field=002	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2005004&field=002	2008/12/4	—
162	Fenvalerate	51630-58-1	Agricultural and livestock products : Fenvalerate(Parent compound only including Esfenvalerate)	Pesticides & Veterinary Medicinal Products	Insecticide	Pyrethroid	Inhibition of neural transmission	Negative	Suppressed body weight gain, Nervous system(Tremor, Increased hyperreflexia), Liver(Multiple granuloma), Spleen(Multiple granuloma), Lymph node(Multiple granuloma), Adrenal gland(Multiple granuloma)	Oral(feed)	three-generation reproductive activity study	—	Rat	Suppressed body weight gain : Parent	NOAEL: 1.7 mg/kg bw per day	ADI: 0.017 mg/kg bw	SF:100	—	—	—	—	—	—	—	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20120718584&field=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20120718584&field=201	2013/7/29	—
163	Ferimzone	89269-64-7	Agricultural and fishery products : Ferimzone, (E)-2-methylacetophenone4,6-dimethylpyrimidin-2-ylthiazole	Pesticides	Fungicide	—	—	Negative	Liver(Centrilobular hepatocellular hypertrophy), Blood(Anemia)/Increased incidence of nasal cavity squamous cell carcinoma : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain	NOAEL: 1.94 mg/kg bw per day	ADI: 0.019 mg/kg bw	SF:100	—	—	—	—	—	—	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20110613075&field=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20110613075&field=201	2012/2/23	—	
164	Figronil	120068-37-3	Agricultural products : Figronil(Parent compound only) Livestock products : Figronil, Figronildesulfanyl	Pesticides & Veterinary Medicinal Products	Insecticide	Phenylpyrazole	Action on interference with the passage of chloride ions through the gammaaminobutyric acid (GABA)-regulated chloride ion channel	Negative	Central nervous system(Convulsion), Liver(Increased organ weight), Thyroid(Increased organ weight : Rat) / Increased thyroid follicular cell tumor : Rat / Reduced fertility rate : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Decreased HT	NOAEL: 0.019 mg/kg bw per day	ADI: 0.00019 mg/kg bw	SF:100	Oral(capsule)	Subacute toxicity study	Dog	Anorexia	NOAEL: 2 mg/kg bw per day	0.02 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20151013447&field=201	2016/4/5	—	
165	Flazasulfuron	104040-78-0	Agricultural products : Flazasulfuron(Parent compound only)	Pesticides	Herbicide	Sulfonyleurea	Inhibition of acetolactate synthase(ALS)	Negative	Liver(Inflammatory cellular infiltration : Dog, Increased organ weight), Kidney(Chronic nephrosis : Rat), Muscle(Atrophy, Degeneration : Dog)/Ventricular septal defect : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Chronic nephrosis : Male	NOAEL: 1.31 mg/kg bw per day	ADI: 0.013 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Decreased locomotor activity : Male	NOAEL: 50 mg/kg bw	0.5 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20091214003&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20091214003&field=211	2020/12/15	—	

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs					Data for ARIDs					Reports			Remarks						
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID		SF	English (Summary/Full)	Japanese	Date of latest evaluation		
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value	
166	Flometoquin	875775-74-9	Agricultural products : Flometoquin(Parent compound only)	Pesticides	Insecticide	Quinoline	Inhibition of electron transfer system in photosynthesis	Negative	Suppressed body weight gain, Liver(Hepatocellular fatty degeneration), Ovary(Atrophy, Decreased number of ovarian follicle)/Increased incidence of ovarian tumor : Female rat, Increased incidence of small intestinal adenocarcinoma : Male mouse/Decreased number of small ovarian follicle, implantation and infant	Oral(gavage)	Developmental toxicity study	6 - 27 days of pregnancy	Rabbit	Death : Maternal	NOAEL: 0.8 mg/kg bw per day	ADI: 0.008 mg/kg bw	SF:100	Oral(feed)	Two-generation reproductive activity study	Rat	Decreased number of ovarian follicle	NOAEL: 4.45 mg/kg bw per day	0.044 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20150113255&fileId=203	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20150113255&fileId=203	2021/10/26	The English report is the first edition published on March 7, 2017	
167.1	Flonicamid	158062-67-0	· Agricultural products : Flonicamid, N-(4-trifluoromethylnicotinoyl)glycine, 4-trifluoromethylnicotinic acid · Livestock products : Flonicamid, 4-trifluoromethylnicotinamide, 4-trifluoromethylnicotinic acid	Pesticides	Insecticide	Pyridinecarboxamide	Suppression of eating behavior	Negative	Liver(Hepatocellular hypertrophy, Altered hepatocellular foci), Kidney(Chronic nephrosis, Proximal tubular vacuolation : Rat), Lung(Hyperplasia/Hypertrophy of terminal bronchiolar squamous cell : Mouse), Blood(Anemia)/Increased incidence of lung tumor : Mouse	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased chronic nephrosis : Male	NOAEL: 7.32 mg/kg bw per day	ADI: 0.073 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Extension of landing hindlimb-spread : Female	NOAEL: 300 mg/kg bw (for general population)	3 mg/kg bw (for general population)	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a202305240826&fileId=218	2023/7/20	—	
167.2	Flonicamid	158062-67-0	· Agricultural products : Flonicamid, N-(4-trifluoromethylnicotinoyl)glycine, 4-trifluoromethylnicotinic acid · Livestock products : Flonicamid, 4-trifluoromethylnicotinamide, 4-trifluoromethylnicotinic acid	Pesticides	Insecticide	Pyridinecarboxamide	Suppression of eating behavior	Negative	Liver(Hepatocellular hypertrophy, Altered hepatocellular foci), Kidney(Chronic nephrosis, Proximal tubular vacuolation : Rat), Lung(Hyperplasia/Hypertrophy of terminal bronchiolar squamous cell : Mouse), Blood(Anemia)/Increased incidence of lung tumor : Mouse	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased chronic nephrosis : Male	NOAEL: 7.32 mg/kg bw per day	ADI: 0.073 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Increased incidence of cervical rib : Fetus	NOAEL: 100 mg/kg bw per day	1 mg/kg bw (for women of childbearing age)	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a202305240826&fileId=218	2023/7/20	—	
168	Florasulam	145701-23-1	Agricultural and livestock products : Florasulam(Parent compound only)	Pesticides	Herbicide	Triazolopyrimidine	Inhibition of acetolactate synthase(ALS)	Negative	Suppressed body weight gain, Kidney(Increased organ weight, Hypertrophy of collecting tubular cell), Adrenal gland(Vacuolation of the adrenal zona reticularis and fasciculata cell : Dog)	Oral(feed)	Chronic toxicity study	1 year	Dog	Decreased body weight and feed intake, Hypertrophy of renal collecting tubular cell, Vacuolation of the adrenal zona reticularis and fasciculata cells	NOAEL: 4.9 mg/kg bw per day	ADI: 0.049 mg/kg bw	SF:100	—	—	—	—	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not Applicable	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2010630147&fileId=212	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2010630147&fileId=212	2022/1/26	—	
169	Florpyrauxifen-benzyl	1390661-72-9	Agricultural and livestock products : Florpyrauxifen-benzyl, 4-amino-3-chloro-6-(4-chloro-2-fluoro-3-methoxyphenyl)-5-fluoropyridine-2-carboxylic acid, 4-amino-3-chloro-6-(4-chloro-2-fluoro-3-hydroxyphenyl)-5-fluoropyridine-2-carboxylic acid	Pesticides	Herbicide	Allylphenolic acid	Disturbance of hormonal effects	Negative	Slight suppressed body weight gain : Mouse	Oral(feed)	Carcinogenicity study	18 months	Mouse	No adverse effect observed at highest level(803 mg/kg bw per day)	NOAEL: 803 mg/kg bw per day	ADI: 8 mg/kg bw	SF:100	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20181121131&fileId=212	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20181121131&fileId=212	2019/6/4	—	
170	Fluazopyrim	178813-81-5	Agricultural products : Fluazopyrim(Parent compound only)	Pesticides	Insecticide (Acaricide)	—	Inhibition of electron transfer system in photosynthesis	Negative	Liver(Increased absolute/relative weight), Duodenum(Thickening, Hyperplasia/Dysplasia of mucosa : Mouse), Cecum(Pigment deposition : Mouse)/Increased hepatocellular adenoma/carcinoma : Male rat and Mouse, Increased dermal histiocytic sarcoma : Male rat, Increased duodenal adenoma/adenocarcinoma : Male/Mouse	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Basophilic altered hepatocellular foci	NOAEL: 5.9 mg/kg bw per day	ADI: 0.059 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2006011&fileId=002	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2006011&fileId=002	2008/10/16	—
171.1	Fluazifop (as fluazifop-butyl and fluazifop-P-butyl)	69806-50-4 (as fluazifop-butyl), 79241-46-6 (as fluazifop-P-butyl)	Agricultural and livestock products : Fluazifop-butyl, Fluazifop-P-butyl, Fluazifop acid	Pesticides	Herbicide	Aryloxyphenoxypyronic	Inhibition of fatty acid biosynthesis	Negative	Liver(Increased organ weight), Kidney(Increased organ weight, Chronic nephrosis), Testis(Seminiferous tubular degeneration : Hamster, Decreased organ weight, Atrophy of germinal epithelium in seminiferous tubule), Eye(Cataract : Dog and Hamster)/Extended gestation period, Decreased number of implantation, Decreased conception rate : Rat(Parent), Diaphragmatic Hernia, Hydronephrosis : Rat(Fetus)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Chronic nephrosis	NOAEL: 0.44 mg/kg bw per day	ADI: 0.0044 mg/kg bw	SF:100	—	—	—	—	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not Applicable (for general population)	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130820281&fileId=501	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130820281&fileId=501	2018/3/6	The English report is the first edition published on July 7, 2015	
171.2	Fluazifop (as fluazifop-butyl and fluazifop-P-butyl)	69806-50-4 (as fluazifop-butyl), 79241-46-6 (as fluazifop-P-butyl)	Agricultural and livestock products : Fluazifop-butyl, Fluazifop-P-butyl, Fluazifop acid	Pesticides	Herbicide	Aryloxyphenoxypyronic	Inhibition of fatty acid biosynthesis	Negative	Liver(Increased organ weight), Kidney(Increased organ weight, Chronic nephrosis), Testis(Seminiferous tubular degeneration : Hamster, Decreased organ weight, Atrophy of germinal epithelium in seminiferous tubule), Eye(Cataract : Dog and Hamster)/Extended gestation period, Decreased number of implantation, Decreased conception rate : Rat(Parent), Diaphragmatic Hernia, Hydronephrosis : Rat(Fetus)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Chronic nephrosis	NOAEL: 0.44 mg/kg bw per day	ADI: 0.0044 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat and Rabbit	Delayed ossification : Fetus	NOAEL: 2 mg/kg bw	0.02 mg/kg bw (for women of childbearing age)	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130820281&fileId=501	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130820281&fileId=501	2018/3/6	The English report is the first edition published on July 7, 2015	
172.1	Fluazinam	79622-59-6	Agricultural and livestock products : Fluazinam(Parent compound only)	Pesticides	Fungicide	N-Phenylpyridinamine	Inhibition of hypha growth	Negative	Liver(Hepatocellular hypertrophy), Blood(Anemia)/Increased thyroid tumor : Rat, Increased hepatocellular tumor : Mouse	Oral(capsule)	Chronic toxicity study	1 year	Dog	Increased number of WBC and Neu	NOAEL: 1 mg/kg bw per day	ADI: 0.01 mg/kg bw	SF:100	(a)(b) Oral(gavage)	(a)Acute neurotoxicity study (b)Developmental toxicity study	(a)(b)Rat	(a)Soft feces, Decreased mobility (b)Suppressed body weight gain, Decreased feed intake : Maternal	NOAEL: 50 mg/kg bw per day	0.5 mg/kg bw (for general population)	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a200630146&fileId=210	2018/8/31	—	
172.2	Fluazinam	79622-59-6	Agricultural and livestock products : Fluazinam(Parent compound only)	Pesticides	Fungicide	N-Phenylpyridinamine	Inhibition of hypha growth	Negative	Liver(Hepatocellular hypertrophy), Blood(Anemia)/Increased thyroid tumor : Rat, Increased hepatocellular tumor : Mouse	Oral(capsule)	Chronic toxicity study	1 year	Dog	Increased number of WBC and Neu	NOAEL: 1 mg/kg bw per day	ADI: 0.01 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Increased embryo death of postimplantation : Fetus	NOAEL: 2 mg/kg bw per day	0.02 mg/kg bw (for women of childbearing age)	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a200630146&fileId=210	2021/8/31	—	
173.1	Flubendiamide	272451-65-7	Agricultural and livestock products : Flubendiamide(Parent compound only)	Pesticides	Insecticide	Iodophthalimide	Activating calcium release channels of ryanodine-sensitive intracellular	Negative	Liver(Hepatocellular hypertrophy, Hepatocellular fatty degeneration), Thyroid(Hypertrophy of follicular epithelial cell), Eye(Enlargement of eyeballs : Rat)	Oral(feed)	Carcinogenicity study	2 years	Rat	Fatty degeneration in centrilobular hepatocytes	NOAEL: 1.7 mg/kg bw per day	ADI: 0.017 mg/kg bw	SF:100	Oral(feed)	Comprehensive evaluation of one- and twogeneration reproductive toxicity studies and developmental neurotoxicity study	Rat	Synechia, Haemorrhage, Iritis and Cataract : Offspring	NOAEL: 15 mg/kg bw per day	0.15 mg/kg bw (for women during lactation)	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20160713073&fileId=202	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20160713073&fileId=202	2019/2/5	The English report is the fifth edition published on July 18, 2017	
173.2	Flubendiamide	272451-65-7	Agricultural and livestock products : Flubendiamide(Parent compound only)	Pesticides	Insecticide	Iodophthalimide	Activating calcium release channels of ryanodine-sensitive intracellular	Negative	Liver(Hepatocellular hypertrophy, hepatocellular fatty degeneration), Thyroid(Hypertrophy of follicular epithelial cell), Eye(Enlargement of eyeballs : Rat)	Oral(feed)	Carcinogenicity study	2 years	Rat	Fatty changes in centrilobular hepatocytes	NOAEL: 1.7 mg/kg bw per day	ADI: 0.017 mg/kg bw	SF:100	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable (for general population)	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20160713073&fileId=202	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20160713073&fileId=202	2019/2/5	The English report is the fifth edition published on July 18, 2017	
174	Flucetosulfuron	412928-75-7	Agricultural products : Flucetosulfuron(Parent compound only)	Pesticides	Herbicide	Sulfonylurea	Inhibition of acetolactate synthase(ALS)	Negative	Testis(Decreased organ weight, Vacuolization of seminiferous tubule), Epididymis(Decreased number of spermatozoon)/Increased incidence of testicular interstitial cell tumors : Rat/Ossification defective : Fetus	Oral(feed)	Two-generation reproductive activity study	—	Rat	Increased absolute/relative Spleen weight : Offspring	NOAEL: 4.1 mg/kg bw per day	ADI: 0.041 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20070522004&fileId=002	2008/7/17	—	
175	Fludioxonil	131341-86-1	Agricultural, livestock and fishery products : Fludioxonil(Parent compound only)	Pesticides & Additives	Fungicide	Phenylpyrrole	Inhibition of glycerol biosynthesis	Negative	Suppressed body weight gain, Liver(Hepatocellular hypertrophy), Kidney(Chronic nephrosis : Rat, Nephrosis : Mouse), Blood(Anemia)	Oral(feed)	Chronic toxicity study	1 year	Dog	Suppressed body weight gain	NOAEL: 33.1 mg/kg bw per day	ADI: 0.33 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Decreased locomotor activity	LOAEL: 500 mg/kg bw	2.5 mg/kg bw	SF:200 interspecies variation;10 interindividual variation;10 LOAEL is used to estimate the ADI.2	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20220323040&fileId=210	2022/5/31	—	

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs						Data for ARIDs						Reports			Remarks			
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID	SF	English (Summary/Full)		Japanese	Date of latest evaluation	
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value
176	Fluensulfone	318290-98-1	Agricultural and livestock products : Fluensulfone(Parent compound only)	Pesticides	Nematicide	Fluoroalkene	—	Negative	Suppressed body weight gain, Blood(Anemia), Liver(Hepatocellular hypertrophy), Kidney(Increased organ weight), Lung(Bronchiolization)/Increased incidence of bronchiolo-alveolar adenoma : Female mouse	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain	NOAEL: 1.4 mg/kg bw per day	ADI: 0.014 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Listless	LOAEL: 100 mg/kg bw	0.33 mg/kg bw	SF:300 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI:3	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20150623386&fileId=1208249&fileId=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20150623386&fileId=1208249&fileId=210	2022/1/26	The English report is the first edition published on December 22, 2015
177	Flufenacet	142459-58-3	- Agricultural products : Flufenacet, metabolites with fluorophenyl structure - Livestock products : Flufenacet(Parent compound only)	Pesticides	Herbicide	Acid amide	Inhibition of fatty acid biosynthesis	Negative	Liver(Hepatocellular hypertrophy), Thyroid(Hyperplasia of follicle epithelium), Kidney(Renal pelvic epithelial hyperplasia), Blood(Increased MetHb, Anemia), Eye(Cataract : Mouse)/Delayed ossification, Skeletal variation : Rat(Fetus), Skeletal variation : Rabbit(Fetus)/Vacuolization of cerebral cortex : Dog, Swelling of axon : Rat	Oral(feed)	Chronic toxicity study	1 year	Dog	Decreased Hb	NOAEL: 1.14 mg/kg bw per day	ADI: 0.011 mg/kg bw	SF:100	—	—	—	—	—	—	—	Report https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20040803002&fileId=0209018&fileId=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130820275&fileId=201	2013/11/11	—
178	Flufenoxuron	101463-69-8	Agricultural, livestock and fishery products : Flufenoxuron(Parent compound only)	Pesticides	Insecticide	Benzophenyl urea	Inhibition of chitin synthesis	Negative	Suppressed body weight gain, Blood(Anemia)	Oral(feed)	Chronic toxicity study	1 year	Dog	Increased WBC : Female	NOAEL: 3.7 mg/kg bw per day	ADI: 0.037 mg/kg bw	SF:100	—	—	—	—	—	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not Applicable	Report https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20040803002&fileId=0209018&fileId=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2009018&fileId=211	2021/6/29	The English report is the first edition published on April 19, 2007
179	Flufenpyr-ethyl	188489-07-8	Agricultural products : Flufenpyr-ethyl(Parent compound only)	Pesticides	Herbicide	Pyridazine	Inhibition of chlorophyll biosynthesis	Negative	Liver(Increased absolute/relative weight, Centrilobular hepatocellular vacuolation)	Oral(feed)	Carcinogenicity study	unspecified	Mouse	Hepatotoxicity	NOAEL: 39.9 mg/kg bw per day	ADI: 0.39 mg/kg bw	SF:100	—	—	—	—	—	—	Not evaluated	Report https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20112006&fileId=0112006&fileId=002	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2009018&fileId=211	2008/10/2	—
180	Flumetsulam	98967-40-9	Agricultural products : Flumetsulam(Parent compound only)	Pesticides	Herbicide	Triazolopyrimidine	Inhibition of acetolactate synthase(ALS)	Negative	Liver(Hepatitis), Kidney(Nephritis)	Oral(feed)	Chronic toxicity study	1 year	Dog	Hepatitis, Bile stasis, Atrophy of renal tubule	NOAEL: 100 mg/kg bw per day	ADI: 1 mg/kg bw	SF:100	—	—	—	—	—	—	Not evaluated	Report https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2009018&fileId=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2009018&fileId=211	2013/4/22	—
181_1	Flumioxazin	103361-09-7	Agricultural and livestock products : Flumioxazin(Parent compound only)	Pesticides	Herbicide	N-Phenylphthalimide	Inhibition of protoporphyrinogen oxidase activity	Negative	Blood(Anemia), Liver(Hepatocellular hypertrophy, Increased organ weight)/Reduced copulation rate, Reduced gestation rate, Decreased survival rate at four days postnatal, Cardiovascular malformation, skeletal malformation : Rat(Fetus)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased extramedullary hematopoiesis in spleen	NOAEL: 1.8 mg/kg bw per day	ADI: 0.018 mg/kg bw	SF:100	—	—	—	—	—	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not Applicable (for general population)	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20080617002&fileId=0252570&fileId=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20080617002&fileId=0252570&fileId=210	2022/10/12	The English report is the first edition published on May 20, 2014
181_2	Flumioxazin	103361-09-7	Agricultural and livestock products : Flumioxazin(Parent compound only)	Pesticides	Herbicide	N-Phenylphthalimide	Inhibition of protoporphyrinogen oxidase activity	Negative	Blood(Anemia), Liver(Hepatocellular hypertrophy, Increased organ weight)/Reduced copulation rate, Reduced gestation rate, Decreased survival rate at four days postnatal, Cardiovascular malformation, skeletal malformation : Rat(Fetus)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased extramedullary hematopoiesis in spleen	NOAEL: 1.8 mg/kg bw per day	ADI: 0.018 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Ventricular septal defect : Fetus	NOAEL: 3 mg/kg bw per day	0.03 mg/kg bw (for women of childbearing age)	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20080617002&fileId=0252570&fileId=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20080617002&fileId=0252570&fileId=210	2022/10/12	The English report is the first edition published on May 20, 2014
182_1	Fluopicolide (2,6-dichlorobenzamide)	239110-15-7(as Fluopicolide)	Agricultural products : Fluopicolide, 2,6-dichlorobenzamide	Pesticides	Fungicide	Dichlorobenzamide	—	Negative	Liver(Hepatocellular hypertrophy, hepatocellular vacuolation), Kidney(Basophilic change of renal tubule : Rat)/Increased incidence of hepatocellular adenoma : Mouse/Skeletal anomaly : Rat(Fetus)	Oral(feed)	Carcinogenicity study	18 months	Mouse	Increased absolute/relative liver weight, Hepatocellular hypertrophy	NOAEL: 7.9 mg/kg bw per day	ADI: 0.079 mg/kg bw (as Fluopicolide)	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Hypothermia	NOAEL: 100 mg/kg bw	1 mg/kg bw (as Fluopicolide)	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20080617002&fileId=0252570&fileId=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20080617002&fileId=0252570&fileId=210	2017/8/8	—
182_2	Fluopicolide (2,6-dichlorobenzamide)	239110-15-7(as Fluopicolide)	Agricultural products : Fluopicolide, 2,6-dichlorobenzamide	Pesticides	Fungicide	Dichlorobenzamide	—	Negative	Liver(Hepatocellular hypertrophy, hepatocellular vacuolation), Kidney(Basophilic change of renal tubule : Rat)/Increased incidence of hepatocellular adenoma : Mouse/Skeletal anomaly : Rat(Fetus)	Oral(feed)	Chronic toxicity study	2 years	Rat	Acidophilic altered hepatocellular foci	NOAEL: 4.7 mg/kg bw per day	ADI: 0.047 mg/kg bw (as 2,6-dichlorobenzamide)	SF:100	Oral(gavage)	Acute toxicity study	Mouse	Sedation, Abnormal gait	LOAEL: 156 mg/kg bw	0.52 mg/kg bw (as 2,6-dichlorobenzamide)	SF:300 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI:3	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20170524029&fileId=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20170524029&fileId=201	2017/8/8	—
183	Fluopyram	658066-35-4	Agricultural and livestock products : Fluopyram(Parent compound only)	Pesticides	Fungicide	Pyridinylethylamine	Inhibition of electron transfer system in photosynthesis	Negative	Eye(Corneal opacity, Retinal fading : Rat), Liver(Increased organ weight, Centrilobular hepatocellular hypertrophy), Kidney(Increased organ weight, Chronic nephrosis), Thyroid(Hypertrophy of follicular epithelial cell)/Increased incidence of hepatocellular adenoma : Female rat, Increased incidence of thyroid follicular cell adenomas : Male mouse/Internal and skeletal variation : Rat(Fetus)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Hepatocellular hypertrophy : Male	NOAEL: 1.2 mg/kg bw per day	ADI: 0.012 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Decreased locomotor activity : Female	NOAEL: 50 mg/kg bw	0.5 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20190319053&fileId=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20190319053&fileId=210	2019/6/18	—
184	Fluoroimide	41205-21-4	Agricultural products : Fluoroimide(Parent compound only)	Pesticides	Fungicide	Maleimide	Inhibition of SH-enzymes	Negative	Suppressed body weight gain, Reduced feed intake, Blood(Anemia), Forestomach(Mucosal edema)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased AST and ALT : Male	NOAEL: 9.28 mg/kg bw per day	ADI: 0.092 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20120123351&fileId=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20120123351&fileId=201	2013/10/21	—	
185	Fluoxastrobin	361377-29-9	- Agricultural products : Fluoxastrobin(Including Z body) - Livestock products : Fluoxastrobin(Including Z body), 6-(2-chlorophenoxy)-5-fluoro-4-pyrimidol	Pesticides	Fungicide	Strobilurin	Inhibition of electron transfer system in photosynthesis	Negative	Suppressed body weight gain, Liver(Increased organ weight, Hepatocellular hypertrophy), Urinary system(Renipelvic/Urethral calculus)	Oral(feed)	Chronic toxicity study	1 year	Dog	Hepatocellular hypertrophy	NOAEL: 1.5 mg/kg bw per day	ADI: 0.015 mg/kg bw	SF:100	—	—	—	—	—	FSCJ concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20140909226&fileId=501	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20140909226&fileId=501	2020/10/13	The English report is the first edition published on March 24, 2015	
186	Flupyradifurone	951659-40-8	Agricultural and livestock products : Flupyradifurone(Parent compound only)	Pesticides	Insecticide	—	Action on the nicotinic acetylcholine receptor	Negative	Suppressed body weight gain, Liver(Centrilobular hepatocellular hypertrophy), Thyroid(Hypertrophy of follicular cell), Muscle(Degeneration, Atrophy : Dog)/Decreased number of estrus cycles, Decreased total number of implantation, Decreased number of littermate : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Centrilobular hepatocellular hypertrophy : Male	NOAEL: 3.16 mg/kg bw per day	ADI: 0.031 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Mydriasis : Female	NOAEL: 35 mg/kg bw	0.35 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20220525069&fileId=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20220525069&fileId=210	2022/7/13	—
187	Flupyrimin	168956-03-7	Agricultural, livestock and fishery products : Flupyrimin(Parent compound only)	Pesticides	Insecticide	—	Action on the nicotinic acetylcholine receptor	Negative	Liver(Centrilobular hepatocellular hypertrophy, Hepatocellular necrosis), Thyroid(Hypertrophy of follicular epithelial cell : Rat)/Increased incidence of hepatocellular adenoma/carcinoma : Rat, Increased incidence of total of thyroid follicular cell adenoma and carcinoma : Male rat, Increased incidence of total of hepatocellular adenoma and carcinoma : Male mouse, Increased incidence of total of hepatocellular adenoma : Female mouse/Decreased numbers of infant : Rat	Oral(feed)	Carcinogenicity study	2 years	Rat	Centrilobular hepatocellular hypertrophy : Male	NOAEL: 1.12 mg/kg bw per day	ADI: 0.011 mg/kg bw	SF:100	Oral(unspecified)	Developmental toxicity study	Rabbit	Decreased body weight : Maternal	NOAEL: 8 mg/kg bw per day	0.08 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20171122126&fileId=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20171122126&fileId=211	2018/7/24	—
188	Fluridone	59756-60-4	Agricultural products : Fluridone(Parent compound only)	Pesticides	Herbicide	Pyridazone	Inhibition of cardenolide biosynthesis	Negative	Liver(Increased absolute/relative weight, Centrilobular hepatocellular hypertrophy)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Decreased body weight, Increased absolute/relative liver and kidney weight : Male	NOAEL: 7.65 mg/kg bw per day	ADI: 0.076 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20081030059&fileId=06_001_001	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20081030059&fileId=06_001_001	2007/8/23	—	

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs					Data for ARIDs					Reports			Remarks					
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID		SF	English (Summary/Full)	Japanese	Date of latest evaluation	
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value
212	Hexaconazole	79983-71-4	Agricultural products : Hexaconazole(Parent compound only)	Pesticides	Fungicide	Triazole	Inhibition of sterol biosynthesis	Negative	Suppressed body weight gain, Liver(Increased organ weight, Hepatocellular fatty degeneration), Adrenal gland(Cortical vacuolization : Rat)/Increased incidence of Leydig cell tumor : Male rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Hepatocellular fatty degeneration : Male	NOAEL: 0.47 mg/kg bw per day ADI: 0.0047 mg/kg bw	SF:100	Oral(gavage)	Subacute toxicity study	Dog	Abnormal gait, Behavior abnormality, Decreased body weight, Suppressed body weight gain	NOAEL: 25 mg/kg bw per day	0.25 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20120718575&fileId=501	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20120718575&fileId=501	2015/10/20	—	
213	Hexazinone	51235-04-2	Agricultural products : Hexazinone, 3-(4-hydroxycyclohexyl)-6-(dimethylamino)-1-methyl-1,3,5-triazine-2,4-(1H,3H)-dione, 3-cyclohexyl-6-(methylamino)-1-methyl-1,3,5-triazine-2,4-(1H,3H)-dione, 3-(4-hydroxycyclohexyl)-6-(methylamino)-1-methyl-1,3,5-triazine-2,4-(1H,3H)-dione, 3-cyclohexyl-1-methyl-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione, 3-(4-hydroxycyclohexyl)-1-methyl-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione	Pesticides	Herbicide	Triazine	Inhibition of electron transfer system in photosynthesis	Negative	Suppressed body weight gain, Liver(Increased organ weight, Hepatocellular necrosis)/Increased hepatic tumorigenic lesion : Female mouse	Oral(feed)	Chronic toxicity study	1 year	Dog	Hepatocellular pigment deposition : Female	NOAEL: 4.97 mg/kg bw per day ADI: 0.049 mg/kg bw	SF:100	—	—	—	—	—	—	Not evaluated	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20070306012&fileId=002	2008/12/11	—	
214	Hexythiazox	78587-05-0	Agricultural products : Hexythiazox(Parent compound only) Livestock products : Hexythiazox, metabolite which has the same chemical structure as hexythiazox	Pesticides	Insecticide (Acaricide)	—	—	Negative	Suppressed body weight gain, Liver(Increased organ weight, Hepatocellular hypertrophy), Adrenal gland(Increased organ weight, Cortical vacuolization)/Increased incidence of hepatocellular adenoma, Increased incidence of total hepatocellular adenoma/carcinoma and hepatoblastoma : Female mouse, Increased incidence of total hepatocellular adenoma/carcinoma and hepatoblastoma : Male mouse	Oral(feed)	Chronic toxicity study	1 year	Dog	Cortical vacuolation of adrenal gland	NOAEL: 2.87 mg/kg bw per day ADI: 0.028 mg/kg bw	SF:100	—	—	—	—	—	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not Applicable	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2011118287&fileId=501	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2011118287&fileId=501	2015/3/24	—
215	Imazapic	104098-48-8	Agricultural and livestock products : Imazapic(Parent compound only)	Pesticides	Herbicide	Imidazolinone	Inhibition of acetolactate synthase(ALS)	Negative	Blood(Anemia : Dog), Muscle(Degeneration and Necrosis : Dog), Stomach(Ulcer : Rabbit)	Oral(feed)	Chronic toxicity study	1 year	Dog	Abdominal muscle degeneration, necrosis and inflammation	LOAEL: 137 mg/kg bw per day ADI: 0.27 mg/kg bw	SF:500 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI:5	—	—	—	—	—	—	Not evaluated	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2013080826&fileId=201	2014/1/20	—	
216	Imazapyr	81334-34-1	Agricultural and livestock products : Imazapyr(Parent compound only)	Pesticides	Herbicide	Imidazolinone	Inhibition of acetolactate synthase(ALS)	Negative	Salivation, Increased kidney weight : Rat	Oral(feed)	Chronic toxicity study	1 year	Dog	No adverse effect observed at highest level(280 mg/kg bw per day)	NOAEL: 280 mg/kg bw per day ADI: 2.8 mg/kg bw	SF:100	—	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20191009076&fileId=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20191009076&fileId=211	2020/1/28	—
217	Imibenconazole	86598-92-7	Agricultural products : Imibenconazole, 2,4-dichloro-2-(1H-1,2,4-triazole-1-yl)acetanilide, 2,4-dichloroaniline	Pesticides	Fungicide	Triazole	Inhibition of ergosterol biosynthesis	Negative	Liver(Centrilobular hepatocellular hypertrophy, Pigment deposition in Kupffer cell), Blood(Increased dysmorphic red blood cell)	Oral(feed)	Carcinogenicity study	18 months	Mouse	Pigment deposition of spleen	NOAEL: 0.984 mg/kg bw per day ADI: 0.0098 mg/kg bw	SF:100	—	—	—	—	—	—	Not evaluated	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20081030025&fileId=05001001	2007/12/20	—	
218	Imicyafof	140163-89-9	Agricultural products : Imicyafof(Parent compound only)	Pesticides	Nematicide	Organophosphorus	Inhibition of cholinesterase activity	Negative	Inhibition of brain and erythrocyte CHE activity(more than 20%), Blood(Anemia) / Increase of maternal animal that all littermate died : Rat	Oral(gavage)	Chronic toxicity study	1 year	Dog	Increased myelopoiesis	NOAEL: 0.05 mg/kg bw per day ADI: 0.0005 mg/kg bw	SF:100	Oral(gavage)	CHE inhibitor study	Rat	Inhibition of erythrocyte CHE activity(more than 20%)	NOAEL: 1 mg/kg bw	0.01 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20150805415&fileId=201	2015/12/22	—	
219	Imidacloprid	138261-41-3	Agricultural products : Imidacloprid(Parent compound only) Livestock products : Imidacloprid, Metabolites containing 6-chloropyridyl groups	Pesticides	Insecticide	Neonicotinoid	Action as an agonist at the nicotinic acetylcholine receptor, affecting the synapses	Negative	Tremor, Suppressed body weight gain/Tremor, Decreased motor and locomotor activity : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased mineralization in the colloid of thyroid gland follicles	NOAEL: 5.7 mg/kg bw per day ADI: 0.057 mg/kg bw	SF:100	(a)(b)(c) Oral(gavage)	(a)(b) Pharmacological study (c) Acute toxicity study	(a)(c) Mouse (b) Rabbit	(a) Reduced alertness and motor activity, Ataxia (b) Suppressed behavior and Suppressed pupillary reflex (c) Reduced motor activity and Transient tremor	NOAEL: 10 mg/kg bw	0.1 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20151117699&fileId=201	2016/7/12	—	
220	Iminoctadine triacetate (former name : Guazatine triacetate) #6	57520-17-9	Agricultural products : Iminoctadine triacetate, Iminoctadine	Pesticides	Fungicide	Guanidine	Inhibition of lipid biosynthesis	Negative	Kidney(Tubular epithelium degeneration), Male accessory sex appendages(Oligospermia : Dog, Sperm granuloma : Rat)/Increased incidence of adrenal pheochromocytoma : Rat, Increased incidence of mononuclear cell leukemia : Male rat, Renal epithelial tumor : Mouse	(a)(b) Oral(feed)	(a) Subacute toxicity study (b) Chronic toxicity study	(a) 90 days (b) 1 year	(a)(b) Dog	(a) Decreased testis weight, Histopathological changes (b) Seminiferous tubular atrophy	NOAEL: 0.2 mg/kg bw per day (as Iminoctadine triacetate) ADI: 0.002 mg/kg bw (as Iminoctadine triacetate)	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Suppressed body weight gain : Maternal	NOAEL: 8 mg/kg bw per day (as Iminoctadine triacetate)	0.08 mg/kg bw (as Iminoctadine triacetate)	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20100125002&fileId=212	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20100125002&fileId=212	2019/6/4	Evaluated as Iminoctadine. Please see #221.	
221	Iminoctadine tris (albesilate) #6	169202-06-6	Agricultural products : Iminoctadine tris(albesilate), Iminoctadine	Pesticides	Fungicide	Guanidine	Inhibition of lipid biosynthesis	Negative	Kidney(Tubular epithelium degeneration), Male accessory sex appendages(Aspermatogenesis : Dog, Sperm granuloma : Rat)/Skeletal anomaly : Rabbit	Oral(feed)	Chronic toxicity study	1 year	Dog	Aspermatogenesis	NOAEL: 0.9 mg/kg bw per day [as Iminoctadine tris(albesilate)] ADI: 0.009 mg/kg bw [as Iminoctadine tris(albesilate)]	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Decreased body weight : Maternal	NOAEL: 10 mg/kg bw per day [as Iminoctadine tris(albesilate)]	0.1 mg/kg bw [as Iminoctadine tris(albesilate)]	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20100125002&fileId=212	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20100125002&fileId=212	2019/6/4	Evaluated as Iminoctadine. Please see #221.	
222	Iminoctadine [Iminoctadine tris(albesilate), Iminoctadine triacetate(former name : Guazatine triacetate)] #6	169202-06-6 [as Iminoctadine tris(albesilate)] 57520-17-9 [as Iminoctadine triacetate]	Agricultural products : Iminoctadine tris(albesilate), Iminoctadine triacetate, Iminoctadine	Pesticides	Fungicide	Guanidine	Inhibition of lipid biosynthesis	Negative	Kidney(Tubular epithelium degeneration), Male accessory sex appendages(Aspermatogenesis and Oligospermia : Dog, Sperm granuloma : Rat)	Oral(feed)	Chronic toxicity study	1 year	Dog	Aspermatogenesis	NOAEL: 0.239 mg/kg bw per day (as Iminoctadine), 0.9 mg/kg bw per day [as Iminoctadine tris(albesilate)] ADI: 0.0023 mg/kg bw (as Iminoctadine), 0.009 mg/kg bw [as Iminoctadine tris(albesilate)]	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Suppressed body weight gain : Maternal	NOAEL: 5.31 mg/kg bw per day (as Iminoctadine), 8 mg/kg bw per day (as Iminoctadine triacetate)	0.053 mg/kg bw (as Iminoctadine), 0.08 mg/kg bw (as Iminoctadine triacetate)	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20100125002&fileId=212	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20100125002&fileId=212	2019/6/4	—	
223	Indanofan	133220-30-1	Agricultural and fishery products : Indanofan(Parent compound only)	Pesticides	Herbicide	Indane	Inhibition of fatty acid and protein biosynthesis	Negative	Blood clotting (coagulation) disorders(Hemorrhage)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Pathological findings related to hemorrhage(Tar-like content)	NOAEL: 0.356 mg/kg bw per day ADI: 0.0035 mg/kg bw	SF:100	—	—	—	—	—	—	Not evaluated	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2010105004&fileId=021	2010/9/9	—	
224	Indoxacarb	173584-44-6	Agricultural products : Indoxacarb(Parent compound only)	Pesticides	Insecticide	Oxadiazine	Disturbance of sodium release channels of nervous systems	Negative	Hemolytic anemia	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain	NOAEL: 1.04 mg/kg bw per day ADI: 0.0052 mg/kg bw	SF:200 interspecies variation:10 interindividual variation:10 Study with IndoxacarbMP is used to estimate the ADI:2	—	—	—	—	—	—	Not evaluated	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20060718034&fileId=002	2008/4/3	—	

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs					Data for ARIDs					Reports			Remarks						
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID		SF	English (Summary/Full)	Japanese	Date of latest evaluation		
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value	
225	Ipnyflumam	135294-67-2	Agricultural, livestock and fishery products : Ipnyflumam(Parent compound only)	Pesticides	Fungicide	—	Inhibition of electron transfer system in photosynthesis	Negative	Suppressed body weight gain, Liver(Diffuse hepatocellular hypertrophy)	Oral(capsule)	Chronic toxicity study	1 year	Dog	Vacuolation of the adrenal zona fasciculata cells	NOAEL: 6 mg/kg bw per day	ADI: 0.06 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Hypothermia, Decreased locomotor activity : Female	NOAEL: 30 mg/kg bw	0.3 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20180621045&field=213	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20221019185&field=210	2022/12/14	The English report is the first edition published on June 21, 2018	
226	Ipencarbazone	212201-70-2	Agricultural and fishery products : Ipencarbazone(Parent compound only)	Pesticides	Herbicide	Triazolone	Inhibition of lipid biosynthesis	Negative	Blood(Methemoglobinemia, Hemolytic anemia), Liver(Centriolobular hepatocellular fatty degeneration : Rat, Centriolobular hepatocellular acidophilic change : Dog), Urinary bladder(Hyperplasia of mucosal epithelium)/Increased incidence of urinary bladder transitional cell papilloma/carcinoma : Rat	Oral(feed)	Chronic toxicity study	1 year	Dog	Centriolobular hepatocellular acidophilic change	NOAEL: 0.0995 mg/kg bw per day	ADI: 0.00999 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20111011275&field=201	2012/10/29	—	
227	Ipflufenquin	1314008-27-9	· Agricultural products : Ipflufenquin, 6-deoxy-1-O-[2-[2-(7,8-difluoro-2-methylquinolin-3-yloxy)-6-fluorophenyl]propan-2-yl]-β-D-glucopyranose-6-yl-Hydrogen-Malonate, 6-deoxy-1-O-[2-[2-(7,8-difluoro-2-methylquinolin-3-yloxy)-6-fluorophenyl]propan-2-yl]-2-O-(β-D-glucuronopyranosyl)-β-D-glucopyranose-6-yl-Hydrogen-Malonate · Livestock products : Ipflufenquin, 2-[2-(7,8-difluoro-2-methylquinolin-3-yloxy)-6-fluorophenyl]-2-Hydroxypropoxy-β-D-glucopyranosiduronic Acid, 2-[2-(7,8-difluoro-2-methylquinolin-3-yloxy)-6-fluorophenyl]-2-Hydroxypropoxy-linoleate · Fishery products : Ipflufenquin(Parent compound only)	Pesticides	Fungicide	—	—	Negative	Suppressed body weight gain, Incisor (Enamel dysplasia : Rat and Mouse), Liver(Hepatocellular hypertrophy), Thyroid(Hypertrophy of follicular cell : Rat), Colon(Hyperplasia of mucosal epithelium : Rat)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Pale color of incisor	NOAEL: 4.84 mg/kg bw per day	ADI: 0.048 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Hypothermia, Decreased locomotor activity	NOAEL: 125 mg/kg bw	1.2 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20190619023&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20190619023&field=210	2020/1/14	—	
228	Iprobenfos	26087-47-8	Food products : Iprobenfos(Parent compound)	Pesticides	Fungicide	Organophosphorus	Inhibition of phospholipid biosynthesis	Negative	Inhibition of ChE activity(more than 20%)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Inhibition of erythrocyte and brain ChE activity(more than 20%)	NOAEL: 3.54 mg/kg bw per day	ADI: 0.035 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20071218001&field=002	2009/4/23	—	
229.1	Iprodione	36734-19-7	Agricultural and livestock products : Iprodione(Parent compound only)	Pesticides	Fungicide	Dicarboximide	Inhibition of spore germination	Negative	Suppressed body weight gain, Erythrocyte(Heinz body : Dog), Liver(Hepatocellular hypertrophy : Mouse), Adrenal gland(Hypertrophy of adrenal zona glomerulosa cells), Testis(Hyperplasia of interstitial cell : Rat and Mouse)/Increased incidence of testicular interstitial cell tumor : Rat, Increased incidence of hepatocellular tumor and carcinoma : Mouse, Decreased litter size and infant : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Microvacuolation of the adrenal zona reticularis cells : Male	LOAEL: 6.1 mg/kg bw per day	ADI: 0.02 mg/kg bw	SF:300 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI:3	—	—	—	—	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not Applicable (for general population)	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20130312054&field=210	2021/11/2	—	
229.2	Iprodione	36734-19-7	Agricultural and livestock products : Iprodione(Parent compound only)	Pesticides	Fungicide	Dicarboximide	Inhibition of spore germination	Negative	Suppressed body weight gain, Erythrocyte(Heinz body : Dog), Liver(Hepatocellular hypertrophy : Mouse), Adrenal gland(Hypertrophy of adrenal zona glomerulosa cells), Testis(Hyperplasia of interstitial cell : Rat and Mouse)/Increased incidence of testicular interstitial cell tumor : Rat, Increased incidence of hepatocellular tumor and carcinoma : Mouse, Decreased litter size and infant : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Microvacuolation of the adrenal zona reticularis cells : Male	LOAEL: 6.1 mg/kg bw per day	ADI: 0.02 mg/kg bw	SF:300 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI:3	Oral(gavage)	Developmental toxicity study	Rat	Increased small fetus, Increased the distance between body wall and organs : Fetus	NOAEL: 90 mg/kg bw per day	0.9 mg/kg bw (for women of childbearing age)	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20130312054&field=210	2021/11/2	—	
230	Isofetamid	875915-78-9	Agricultural products : Isofetamid(Parent compound only)	Pesticides	Fungicide	Phenacylamide	Inhibition of electron transfer system in photosynthesis	Negative	Liver(Hepatocellular hypertrophy), Thyroid(Hypertrophy of follicular epithelial cell)	Oral(feed)	Chronic toxicity study	1 year	Dog	Increased absolute/relative weight, Centriolobular hepatocellular hypertrophy	NOAEL: 5.34 mg/kg bw per day	ADI: 0.053 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Decreased body weight and feed intake : Maternal	NOAEL: 300 mg/kg bw per day	3 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20150113247&field=202	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20220421057&field=210	2022/6/28	The English report is the first edition published on October 25, 2016	
231.1	Isoprothiolane	50512-35-1	· Agricultural and fishery products : Isoprothiolane(Parent compound only) · Livestock products : Isoprothiolane, monoisopropyl 1,3-dithiolan-2-ylidenemalonate	Pesticides & Veterinary Medicinal Products	Fungicide, Insecticide, Plant Growth Regulator	Dithiolane	Inhibition of hypha growth	Negative	Suppressed body weight gain, Liver(Increased organ weights)/Increased keratoacanthoma : Rat	Oral(capsule)	Chronic toxicity study	1 year	Dog	Increased ALP	NOAEL: 10 mg/kg bw per day	ADI: 0.1 mg/kg bw	SF:100	(a)(b) Oral(gavage)	(a) Developmental toxicity study (b) Pharmacological study	(a)Rat (b)Mouse	(a)Suppressed body weight gain : Maternal (b)Reduced motor activity : Male	NOAEL: 50 mg/kg bw per day	0.5 mg/kg bw (for women of childbearing age)	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20220525072&field=210	2022/8/9	—	
231.2	Isoprothiolane	50512-35-1	· Agricultural and fishery products : Isoprothiolane(Parent compound only) · Livestock products : Isoprothiolane, monoisopropyl 1,3-dithiolan-2-ylidenemalonate	Pesticides & Veterinary Medicinal Products	Fungicide, Insecticide, Plant Growth Regulator	Dithiolane	Inhibition of hypha growth	Negative	Suppressed body weight gain, Liver(Increased organ weights)/Increased keratoacanthoma : Rat	Oral(capsule)	Chronic toxicity study	1 year	Dog	Increased ALP	NOAEL: 10 mg/kg bw per day	ADI: 0.1 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Delayed ossification : Fetus	NOAEL: 12 mg/kg bw per day	0.12 mg/kg bw (for women of childbearing age)	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20220525072&field=210	2022/8/9	—	
232	Isoyrazam	881685-58-1	Agricultural and livestock products : Isoyrazam(Parent compound only)	Pesticides	Fungicide	Pyrazolecarboxamide	Inhibition of electron transfer system in photosynthesis	Negative	Suppressed body weight gain, Liver(Hepatocellular hypertrophy, Increased organ weight, Acidophilic altered hepatocellular foci)/Increased incidence of hepatocellular adenoma and endometrium adenoma : Female rat/ Delayed ossification and Skeletal variation : Rat, Microphthalmia : Rabbit, Reduced number of implantation	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Acidophilic altered hepatocellular foci	NOAEL: 5.5 mg/kg bw per day	ADI: 0.055 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Listless, Exhaustion, Lateral position, Staggering gait, Suppressed body weight gain, Decreased locomotor activity	NOAEL: 30 mg/kg bw	0.3 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20220524080&field=210	2023/8/1	—	
233	Isotianil	224049-04-1	Agricultural, livestock and fishery products : Isotianil(Parent compound only)	Pesticides	Fungicide	Isothiazole	Induction of disease resistance	Negative	Forestomach(Hyperplasia of mucosal epithelium in the limiting ridge), Liver(Increased organ weight), Kidney(Chronic nephrosis)	Oral(feed)	Chronic toxicity study	1 year	Rat	Increased T.Chol, Increased liver relative weight	NOAEL: 2.83 mg/kg bw per day	ADI: 0.028 mg/kg bw	SF:100	—	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20221214272&field=210	2023/11/1	—
234	Isouron	55861-78-4	Agricultural products : Isouron(Parent compound only)	Pesticides	Herbicide	Urea	Inhibition of electron transfer system in photosynthesis	Negative	Cytoplasmic vacuolation, Retinopathy, Anemia/Microphthalmia : Rat, Decreased number of implantation	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain : Female	NOAEL: 1.74 mg/kg bw per day	ADI: 0.017 mg/kg bw	SF:100	(a)Oral(capsule) (b)Nasogastric	(a)(b)Chronic toxicity study	(a)Dog (b)Monkey	(a)Tachycardia, Decreased body weight (b)Vomiting, Decreased body weight	NOAEL: 20 mg/kg bw per day	0.2 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20110613081&field=202	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20110613081&field=201	2016/2/23	—	
235	Isoxafutole	141112-29-0	Agricultural and livestock products : Isoxafutole(Parent compound only)	Pesticides	Herbicide	Isoxazole	Inhibition of 4-HPPDase	Negative	Eye(Corneal opacity : Rat), Liver(Centriolobular hepatocellular hypertrophy)/Increased incidence of hepatocellular tumor : Rat and Mouse, Increased incidence of thyroid follicular cell adenomas : Male rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Keratitis : Male	NOAEL: 0.5 mg/kg bw per day	ADI: 0.005 mg/kg bw	SF:100	—	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20141021266&field=201	2015/5/12	—

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADI					Data for ARIDs					Reports			Remarks					
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID		SF	English (Summary/Full)	Japanese	Date of latest evaluation	
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value
236	Isoxathion	18854-01-8	Agricultural and fishery products : Isoxathion(Parent compound only)	Pesticides	Insecticide	Organophosphorus	Inhibition of cholinesterase activity	Negative	Inhibition of brain and erythrocyte CHE activity(more than 20%)	(a)Oral(feed) (b)Oral(gavage)	(a)Chronic toxicity study (b)Developmental toxicity study	(a)2 years (b)13 days	(a)Dog (b)Rabbit	(a)Inhibition of erythrocyte CHE activity(more than 20%) (b)Suppressed body weight gain : Maternal	NOAEL: 0.2 mg/kg bw per day	ADI: 0.002 mg/kg bw	SF:100	Oral(unspecified)	CHE inhibitor study	Human	No adverse effect observed at highest level(0.03 mg/kg bw per day)	NOAEL: 0.03 mg/kg bw per day	0.003 mg/kg bw	SF:10	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20110613080&field=202	https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20110613080&field=202	2016/2/23	--
237	Kasugamycin	19408-46-9	Agricultural products : Kasugamycin(Parent compound only)	Pesticides	Fungicide	Aminoglycoside	Inhibition of protein biosynthesis	Negative	Suppressed body weight gain, Rectum and Anus(Ulcer), Tongue (Disappearance of lingual papilla : Dog), Kidney(Pigment deposition of proximal tubular epithelium cell), Testis(Seminiferous tubular atrophy) / Seminiferous tubular atrophy and Reduced conception rate : Rat	Oral(feed)	Two-generation reproductive activity study	--	Rat	Suppressed body weight gain : Parent(Male)	NOAEL: 9.43 mg/kg bw per day	ADI: 0.094 mg/kg bw	SF:100	--	--	--	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	--	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20200611080&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20200611080&field=211	2020/10/27	--	
238	Kresoxim-methyl	143390-89-0	Agricultural, livestock and fishery products : Kresoxim-methyl(Parent compound only)	Pesticides	Fungicide	Strobilurin	Inhibition of electron transfer system in photosynthesis	Negative	Liver(Hepatocellular hypertrophy, Altered hepatocellular foci)/Increased incidence of liver tumor : Rat	Oral(feed)	Chronic toxicity study and Carcinogenicity study	2 years	Rat	Suppressed body weight gain : Male	NOAEL: 36 mg/kg bw per day	ADI: 0.36 mg/kg bw	SF:100	--	--	--	--	Not evaluated	--	--	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20200611080&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20200611080&field=211	2014/6/24	--
239	Lactofen	77561-63-4	Food products : Lactofen(Parent compound only)	Pesticides	Herbicide	Diphenyl ether	Inhibition of protoporphyrinogen oxidase activity	Negative	Liver(Increased organ weight, Increased incidence of altered hepatocellular foci), Kidney(Increased organ weight, Pigment deposition), Testis(Vacuolization), Blood(Anemia)/Increased incidence of hepatic tumor : Rat and Mouse/Reduced reproductive ability : Male rat, Low body weight, Skeletal anomaly : Rat(Fetus)	Oral(feed)	Chronic toxicity study	1 year	Dog	Increased urinary cast	NOAEL: 0.79 mg/kg bw per day	ADI: 0.0079 mg/kg bw	SF:100	--	--	--	--	Not evaluated	--	--	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a201901513&field=201	https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a201901513&field=201	2010/7/29	--
240	Lancotriene sodium	1486617-22-4	Agricultural products : Lancotriene sodium(Parent compound only)	Pesticides	Herbicide	Triketone	Inhibition of electron transfer system in photosynthesis	Negative	Eye(keratitis), Nervous system(Vacuolation of molecular layer of cerebellar cortex : Rat), Skin(Dermatitis), Liver(Hepatocellular hypertrophy), Thyroid(Hypertrophy of follicular epithelial cell), Gallbladder(Calculus : Mouse)/Corneal squamous cell papilloma/carcinoma : Rat	Oral(gavage)	Developmental toxicity study	6 - 27 days of pregnancy	Rabbit	Extra Rib, Increased skeletal anomaly : Fetus	NOAEL: 0.1 mg/kg bw per day	ADI: 0.001 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Decreased body weight and feed intake : Maternal	NOAEL: 10 mg/kg bw per day	0.1 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20170927103&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20170927103&field=211	2018/4/17	--
241	Lepimectin (Mixture of LA3 and LA4)	171249-10-8 (as LA3), 171249-05-1 (as LA4)	Agricultural and fishery products : Lepimectin(Parent compound only)	Pesticides	Insecticide	16 membered macrolide	Action on the chloride channel	Negative	Liver(Hepatocellular fatty degeneration), Blood(Hemolytic anemia), Incisor elongation : Mouse/Increased skeletal variation : Rat	Oral(feed)	Carcinogenicity study	2 years	Rat	Decreased Eos	NOAEL: 2.02 mg/kg bw per day	ADI: 0.02 mg/kg bw	SF:100	Oral(gavage)	Pharmacological study	Rat	Tip toe gait, Suppression of righting reflex, Hypotonia	NOAEL: 200 mg/kg bw	2 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20170927103&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20170927103&field=211	2017/6/13	--
242	Lindane	58-89-9	Agricultural and livestock products : Lindane(Parent compound only)	Pesticides	Insecticide	Organochlorine	Effects on GABA receptors	Negative	Liver(Increased organ weight, Hepatocellular hypertrophy), Kidney(Accumulation of hyaline droplet, Multiple cortical tubular necrosis : Male rat)/Increased incidence of bronchio-alveolar adenoma : Female mouse/Suppressed body weight gain, Retarded development, Decreased viability rate : Rat, Decreased number of live fetus : Mouse	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Centrilobular hepatocellular hypertrophy, Increased spleen weight	NOAEL: 0.47 mg/kg bw per day	TDI: 0.0047 mg/kg bw	UF:100	--	--	--	--	Not evaluated	--	--	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a201140082&field=201	https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a201140082&field=201	2013/3/4	--
243	Lufenuron	103055-07-8	Agricultural and livestock products : Lufenuron(Parent compound only)	Pesticides & Veterinary Medical Products	Insecticide	Benzoylurea	Inhibition of molting	Negative	Nervous system(Tonic-clonic convulsion), Liver(Increased organ weight), Adrenal gland(Increased organ weight)	Oral(feed)	Chronic toxicity study	1 year	Dog	Hepatocellular hypertrophy	NOAEL: 1.42 mg/kg bw per day	ADI: 0.014 mg/kg bw	SF:100	--	--	--	--	Not evaluated	--	--	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a2014023024&field=202	https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a2014023024&field=202	2014/6/17	--
244	Malathion	121-75-5	Agricultural and livestock products : Malathion(Parent compound only)	Pesticides	Insecticide	Organophosphorus	Inhibition of cholinesterase activity	Negative	Inhibition of brain and erythrocyte CHE activity(more than 20%) / Increased incidence of hepatocellular adenomas : Mouse	Oral(feed)	Chronic toxicity study and Combined chronic toxicity/carcinogenicity study	2 years	Rat	Inhibition of erythrocyte AChE activity(more than 20%)	NOAEL: 29 mg/kg bw per day	ADI: 0.29 mg/kg bw	SF:100	Oral(capsule)	Single-dose toxicity study	Human	No adverse effect observed at highest level(15 mg/kg bw)	NOAEL: 15 mg/kg bw	1.5 mg/kg bw	SF:10	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20110425002&field=202	https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20110425002&field=202	2014/5/13	--
245	Mandestrobin	173662-97-0	Agricultural products : Mandestrobin(Parent compound only)	Pesticides	Fungicide	Strobilurin	Inhibition of electron transfer system in photosynthesis	Negative	Liver(Increased organ weight, Hepatocellular hypertrophy), Thyroid(Hypertrophy of follicular cell)	Oral(feed)	Chronic toxicity study	1 year	Dog	Increased ALP : Male	NOAEL: 19.2 mg/kg bw per day	ADI: 0.19 mg/kg bw	SF:100	--	--	--	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not Applicable	--	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a2014023024&field=202	https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a2014023024&field=202	2021/3/16	The English report is the first edition published on October 7, 2014	
246	Mandipropamid	374726-62-2	Agricultural and livestock products : Mandipropamid(Parent compound only)	Pesticides	Fungicide	Mandelic acid amide	Inhibition of hypha growth	Negative	Liver(Hepatocellular acidophilic change)	Oral(capsule)	Chronic toxicity study	1 year	Dog	Increased ALP	NOAEL: 5 mg/kg bw per day	ADI: 0.05 mg/kg bw	SF:100	--	--	--	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not Applicable	--	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a2019126&field=210	https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a2019126&field=210	2021/2/16	--	
247	MCPA	94-74-6	Agricultural, livestock and fishery products : MCPA(including MCPA sodium salt, MCPA-dimethylamine salt, MCPA-ethyl and MCPA-ethylhexyl ester)	Pesticides	Herbicide	Phenoxy	Promotion of auxin action	Negative	Suppressed body weight gain, Nervous system(Abnormal gait, Ataxia : Rat and Mouse), Liver(Hepatocellular hypertrophy), Kidney(Renal dysfunction and related renal lesions) / Skeletal variation : C3H/He Mouse(Fetus), Skeletal anomaly and variation : Rat(Fetus)	Oral(feed)	Chronic toxicity study	1 year	Dog	Aggravation of lipofuscin deposit in renal proximal tubular epithelium cell	NOAEL: 0.19 mg/kg bw per day	ADI: 0.0019 mg/kg bw	SF:100	Oral(feed)	Developmental toxicity study	Mouse	Increased 14th rib : Fetus	NOAEL: 32 mg/kg bw per day	0.32 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20111137&field=210	https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20111137&field=210	2021/6/22	--
248	MCPB (MCPB-ethyl)	10443-70-6	Agricultural products : MCPB-ethyl, 4-(4-chloro-o-tolyl)oxy)butyric acid, 4-chloro-o-tolylacetic acid	Pesticides	Herbicide	Phenoxy	Promotion of auxin action	Negative	Suppressed body weight gain, Kidney(Increased organ weight)/Increased ventricular septal defect : Rat(Fetus)	Oral(feed)	Two-generation reproductive activity study	--	Rat	Suppressed body weight gain : Female parent	NOAEL: 1.24 mg/kg bw per day	ADI: 0.012 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Decreased body weight, Crouching position : Maternal	NOAEL: 20 mg/kg bw per day	0.2 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20140325097&field=212	https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20140325097&field=212	2018/9/4	--
249	Mefenacet	73250-68-7	Food products : Mefenacet(Parent compound only)	Pesticides	Herbicide	Acid amide	Inhibition of very long chain fatty acid synthesis	Negative	Blood(Increased Methb, Increased number of reticulocyte), Spleen(Swelling : Dark red change, Congestion)	Oral(feed)	Two-generation reproductive activity study	--	Rat	Increased incidence of pigment deposition in spleen : Parent	NOAEL: 0.7 mg/kg bw per day	ADI: 0.007 mg/kg bw	SF:100	--	--	--	--	Not evaluated	--	--	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20080316&field=201	https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20080316&field=201	2008/3/13	--
250	Mefenpyr-diethyl	135590-91-9	Agricultural products : Mefenpyr-diethyl(Parent compound only)	Pesticides	Herbicide Safeners	--	Acceleration of drug metabolism	Negative	Liver(Increased organ weight, Hepatocellular hypertrophy), Kidney(Decreased urine volume and BUN), Hematopoietic system(Increased extramedullary hematopoiesis in spleen)	Oral(feed)	Carcinogenicity study	18 months	Mouse	Centrilobular-Lobule intermediate zone hepatocellular hypertrophy : Male	NOAEL: 2.8 mg/kg bw per day	ADI: 0.028 mg/kg bw	SF:100	--	--	--	--	Not evaluated	--	--	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a2007060509&field=202	https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a2007060509&field=202	2008/12/18	--
251	Mefentrifluconazole	1417782-03-6	Agricultural products : Mefentrifluconazole(Parent compound only) Livestock products : Mefentrifluconazole, 2-[4-(4-chlorophenoxy)-2-(trifluoromethyl)phenyl]propane-1,2-diol(including conjugated form)	Pesticides	Fungicide	Triazole	Inhibition of ergosterol biosynthesis	Negative	Suppressed body weight gain, Liver(Hepatocellular hypertrophy, Hepatocellular necrosis) / Slight decreased number of implantation, Decreased number of infant : Rat	Oral(feed)	Carcinogenicity study	18 months	Mouse	Hepatocellular fatty degeneration : Male	NOAEL: 3.5 mg/kg bw per day	ADI: 0.035 mg/kg bw	SF:100	--	--	--	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not Applicable	--	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20190523011&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?wload7retrievalId=ky-a20190523011&field=211	2022/10/26	The English report is the first edition published on January 14, 2020	

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs					Data for ARIDs					Reports			Remarks						
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID		SF	English (Summary/Full)	Japanese	Date of latest evaluation		
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value	
252	Mepanipyrim	110235-47-7	Agricultural products : Mepanipyrim(Parent compound only)	Pesticides	Fungicide	Anilinopyrimidine	Inhibition of hypha growth	Negative	Liver(Hepatocellular hypertrophy/degeneration), Kidney(Increased organ weight : Rat)/Increased hepatocellular adenoma : Female rat, Increased hepatocellular adenoma/carcinoma : Mouse	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain, Fatty degeneration of liver	NOAEL: 7.34 mg/kg bw per day	ADI: 0.073 mg/kg bw	SF:100	Oral(capsule)	Acute neurotoxicity study	Rat	Decreased number of rearings, Tremor, Reduced state of arousal : Male	NOAEL: 400 mg/kg bw	4 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130130017&fileId=203	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2022-0119019&fileId=210	2022/3/29	The English report is the first edition published on October 20, 2015	
253	Mepiquat chloride	24307-26-4	Agricultural products : Mepiquat chloride(Parent compound only)	Pesticides	Plant Growth Regulator	Hetero	Inhibition of gibberellin biosynthesis	Negative	Suppressed body weight gain, Tremor, Kidney(Vacuolization of distal tubular epithelium : Dog)	Oral(gavage)	Developmental neurotoxicity study	6 days of pregnancy - 10 days postnatal : Maternal, 11 - 21 days postnatal : Offspring	Rat	Death : Offspring	NOAEL: 30 mg/kg bw per day	ADI: 0.3 mg/kg bw	SF:100	Oral(gavage)	Developmental neurotoxicity study	Rat	Death : Offspring	NOAEL: 30 mg/kg bw per day	0.3 mg/kg bw	SF:100	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2013-1114386&fileId=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2013-1114386&fileId=210	2017/3/7	—	
254	Mepromil	55814-41-0	Food products : Mepromil(Parent compound only)	Pesticides	Fungicide	Amide	Inhibition of electron transfer system in photosynthesis	Negative	Suppressed body weight gain, Liver(Increased absolute/relative weight)	Oral(capsule)	Chronic toxicity study	2 years	Dog	Increased ALP : Female	NOAEL: 5 mg/kg bw per day	ADI: 0.05 mg/kg bw	SF:100	—	—	—	—	—	—	Not evaluated	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2008-0325022&fileId=002	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2008-0325022&fileId=002	2009/12/17	—
255	Mesotrione	104266-82-8	Agricultural products : Mesotrione(Parent compound only)	Pesticides	Herbicide	Triketone	Inhibition of carotenoid biosynthesis	Negative	Eye(Corneal opacity), Liver(Increased organ weight)/Slight increased thyroid follicular cell adenoma : Female rat	Oral(feed)	Three-generation reproductive activity study	—	Rat	Increased kidney weight : Male parent, Decreased feed intake : Female parent, Renal pelvic dilatation : Offspring	NOAEL: 0.3 mg/kg bw per day	ADI: 0.003 mg/kg bw	SF:100	—	—	—	—	—	—	Not Applicable	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2014-0702189&fileId=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2014-0702189&fileId=201	2015/2/3	—
256	Metazofluzone	139968-49-3	Agricultural products : Metazofluzone(E-isomer and Z-isomer), p-(m-trifluoromethyl)phenyl)benzoxirle Livestock and fishery products : Metazofluzone(E-isomer and Z-isomer)	Pesticides	Insecticide	Trifluoromethoxyphenyl	Inhibition of neural transmission	Negative	Suppressed body weight gain, Blood(Anemia), Liver(Centrilobular hepatocellular hypertrophy)	Oral(capsule)	Chronic toxicity study	1 year	Dog	Decreased MCHC, Increased hypochromasia erythrocyte and T.Bil : Male, Vomiting, Ataxia, Suppressed body weight gain, Decreased body weight and feed intake : Female	NOAEL: 12 mg/kg bw per day	ADI: 0.12 mg/kg bw	SF:100	—	—	—	—	—	—	Not Applicable	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2020-1019127&fileId=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2020-1019127&fileId=210	2021/1/12	—
257	Metaxyl (Metaxyl-M)	57837-19-1 (as Metaxyl), 70630-17-0 (as Metaxyl-M)	Agricultural and fishery products : Metaxyl, Metaxyl-M(Parent compound only) Livestock products : Metaxyl, Metaxyl-M, Metabolites containing 2,6-dimethylaniline groups	Pesticides	Fungicide	Acylaniline	Inhibition of DNA and RNA replication	Negative	Liver(Increased organ weight)	Oral(capsule)	Chronic toxicity study	2 years	Dog	Tonic convulsion, Death with salivation	NOAEL: 8 mg/kg bw per day	ADI: 0.08 mg/kg bw	SF:100	(a) Oral(gavage) (b) Oral(unspecified)	(a)Subacute toxicity study (b) Pharmacological study	(a)Rat (b)Mouse	(a)Reduced motor activity (b)Decreased locomotor activity	NOEL: 50 mg/kg bw per day	0.5 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2017-0315212&fileId=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2017-0315212&fileId=201	2017/10/17	—
258	Metolaldehyde	108-62-3	Agricultural, livestock and fishery products : Metolaldehyde(Parent compound only)	Pesticides	Insecticide	Ethanalpolymer	—	Negative	Liver(Hepatocellular hypertrophy), Nervous system(Ataxia : Rat and Dog)/Increased hepatocellular adenoma : Female rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Hepatocellular hypertrophy : Male	NOAEL: 2.2 mg/kg bw per day	ADI: 0.022 mg/kg bw	SF:100	Oral(feed)	Chronic toxicity study	Dog	Ataxia	NOAEL: 30 mg/kg bw per day	0.3 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2022-0713116&fileId=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2022-0713116&fileId=210	2022/10/12	—
259	Metam (Metam-ammonium) #3	39680-90-5 (as Metam-ammonium)	Agricultural products : Methyl isothiocyanate	Pesticides	Fumigant	Dithiocarbamate	Inhibition of SH-enzymes	Negative	Suppressed body weight gain, Stomach(Hyperkeratosis : Forestomach, Hyperplasia of mucosal epithelium : Glandular stomach) / Decreased the number of viable fetuses, Increased the number of stillborn infant : Rat	(a)Oral(capsule) (b)Oral(gavage)	(a)Chronic toxicity study (b)Two-generation reproductive activity study	(a)1 year (b)—	(a)Dog (b)Rat	(a)Vomiting, Salivation (b)Increased absolute/relative liver weight	NOAEL: 0.5 mg/kg bw per day	ADI: 0.005 mg/kg bw	SF:100	Oral(capsule)	Chronic toxicity study	Dog	Vomiting	NOAEL: 3 mg/kg bw per day	0.03 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2019-0523009&fileId=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2019-0523009&fileId=210	2019/8/27	Evaluated as a group of Dazomet, Metam and Methyl isothiocyanate. Please see #100.
260	Metam (Metam-sodium, Metam-potassium) #3	137-42-8 (as Metam-sodium), 137-41-7 (as Metam-potassium)	Agricultural products : Methyl isothiocyanate	Pesticides	Fumigant	Dithiocarbamate	Inhibition of SH-enzymes	Negative	Suppressed body weight gain, Blood(Anemia), Stomach(Hyperplasia of mucosal epithelium : Forestomach), Urinary bladder(Hyperplasia of mucosal epithelium) / Meningocele : Rat and rabbit fetus	Oral(gavage)	Chronic toxicity study	1 year	Dog	Increased ALP : Male	NOAEL: 0.75 mg/kg bw per day	ADI: 0.0075 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat and Rabbit	Suppressed body weight gain : Maternal	NOAEL: 2.16 mg/kg bw per day	0.021 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2019-0523009&fileId=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2019-0523009&fileId=210	2019/8/27	Evaluated as a group of Dazomet, Metam and Methyl isothiocyanate. Please see #100.
261	Metamifop	256412-89-2	Agricultural, livestock and fishery products : Metamifop(Parent compound only)	Pesticides	Herbicide	Aryloxyphenoxypionic	Inhibition of acetyl-CoA carboxylase	Negative	Suppressed body weight gain, Blood(Anemia), Liver(Hepatocellular hypertrophy), Kidney(Epithelial hyperplasia of urinary tract, Mineralization of pelvis : Rat), Thyroid(Hypertrophy of follicular epithelial cell)/Increased incidence of granulosa cell tumor : Female rat, Increased incidence of hepatocellular adenoma/carcinoma : Mouse/Decreased number of primordial follicle, Decreased average number of implantation and Infant : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Mineralization of pelvis	NOAEL: 0.42 mg/kg bw per day	ADI: 0.0042 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Suppressed body weight gain, Decreased feed intake : Maternal	NOAEL: 120 mg/kg bw per day	1.2 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20160323545&fileId=202	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20160323545&fileId=202	2021/2/16	The English report is the first edition published on September 6, 2016	
262	Metazosulfuron	868680-84-6	Agricultural products : Metazosulfuron(Parent compound only)	Pesticides	Herbicide	Sulfonylurea	Inhibition of acetolactate synthase(ALS)	Negative	Suppressed body weight gain, Blood(Anemia), Liver(Hepatocellular hypertrophy)/Increased incidence of endometrium adenoma : Female rat/Decreased body weight, Skeletal variation, Increased incidence of delayed ossification : Rat(Fetus)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	1 year	Rat	Increased foamy alveolar macrophage of lung : Male	NOAEL: 2.75 mg/kg bw per day	ADI: 0.027 mg/kg bw	SF:100	—	—	—	—	—	—	Not evaluated	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2019-1210343&fileId=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2019-1210343&fileId=201	2012/1/26	—
263.1	Metconazole	125116-23-6	Agricultural products : Metconazole(Parent compound only)	Pesticides	Fungicide	Triazole	Inhibition of ergosterol biosynthesis	Negative	Blood(Miniaturization of RBC), Liver(Hepatocellular hypertrophy)/Increased hepatocellular tumor : Mouse/Ventricular septal defect, Variation of rib : Rat, Hydrocephaly, Internal anomaly, Skeletal anomaly : Rabbit(Fetus)	Oral(gavage)	Developmental toxicity study	13 days	Rabbit	Hydrocephaly : Fetus	NOAEL: 2 mg/kg bw per day	ADI: 0.02 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Suppressed body weight gain, Decreased feed intake and body weight : Maternal	NOAEL: 10 mg/kg bw per day	0.1 mg/kg bw (for general population)	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2014-0514145&fileId=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2014-0514145&fileId=201	2014/11/18	—
263.2	Metconazole	125116-23-6	Agricultural products : Metconazole(Parent compound only)	Pesticides	Fungicide	Triazole	Inhibition of ergosterol biosynthesis	Negative	Blood(Miniaturization of RBC), Liver(Hepatocellular hypertrophy)/Increased hepatocellular tumor : Mouse/Ventricular septal defect, Variation of rib : Rat, Hydrocephaly, Internal anomaly, Skeletal anomaly : Rabbit(Fetus)	Oral(gavage)	Developmental toxicity study	13 days	Rabbit	Hydrocephaly : Fetus	NOAEL: 2 mg/kg bw per day	ADI: 0.02 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Hydrocephaly : Fetus	NOAEL: 2 mg/kg bw per day	0.02 mg/kg bw (for women of childbearing age)	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2014-0514145&fileId=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2014-0514145&fileId=201	2014/11/18	—
264	Methamidophos	10265-92-6	Agricultural and livestock products : Methamidophos(Parent compound only)	Pesticides	Insecticide, Acaricide	Organophosphorus	Inhibition of acetylcholinesterase activity	Negative	Inhibition of brain and erythrocyte CHE activity(more than 20%) / Reduced birth rate : Rat	Oral(feed)	Chronic toxicity study	1 year	Dog	Inhibition of brain and erythrocyte CHE activity(more than 20%)	NOAEL: 0.056 mg/kg bw per day	ADI: 0.00056 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Inhibition of erythrocyte CHE activity(more than 20%) : Male, Inhibition of brain and erythrocyte CHE activity(more than 20%) : Female	NOAEL: 0.3 mg/kg bw	0.003 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2016-0209501&fileId=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2016-0209501&fileId=201	2016/12/13	—
265	Methiocarb	2032-65-7	Agricultural products : Methiocarb, Methiocarb sulfioxide	Pesticides	Insecticide	Carbamate	—	Negative	Inhibition of erythrocyte and brain CHE activity(more than 20%)	Oral(feed)	Chronic toxicity study	2 years	Dog	Paralysis of hindlimb, Tremor, Decreased attention, Vomiting	NOAEL: 2.4 mg/kg bw per day	ADI: 0.024 mg/kg bw	SF:100	—	—	—	—	—	—	Not evaluated	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2007-0206013&fileId=002	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2007-0206013&fileId=002	2007/2/6	—
266	Methoxyfenozide	161050-58-4	Agricultural, livestock and fishery products : Methoxyfenozide(Parent compound only)	Pesticides	Insecticide	Benzoylhydrazine	Induction of abnormal molting	Negative	Blood(Anemia), Liver(Periportal hepatocellular hypertrophy : Rat), Kidney(Renal pelvic epithelial cell hyperplasia : Rat)	Oral(feed)	Chronic toxicity study	1 year	Dog	Decreased RBC : Male	NOAEL: 9.8 mg/kg bw per day	ADI: 0.098 mg/kg bw	SF:100	—	—	—	—	—	—	Not Applicable	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2022-0525071&fileId=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2022-0525071&fileId=210	2022/7/13	—

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs					Data for ARIDs					Reports			Remarks						
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID		SF	English (Summary/Full)	Japanese	Date of latest evaluation		
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value	
335	Pyraclonil	158353-15-2	Agricultural products : Pyraclonil, 1-(3-chloro-4-hydroxy-4,5,6,7-tetrahydropyrazolo[1,5-a]pyridin-2-yl)-5-(methylamino) pyrazole-4-carbonitrile, 1-(3-chloro-4,5,6,7-tetrahydropyrazolo[1,5-a]pyridin-2-yl)-5-(methylamino)pyrazole-4-carbonitrile	Pesticides	Herbicide	Pyrazolopyrazole	Inhibition of protoporphyrinogen IX oxidase activity	Negative	Liver(Hepatocellular hypertrophy), Thyroid(Hypertrophy of follicular epithelial cell)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain, Decreased feed intake	NOAEL: 0.44 mg/kg bw per day	ADI: 0.0044 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachdfile/download?strialid=ky2010-061847&filed=04_401	2011/6/2	—	
336	Pyraclostrobin	175013-18-0	Agricultural products : Pyraclostrobin(Parent compound only)	Pesticides	Fungicide	Strobilurin	Inhibition of electron transfer system in photosynthesis	Negative	Suppressed body weight gain, Blood(Anemia), Duodenitis(Hyperplasia of mucosal epithelium)/Increased internal and skeletal variation : Rat(Fetus)	Oral(feed)	Chronic toxicity study/ Carcinogenicity study	2 years	Rat	Suppressed body weight gain	NOAEL: 3.4 mg/kg bw per day	ADI: 0.034 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Decreased body weight, Early Resorption, Resorption of all embryo : Maternal, Increased postimplantation loss : Fetus	NOAEL: 5 mg/kg bw per day	0.05 mg/kg bw	SF:100	—	—	https://www.fsc.go.jp/fscis/attachdfile/download?strialid=ky2010-0323541&filed=201	2016/9/27	—
337	Pyraflufen-ethyl	129630-19-9	Agricultural products : Pyraflufen-ethyl(Parent compound only)	Pesticides	Herbicide	Pyrazole	Inhibition of chlorophyll biosynthesis	Negative	Liver(Hepatocellular hypertrophy, Pigment deposition of Kupffer cell), Kidney(Hyperplasia of transitional epithelium, Renal papillary necrosis/dissection)/Slight increased hepatocellular adenoma : Mouse	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased urine volume : Male	NOAEL: 17.2 mg/kg bw per day	ADI: 0.17 mg/kg bw	SF:100	—	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	—	—	https://www.fsc.go.jp/fscis/attachdfile/download?strialid=ky2021-0209016&filed=211	2021/6/29	—
338	Pyrasulfotole	365400-11-9	Agricultural products : Pyrasulfotole, (5-hydroxy-3-methyl-1H-pyrazol-4-yl)(2-(methylsulfonyl)-4-(trifluoromethyl) phenyl)methanone	Pesticides	Herbicide	—	Inhibition of 4-HPPDase	Negative	Cornea(Opacity, Inflammation, Hyperplasia), Urinary tract(Epithelial hyperplasia, Calculus)/ Corneal squamous papilloma/carcinoma : Rat, Urinary bladder transitional cell papilloma/carcinoma and urethra transitional epithelium carcinoma : Mouse	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain	NOAEL: 1 mg/kg bw per day	ADI: 0.01 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachdfile/download?strialid=ky2007-0828002&filed=002	2008/11/20	—	
339	Pyraziflumid	942515-63-1	Agricultural and livestock products : Pyraziflumid(Parent compound only)	Pesticides	Fungicide	Pyrazinecarboxamide	Inhibition of electron transfer system in photosynthesis	Negative	Liver(Hepatocellular single cell necrosis), Thyroid(Hypertrophy of follicular epithelial cell)/Increased incidence of thyroid follicular cell adenoma/carcinoma : Male rat, Increased incidence of hepatocellular adenoma : Female rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Centrilobular hepatocellular hypertrophy and fatty degeneration : Male	NOAEL: 2.15 mg/kg bw per day	ADI: 0.021 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Decreased locomotor activity	LOAEL: 500 mg/kg bw	1.6 mg/kg bw	SF:300 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI:3	Summary https://www.fsc.go.jp/fscis/attachdfile/download?strialid=ky2016-1020161018124&filed=10	https://www.fsc.go.jp/fscis/attachdfile/download?strialid=ky2016-1020161018124&filed=10	2022/5/10	The English report is the first edition published on March 28, 2017	
340	Pyrazosulfuron-ethyl	93697-74-6	Agricultural products : Pyrazosulfuron-ethyl(Parent compound only)	Pesticides	Herbicide	Sulfonyleurea	Inhibition of acetolactate synthase(ALS)	Negative	Liver(Centrilobular hepatocellular hypertrophy, Vacuolar degeneration), Blood(Anemia), Decreased Chol	Oral(capsule)	Chronic toxicity study	1 year	Dog	Decreased Chol : Female	NOAEL: 1 mg/kg bw per day	ADI: 0.01 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachdfile/download?strialid=ky2010-0323528&filed=201	2014/5/20	—	
341	Pyribencarb	799247-52-2	Agricultural products : Pyribencarb, methyl(2-chloro-5-[(Z)-1-(6-methyl-2-pyridinylmethoxyimino)ethyl]benzyl)carbamate Livestock and fishery products : Pyribencarb(Parent compound only)	Pesticides	Fungicide	Benzylcarbamate	Inhibition of electron transfer system in photosynthesis	Negative	Liver(Hepatocellular hypertrophy), Duodenum(Dilatation, Mucosal thickening)	Oral(feed)	Chronic toxicity study	1 year	Rat	Diffuse hepatocellular fatty degeneration : Male	NOAEL: 3.97 mg/kg bw per day	ADI: 0.039 mg/kg bw	SF:100	Oral(gavage)	Pharmacological study	Mouse	Reduced of righting reflex, Abnormal gait	NOAEL: 113 mg/kg bw	1.1 mg/kg bw	SF:100	—	—	https://www.fsc.go.jp/fscis/attachdfile/download?strialid=ky2022-1019190&filed=210	2023/1/19	—
342	Pyributicarb	88678-67-5	Food products : Pyributicarb(Parent compound only)	Pesticides	Herbicide	Thiocarbamate	—	Negative	Blood(Anemia)/Increased interstitial cell tumor : Rat, Increased hepatocellular adenoma/carcinoma : Mouse	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain, Decreased water intake, Increased urinary specific gravity : Female	NOAEL: 0.88 mg/kg bw per day	ADI: 0.0088 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachdfile/download?strialid=ky2007-0906001&filed=002	2008/9/11	—	
343	Pyridaben	96489-71-3	Agricultural and livestock products : Pyridaben(Parent compound only)	Pesticides	Insecticide	Pyridazinone	Inhibition of electron transfer system in photosynthesis	Negative	Suppressed body weight gain	Oral(capsule)	Chronic toxicity study	1 year	Dog	Suppressed body weight gain	NOAEL: 0.5 mg/kg bw per day	ADI: 0.005 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachdfile/download?strialid=ky2010-0216004&filed=201	2011/6/30	—	
344	Pyridachlometyl	1358061-55-8	Agricultural and livestock products : Pyridachlometyl(Parent compound only)	Pesticides	Fungicide	Pyridazine	Inhibition of hypha growth	Negative	Suppressed body weight gain, Thyroid(Increased organ weight, Hypertrophy of follicular epithelial cell : Rat and Mouse), Liver(Increased organ weight, Hepatocellular hypertrophy)/Increased incidence of thyroid follicular cell adenoma/carcinoma, hepatocellular adenoma/carcinoma and endometrial stromal polyp : Rat, Increased incidence of hepatocellular adenoma/carcinoma : Mouse	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased GGT, Panlobular hepatocellular hypertrophy : Male	NOAEL: 8 mg/kg bw per day	ADI: 0.08 mg/kg bw	SF:100	—	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	—	—	https://www.fsc.go.jp/fscis/attachdfile/download?strialid=ky2022-0323038&filed=210	2022/8/31	—
345	Pyridalyl	179101-81-6	Agricultural, livestock and fishery products : Pyridalyl(Parent compound only)	Pesticides	Insecticide	Phenoxy-pyridoloyl derivative	Action as a cytotoxin	Negative	Liver(Hepatocellular hypertrophy, Single cell necrosis), Lung(Accumulation of foam cell : Rat), Adrenal gland(Adrenocortical vacuolization)	Oral(feed)	Two-generation reproductive activity study	—	Rat	Suppressed body weight gain : Male parent	NOAEL: 2.8 mg/kg bw per day	ADI: 0.028 mg/kg bw	SF:100	—	—	—	—	—	Not Applicable	—	Report https://www.fsc.go.jp/fscis/attachdfile/download?strialid=ky2022-a200310290326&filed=06_001_003	https://www.fsc.go.jp/fscis/attachdfile/download?strialid=ky2022-a200310290326&filed=06_001_003	2022/5/18	The English report is the first edition published on January 15, 2004	
346.1	Pyrifluquinazon	337458-27-2	Agricultural products : Pyrifluquinazon(Parent compound only)	Pesticides	Insecticide	Quinazoline	Suppression of eating behavior	Negative	Testis(Hyperplasia of interstitial cell), Liver(Hepatocellular hypertrophy), Blood(Anemia)/Increased incidence of testicular interstitial cell tumor : Rat and Mouse./Hypospadias, Shorter anogenital distance : Rat(Offspring and Fetus)	Oral(capsule)	Chronic toxicity study	1 year and 6 months recovery period	Dog	Mononuclear cell infiltration in olfactory region of nasal cavity	NOAEL: 0.5 mg/kg bw per day	ADI: 0.005 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Imminent murder, Abnormal body position, Ataxia, Abnormal gait, Abnormal respiration	NOAEL: 100 mg/kg bw	1 mg/kg bw (for general population)	SF:100	—	—	https://www.fsc.go.jp/fscis/attachdfile/download?strialid=ky2022-0119015&filed=211	2022/3/9	—
346.2	Pyrifluquinazon	337458-27-2	Agricultural products : Pyrifluquinazon(Parent compound only)	Pesticides	Insecticide	Quinazoline	Suppression of eating behavior	Negative	Testis(Hyperplasia of interstitial cell), Liver(Hepatocellular hypertrophy), Blood(Anemia)/Increased incidence of testicular interstitial cell tumor : Rat and Mouse./Hypospadias, Shorter anogenital distance : Rat(Offspring and Fetus)	Oral(capsule)	Chronic toxicity study	1 year and 6 months recovery period	Dog	Mononuclear cell infiltration in olfactory region of nasal cavity	NOAEL: 0.5 mg/kg bw per day	ADI: 0.005 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Shorter anogenital distance : Fetus	NOAEL: 5 mg/kg bw per day	0.05 mg/kg bw (for women of childbearing age)	SF:100	—	—	https://www.fsc.go.jp/fscis/attachdfile/download?strialid=ky2022-0119015&filed=211	2022/3/9	—
347	Pyritalid	135186-78-6	Agricultural products : Pyritalid(Parent compound only)	Pesticides	Herbicide	Isobenzofurane	Inhibition of acetolactate synthase(ALS)	Negative	Liver(Increased absolute/relative weight, Centrilobular hepatocellular hypertrophy), Kidney(Increased absolute/relative weight, Tubular basophila changes)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Demyelination of sciatic nerve : Female	NOAEL: 0.56 mg/kg bw per day	ADI: 0.0056 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachdfile/download?strialid=ky2008-1030034&filed=06_001_001	2008/1/17	—	

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs					Data for ARIDs					Reports			Remarks									
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID		SF	English (Summary/Full)	Japanese	Date of latest evaluation					
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value				
373	tau-Fluvalinate	102851-06-9	Agricultural products : Fluvalinate(Parent compound only)	Pesticides & Veterinary Medicinal Products	Insecticide(Acaricide)	Pyrethroid	Inhibition of neural transmission	Negative	Salivation, Reduced motor activity, Abnormal gait, Suppressed body weight gain, Blood(Anemia), Skin(Dehairing, Crust)	Oral(gavage)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain	NOAEL: 0.5 mg/kg bw per day	ADI: 0.005 mg/kg bw	SF:100	Oral(gavage)	Comprehensive evaluation of subacute neurotoxicity study and developmental neurotoxicity study	Rat	Listless, Hunchback position : Male, Salivation : Female	NOAEL: 6 mg/kg bw per day	0.06 mg/kg bw	SF:100	—	—	—	https://www.fsc.go.jp/fscis/attachfile/download?trivallid=ky201702151756&filed=201	2017/8/22	—		
374	TCMTB	21564-17-0	Agricultural products : TCMTB(Parent compound only)	Pesticides	Fungicide	Thiazole	—	Negative	Suppressed body weight gain, Gastrointestine(Inflammation)/Increased incidence of testicular interstitial cell tumors : Male rat, Increased incidence of thyroid C-cell adenoma : Female rat	Oral(feed)	Chronic toxicity study	1 year	Dog	Decreased ALT	LOAEL: 3.8 mg/kg bw per day	ADI: 0.012 mg/kg bw	SF:300 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI:3	—	—	—	—	—	—	Not evaluated	—	—	—	—	—	https://www.fsc.go.jp/fscis/attachfile/download?trivallid=ky200603250076&filed=021	2010/9/16	—
375	Tebuconazole	107534-96-3	Agricultural and livestock products : Tebuconazole(Parent compound only)	Pesticides	Fungicide	Triazole	Inhibition of sterol biosynthesis	Negative	Suppressed body weight gain, Liver(Fatty degeneration)/hepatocellular tumor : Mouse/ Decreased number of littermate at birth, Reduced weaning rate : Rat, Low body weight, Delayed ossification, Malformation : Rat, Mouse and Rabbit(Fetus)	Oral(feed)	Chronic toxicity study	1 year	Dog	Minor hypertrophy of the adrenal zona fasciculata cells	NOAEL: 2.94 mg/kg bw per day	ADI: 0.029 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat and Rabbit	Decreased body weight, Suppressed body weight gain : Maternal	NOAEL: 30 mg/kg bw per day	0.3 mg/kg bw	SF:100	—	—	—	—	—	https://www.fsc.go.jp/fscis/attachfile/download?trivallid=ky201506190756&filed=216	2019/10/1	—
376	Tebufenozide	112410-23-8	Agricultural and fishery products : Tebufenozide(Parent compound only)	Pesticides	Insecticide	Benzoylhydrazide	Induction of abnormal molting	Negative	Blood(Hemolytic anemia, Methemoglobinemia), Suppressed body weight gain/Increased non gestational rate, Decreased average number of live born and infant	Oral(feed)	Two-generation reproductive activity study	—	Rat	Increased splenic congestion : Male parent	NOAEL: 1.6 mg/kg bw per day	ADI: 0.016 mg/kg bw	SF:100	—	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	—	—	—	—	—	https://www.fsc.go.jp/fscis/attachfile/download?trivallid=ky20160209488&filed=201	2016/5/17	—
377	Tebufenpyrad	119168-77-3	Agricultural products : Tebufenpyrad(Parent compound only)	Pesticides	Insecticide(Acaricide)	Pyrazole	Inhibition of electron transfer system in photosynthesis	Negative	Suppressed body weight gain, Liver(Increased organ weight)/Increased incidence of hepatocellular adenoma : Male rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain	NOAEL: 0.82 mg/kg bw per day	ADI: 0.0082 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Suppressed body weight gain, Decreased feed intake : Maternal	NOAEL: 15 mg/kg bw per day	0.15 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachfile/download?trivallid=ky201101246808&filed=211	2023/5/17	The English report is the first edition published on May 22, 2018					
378	Tebufoquin	37645-78-2	Agricultural and fishery products : Tebufoquin, 6-tert-butyl-8-fluoro-2,3-dimethyl-4(1H)-quinolinone	Pesticides	Fungicide	—	Inhibition of electron transfer system in photosynthesis	Negative	Hematopoietic system(Hemolytic anemia, Splenic congestion, Increased extramedullary hematopoiesis), Liver(Altered hepatocellular foci : Rat), Biliary tract(Hyperplasia of mucosal epithelium : Dog), Blood vessel(Aortitis : Mouse), Urinary bladder(Hyperplasia of mucosal epithelium)/Increased incidence of skeletal variation(Extra Rib) : Rat	Oral(feed)	Two-generation reproductive activity study	—	Rat	Suppressed body weight gain, Increased absolute/relative thymus weight : Offspring	NOAEL: 4.13 mg/kg bw per day	ADI: 0.041 mg/kg bw	SF:100	—	—	—	—	—	—	Not evaluated	—	—	—	—	https://www.fsc.go.jp/fscis/attachfile/download?trivallid=ky201402030208&filed=201	2014/4/22	—	
379	Teflubenzuron	83121-18-0	Agricultural products : Teflubenzuron(Parent compound only)	Pesticides & Veterinary Medicinal Products	Insecticide	Benzoxazole	Inhibition of chitin synthesis	Negative	Liver(Hepatocellular hypertrophy, Single cell necrosis, Altered hepatocellular foci)/Increased incidence of hepatocellular adenoma : Male mouse	Oral(feed)	Carcinogenicity study	78 weeks	Mouse	Hepatocellular single cell necrosis : Male	NOAEL: 2.1 mg/kg bw per day	ADI: 0.021 mg/kg bw	SF:100	—	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	—	—	—	—	Summary https://www.fsc.go.jp/fscis/attachfile/download?trivallid=ky20170315214&filed=211	2017/12/12	—	
380	Tefuryltrione	473278-76-1	Agricultural products : Tefuryltrione(Parent compound only)	Pesticides	Herbicide	Triketone	Inhibition of 4-HPPDase	Negative	Eye(Corneal opacity, Neovascularization : Rat and Dog), Increased body weight, Blood(Anemia : Dog), Liver(Centrilobular hepatocellular hypertrophy, Increased relative weight)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Corneal opacity, keratitis	NOAEL: 0.08 mg/kg bw per day	ADI: 0.0008 mg/kg bw	SF:100	—	—	—	—	—	—	Not evaluated	—	—	—	—	https://www.fsc.go.jp/fscis/attachfile/download?trivallid=ky200801110038&filed=002	2009/2/19	—	
381.1	Tepraloxydim	149979-41-9	Agricultural products : Tepraloxydim(Parent compound only) Livestock products : Tepraloxydim, (RS)-3-hydroxy-2-propionyl-5-perhydropryan-4-ylcyclohex-2-en-1-one	Pesticides	Herbicide	Cyclohexanone	Inhibition of fatty acid biosynthesis	Negative	Suppressed body weight gain, Liver(Centrilobular hepatocellular hypertrophy), Thyroid(Increased organ weight : Dog), Testis(Seminiferous tubular atrophy : Dog), Urinary system(Hyperplasia of urinary bladder epithelium : Dog)/Increased incidence of total of hepatocellular adenoma/carcinoma : Female rat and Female mouse/External malformation : Rat(Fetus)	Oral(feed)	Chronic toxicity study/ Carcinogenicity study	2 years	Rat	Acidophilic altered hepatocellular foci	NOAEL: 5 mg/kg bw per day	ADI: 0.05 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Decreased locomotor activity	LOAEL: 500 mg/kg bw	1.6 mg/kg bw (for general population)	SF:300 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI:3	Summary https://www.fsc.go.jp/fscis/attachfile/download?trivallid=ky20150124684&filed=01	2015/5/12	—					
381.2	Tepraloxydim	149979-41-9	Agricultural products : Tepraloxydim(Parent compound only) Livestock products : Tepraloxydim, (RS)-3-hydroxy-2-propionyl-5-perhydropryan-4-ylcyclohex-2-en-1-one	Pesticides	Herbicide	Cyclohexanone	Inhibition of fatty acid biosynthesis	Negative	Suppressed body weight gain, Liver(Centrilobular hepatocellular hypertrophy), Thyroid(Increased organ weight : Dog), Testis(Seminiferous tubular atrophy : Dog), Urinary system(Hyperplasia of urinary bladder epithelium : Dog)/Increased incidence of total of hepatocellular adenoma/carcinoma : Female rat and Female mouse/External malformation : Rat(Fetus)	Oral(feed)	Chronic toxicity study/ Carcinogenicity study	2 years	Rat	Acidophilic altered hepatocellular foci	NOAEL: 5 mg/kg bw per day	ADI: 0.05 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Delayed ossification, Low body weight : Fetus	NOAEL: 40 mg/kg bw per day	0.4 mg/kg bw (for women of childbearing age)	SF:100	Summary https://www.fsc.go.jp/fscis/attachfile/download?trivallid=ky20150124684&filed=01	2015/5/12	—					
382	Tetraconazole	112281-77-3	Agricultural and livestock products : Tetraconazole(Parent compound only)	Pesticides	Fungicide	Triazole	Inhibition of ergosterol biosynthesis	Negative	Liver(Centrilobular hepatocellular hypertrophy), Kidney(Hypertrophy of tubular epithelium cell in renal cortex : Dog), Bone(Thickening of skull), Decreased locomotor activity/Increased hepatocellular adenoma/carcinoma : Mouse/Increased incidence of hydronephrosis and hydroureter : Rat(Fetus), Extended gestation period	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Centrilobular hepatocellular hypertrophy	NOAEL: 0.4 mg/kg bw per day	ADI: 0.004 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Suppressed body weight gain : Maternal	NOAEL: 5 mg/kg bw per day	0.05 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachfile/download?trivallid=ky20080708006&filed=501	2021/10/26	The English report is the first edition published on August 18, 2015					
383	Tetradifon	116-29-0	Agricultural products : Tetradifon(Parent compound only)	Pesticides	Insecticide(Acaricide)	Diphenylsulfone	—	Negative	Liver(Hepatocellular hypertrophy, Hepatocellular single cell necrosis), Thyroid(Increased organ weight : Rat), Lung(Alveolus macrophage accumulation)/Increased thyroid follicular adenoma : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Localized alveolus macrophage accumulation	NOAEL: 1.39 mg/kg bw per day	ADI: 0.013 mg/kg bw	SF:100	—	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	—	—	—	—	Summary https://www.fsc.go.jp/fscis/attachfile/download?trivallid=ky20180913528&filed=212	2018/9/4	—	
384	Tetranilprole	1229654-66-3	Agricultural, livestock and fishery products : Tetranilprole(Parent compound only)	Pesticides	Insecticide	Anthranilamide	Activating calcium release channels of ryanodine-sensitive intracellular	Negative	Suppressed body weight gain, Uterus and Vagina(Hyperplasia of squamous epithelium : Rat), Ovary(Decreased corpus luteum : Elderly rat)	Oral(feed)	Chronic toxicity study	1 year	Dog	Suppressed body weight gain	NOAEL: 88.4 mg/kg bw per day	ADI: 0.88 mg/kg bw	SF:100	—	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	—	—	—	—	Summary https://www.fsc.go.jp/fscis/attachfile/download?trivallid=ky2021070927102&filed=212	2021/9/7	The English report is the first edition published on September 4, 2018	
385	Thiabendazole	148-79-8	Agricultural products : Thiabendazole(Parent compound only) Livestock products : Thiabendazole, Benzimidazole	Pesticides, Additives & Veterinary Medicinal Products	Fungicide	Heterocyclic	Inhibition of cell division	Negative	Liver(Hepatocellular hypertrophy), Thyroid(Hyperplasia of follicular cell), Kidney(Hyperplasia of renipelvic transitional epithelium), Blood(Anemia)/Increased incidence of thyroid follicular cell adenoma and preputial glands adenoma : Rat/Increased incidence of fetal malformation : Rabbit	(a)(b)Oral(feed) (c)Oral(gavage) (d)Oral(capsule)	(a)Combined chronic toxicity/carcinogenicity study (b)Two-generation reproductive activity study (c)Developmental toxicity study (d)Chronic toxicity study	(a)2 years (b)— (c)6 - 17 days of pregnancy (d)1 year	(a)(b)(c) Rat (d)Dog	(a)Suppressed body weight gain : Male (b)Suppressed body weight gain : MaleParent (c)Suppressed body weight gain : Maternal, Low body weight : Fetus (d)Increased absolute/relative liver weight	NOAEL: 10 mg/kg bw per day	ADI: 0.1 mg/kg bw	SF:100	—	—	—	—	—	—	Not evaluated	—	—	—	—	Summary https://www.fsc.go.jp/fscis/attachfile/download?trivallid=ky20141210007&filed=202	2014/12/10	—	

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs					Data for ARIDs					Reports			Remarks						
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID		SF	English (Summary/Full)	Japanese	Date of latest evaluation		
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value	
386	Thiacloprid	111988-49-9	Agricultural and livestock products : Thiacloprid(Parent compound only)	Pesticides	Insecticide	Neonicotinoid	Disturbance of sodium release channels of nervous systems	Negative	Liver (Hepatocellular hypertrophy), Thyroid (Follicular cell hypertrophy), Adrenal (hypertrophy of the adrenal X-zone : mice)/Increased incidences of thyroid follicular cell adenoma : Male rat, Increased incidences of uterine adenocarcinoma : Female rat, Increased incidences of luteoma : Female mouse/Increased incidences of stillbirth, dystocia and skeletal alterations : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Follicular cell hypertrophy : Male	NOAEL: 1.2 mg/kg bw per day	ADI: 0.012 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Decreased motor and locomotor activity	NOAEL: 3.1 mg/kg bw	0.031 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload=retrievalId=ky20111011227&fileId=212	https://www.fsc.go.jp/fscis/attachedFile/download?wload=retrievalId=ky20111011227&fileId=212	2018/10/23	—	
387	Thiamethoxam	153719-23-4	Agricultural and livestock products : Thiamethoxam(Parent compound only)	Pesticides	Insecticide	Neonicotinoid	Action as an agonist at the nicotinic acetylcholine receptor, affecting the synapses	Negative	Kidney (Hyaline droplet accumulation in renal tubule), Liver (Inflammatory cell infiltration, Hepatocellular hypertrophy) / Increase in hepatocellular adenoma and carcinoma : Mouse	Oral(feed)	Two-generation reproductive activity study	—	Rat	Hyaline droplet accumulation in renal tubule : Male	NOAEL: 1.84 mg/kg bw per day	ADI: 0.018 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Decreased body weight and feed intake : Maternal	NOAEL: 50 mg/kg bw per day	0.5 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?wload=retrievalId=ky2015113250&fileId=201	2015/7/28	—	
388	Thiazopyr	117718-60-2	Agricultural products : Thiazopyr(Parent compound only)	Pesticides	Herbicide	Pyridine	Inhibition of cell division	Negative	Thyroid(Swelling, Increased absolute/relative weight, Hyperplasia of follicular epithelial cell), Liver(Hepatocellular hypertrophy/hyperplasia)/Increased incidence of thyroid follicular adenoma : Rat	Oral(feed)	Two-generation reproductive activity study	—	Rat	Centrilobular hepatocellular hypertrophy	NOAEL: 0.72 mg/kg bw per day	ADI: 0.0072 mg/kg bw	SF:100	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?wload=0605013&fileId=602	2008/6/5	—	
389	Thiazuron	51707-55-2	Agricultural products : Thiazuron(Parent compound only)	Pesticides	Plant Growth Regulator	Urea	Promotion of defoliation	Negative	Suppressed body weight gain, Kidney(Vacuolation of glomerulus, Mineralization : Rat), Liver(Hepatocellular hypertrophy), Blood(Anemia : Dog), Testis(Atrophy)	Oral(feed)	Chronic toxicity study	1 year	Dog	Anemia symptom : Male	NOAEL: 3.93 mg/kg bw per day	ADI: 0.039 mg/kg bw	SF:100	—	—	—	—	—	—	Not evaluated	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?wload=030608&fileId=602	2009/12/3	—
390	Thiencarbazone-methyl	317815-83-1	Agricultural and livestock products : Thiencarbazone-methyl(Parent compound only)	Pesticides	Herbicide	Sulfonylamino carbonyl triazolone	Inhibition of acetolactate synthase(ALS)	Negative	Kidney(Renal pelvic dilatation : Rat and Mouse), Urinary bladder(Calculus, Inflammation, Hyperplasia of transitional epithelium)/Urinary bladder transitional cell papilloma : Mouse, Urethra transitional epithelium carcinoma : Male mouse, Urinary bladder transitional epithelium carcinoma : Female mouse	Oral(feed)	Chronic toxicity study	1 year	Dog	Urinary bladder calculus, Urinary bladder inflammation, Hyperplasia of urinary bladder transitional epithelium : Male	NOAEL: 117 mg/kg bw per day	ADI: 1.1 mg/kg bw	SF:100	—	—	—	—	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not Applicable	—	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload=061082&fileId=211	https://www.fsc.go.jp/fscis/attachedFile/download?wload=061082&fileId=211	2020/10/20	—
391	Thifensulfuron methyl	79277-27-3	Agricultural products : Thifensulfuron methyl(Parent compound only)	Pesticides	Herbicide	Sulfonylurea	Inhibition of acetolactate synthase(ALS)	Negative	Suppressed body weight gain	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain : Male	NOAEL: 0.96 mg/kg bw per day	ADI: 0.0096 mg/kg bw	SF:100	(a)(b) Oral(gavage)	(a)(b) Developmental toxicity study	(a)Rat (b)Rabbit	(a)Suppressed body weight gain : Maternal (b)Decreased body weight : Maternal	NOAEL: 200 mg/kg bw per day	2 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload=020130130018&fileId=501	https://www.fsc.go.jp/fscis/attachedFile/download?wload=020130130018&fileId=501	2015/12/22	—	
392	Thifluzamide	130000-40-7	Agricultural and fishery products : Thifluzamide(Parent compound only) Livestock products : Thifluzamide, N-[2,6-dibromo-4-(trifluoromethoxy)phenyl]-2-(hydroxymethyl)-4-(trifluoromethyl)-5-thiazolecarboxamide	Pesticides	Fungicide	Acid amide	Inhibition of electron transfer system in photosynthesis	Negative	Liver(hepatocellular vacuolation : Rat), Adrenal gland(Increased organ weight, Vacuolation of adrenal cortex : Dog), Kidney(Renal tubular dilatation), Nervous system(Degeneration of axon and myelin sheath : Dog)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Centrilobular hepatocellular fatty degeneration	NOAEL: 1.4 mg/kg bw per day	ADI: 0.014 mg/kg bw	SF:100	(a)(b) Oral(gavage)	(a)(b) Developmental toxicity study	(a)Rat (b)Rabbit	(a)Decreased body weight : Maternal (b)Decreased body weight, Decreased feed intake : Maternal	NOAEL: 25 mg/kg bw per day	0.25 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?wload=022817&fileId=210	2023/11/1	—	
393	Thiobencarb	28249-77-6	Agricultural, livestock and fishery products : Thiobencarb(Parent compound only)	Pesticides	Herbicide	Thiocarbamate	Inhibition of fatty acid biosynthesis	Negative	Liver(Increased organ weight, Hepatocellular hypertrophy), Kidney(Deposition of hyaline droplet)/Abnormal gait, Reduced sensorial reactivity	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain : Male	NOAEL: 0.9 mg/kg bw per day	ADI: 0.009 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Abnormal gait, Reduced physical activity and sensorial reactivity	NOAEL: 100 mg/kg bw	1 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?wload=052817&fileId=218	2023/11/1	—	
394	Thiocyclam hydrogen oxalate 3B2	31895-22-4	Agricultural products : Thiocyclam hydrogen oxalate, Thiocyclam, Nereistoxin	Pesticides	Insecticide	Nereistoxin	Inhibition of acetylcholinesterase activity	Negative	Suppressed body weight gain, Convulsion	Oral(feed)	Chronic toxicity study	2 years	Dog	Salivation	NOAEL: 2.11 mg/kg bw per day	ADI: 0.021 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Decreased body weight	NOAEL: 10 mg/kg bw per day	0.1 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload=020181210142&fileId=211	https://www.fsc.go.jp/fscis/attachedFile/download?wload=020181210142&fileId=211	2019/6/4	Evaluated as a group of Bensulap, Cartap hydrochloride and Thiocyclam hydrogen oxalate. Please see #61.	
395	Tiadinil	223580-51-6	Agricultural products : Tiadinil, 4-methyl-1,2,3-thiadiazole-5-carboxylic acid, 4-hydroxymethyl-1,2,3-thiadiazole-5-carboxylic acid Livestock products : Tiadinil, 2-chloro-4-(4-methyl-1,2,3-thiadiazole-5-ylcarbonylamino)benzoic acid Fishery products : Tiadinil(Parent compound only)	Pesticides	Fungicide	Thiadiazolecarboxamid	Induction of disease resistance	Negative	Liver(Increased organ weight, Hepatocellular hypertrophy), Kidney(Vacuolation of renal tubule epithelium)/Increased incidence of hepatocellular adenoma : Mouse	Oral(capsule)	Chronic toxicity study	1 year	Dog	Suppressed body weight gain	NOAEL: 4 mg/kg bw per day	ADI: 0.04 mg/kg bw	SF:100	(a)(b) Oral(gavage)	(a)(b) Developmental toxicity study	(a)Rat (b)Rabbit	(a)Decreased body weight, Suppressed body weight gain, Decreased feed intake : Maternal (b)Decreased body weight, Suppressed body weight gain : Maternal	NOAEL: 150 mg/kg bw per day	1.5 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload=0213027&fileId=211	https://www.fsc.go.jp/fscis/attachedFile/download?wload=0213027&fileId=211	2020/9/15	—	
396.1	Tioxazafen	330459-31-9	Agricultural and livestock products : Tioxazafen, Benzimidazole	Pesticides	Nematicide	Oxadiazolone	Inhibition of protein biosynthesis	Negative	Liver(Increased organ weight, Hepatocellular hypertrophy), Suppressed body weight gain, Adrenal gland(Vacuolation of cortex cell : Rat), Femur(Metaphyseal proliferation : Rat)/Increased incidence of hepatocellular carcinoma : Male mouse, Increased incidence of hepatocellular adenoma : Female mouse	(a)Oral(feed) (b)Oral(gavage)	(a)Two-generation reproductive activity study (b)Developmental toxicity study	(a)— (b)7 - 28 days of pregnancy	(a)Rat (b)Rabbit	(a)Vacuolation of the adrenal zona fasciculata cells : Male parent (b)Decreased body weight, Suppressed body weight gain, Decreased feed intake : Maternal	NOAEL: 5 mg/kg bw per day	ADI: 0.05 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Decreased locomotor activity : Male, Decreased locomotor activity, Hypothermia : Female	LOAEL: 250 mg/kg bw	0.5 mg/kg bw	SF:500 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI.	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload=020191218112&fileId=211	https://www.fsc.go.jp/fscis/attachedFile/download?wload=020191218112&fileId=211	2020/9/1	—	
396.2	Tioxazafen	330459-31-9	Agricultural and livestock products : Tioxazafen, Benzimidazole	Pesticides	Nematicide	Oxadiazolone	Inhibition of protein biosynthesis	Negative	Liver(Increased organ weight, Hepatocellular hypertrophy), Suppressed body weight gain, Adrenal gland(Vacuolation of cortex cell : Rat), Femur(Metaphyseal proliferation : Rat)/Increased incidence of hepatocellular carcinoma : Male mouse, Increased incidence of hepatocellular adenoma : Female mouse	(a)Oral(feed) (b)Oral(gavage)	(a)Two-generation reproductive activity study (b)Developmental toxicity study	(a)— (b)7 - 28 days of pregnancy	(a)Rat (b)Rabbit	(a)Vacuolation of the adrenal zona fasciculata cells : Male parent (b)Decreased body weight, Suppressed body weight gain, Decreased feed intake : Maternal	NOAEL: 5 mg/kg bw per day	ADI: 0.05 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Suppressed body weight gain, Decreased feed intake : Maternal	NOAEL: 50 mg/kg bw per day	0.5 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload=020191218112&fileId=211	https://www.fsc.go.jp/fscis/attachedFile/download?wload=020191218112&fileId=211	2020/9/1	—	
397	Tolclofos-methyl	57018-04-9	Agricultural products : Tolclofos-methyl(Parent compound only)	Pesticides	Fungicide	Organophosphorus	Inhibition of cell division	Negative	Suppressed body weight gain, Inhibition of ChE activity(more than 20%), Blood(Anemia : Dog), Liver(Increased organ weight, Hepatocellular hypertrophy)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Mouse	Inhibition of erythrocyte ChE activity(more than 20%)	NOAEL: 6.45 mg/kg bw per day	ADI: 0.064 mg/kg bw	SF:100	Oral(feed)	Subacute toxicity study	Mouse	Inhibition of erythrocyte ChE activity(more than 20%)	NOAEL: 13.8 mg/kg bw per day	0.13 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload=082161&fileId=211	https://www.fsc.go.jp/fscis/attachedFile/download?wload=082161&fileId=211	2019/10/28	—	
398	Tolfenpyrad	129558-76-5	Agricultural products : Tolfenpyrad(Parent compound only)	Pesticides	Insecticide	Pyrazole	Inhibition of complex I of the respiratory electron transport chain in the mitochondria	Negative	Liver(Hepatocellular hypertrophy), Kidney(Hypertrophy of the proximal renal tubular epithelium) / Prolonged gestation period : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased relative liver and kidney weight : Male	NOAEL: 0.56 mg/kg bw per day	ADI: 0.0056 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Suppressed body weight gain and Decreased feed intake : Maternal	NOAEL: 1 mg/kg bw per day	0.01 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload=02200728097&fileId=211	https://www.fsc.go.jp/fscis/attachedFile/download?wload=02200728097&fileId=211	2014/11/24	—	
399	Tolprocarb	911499-62-2	Agricultural and fishery products : Tolprocarb(Parent compound only)	Pesticides	Fungicide	—	Inhibition of melanin biosynthesis	Negative	Suppressed body weight gain, Liver(Increased organ weight, Hepatocellular hypertrophy), Thyroid(Increased organ weight, Colloid degeneration)	Oral(feed)	Carcinogenicity study	2 years	Rat	Decreased WBC : Female	NOAEL: 20.5 mg/kg bw per day	ADI: 0.2 mg/kg bw	SF:100	—	—	—	—	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not Applicable	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?wload=020140203021&fileId=502	https://www.fsc.go.jp/fscis/attachedFile/download?wload=020140203021&fileId=502	2014/11/18	—	

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs					Data for ARIDs					Reports			Remarks						
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID		SF	English (Summary/Full)	Japanese	Date of latest evaluation		
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value	
400	Tolpyralate	1101132-67-5	Agricultural products : Tolpyralate(Parent compound only)	Pesticides	Herbicide	Pyrazole	Inhibition of 4-HPPDase	Negative	Eye ball(Keratitis), Nervous system(Vacuolation of molecular layer of cerebellar cortex : Rat), Kidney(Tubular basophilia changes), Liver(Hepatocellular hypertrophy), Gallbladder(Calculus : Mouse)/Corneal squamous cell papilloma/carcinoma : Rat	Oral(feed)	Carcinogenicity study	2 years	Rat	Keratitis	NOAEL: 0.765 mg/kg bw per day	ADI: 0.0076 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Decreased body weight and feed intake : Maternal	NOAEL: 10 mg/kg bw per day	0.1 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile.do?wload?retrieveId=ky-a201905230108&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky201905230108&field=211	2019/12/3	—	
401	Tolyfluamid	731-27-1	Agricultural products : Tolyfluamid, Dimethylaminosulfotoluidine	Pesticides	Fungicide	Phenylsulfamide	Inhibition of SH-enzymes	Negative	Bone(Increased fluorine concentration, Osteosclerosis), Tooth(Increased fluorine concentration, Incisor elongation), Kidney(Mineralization of renal papilla, Increased absolute/relative weight), Liver(Peripheral hepatocellular hypertrophy, Increased absolute/relative weight)/Thyroid follicular cell tumor : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased fluorine concentration of tooth	NOAEL: 3.6 mg/kg bw per day	ADI: 0.036 mg/kg bw	SF:100	—	—	—	—	—	—	—	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky200806030068&field=002	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky200806030068&field=002	2008/9/4	—
402	Talomeftrhin #4	66841-25-6	Agricultural products : Talomeftrhin, Deltamethrin	Pesticides	Insecticide	Pyrethroid	Inhibition of neural transmission	Negative	Suppressed body weight gain, Skin(Dermatitis), Nervous system(Convulsion)	(a)(b)Oral(gavage)	(a)(b)Combined chronic toxicity/carcinogenicity study	(a)(b)2 years	(a)Rat (b)Mouse	(a)Suppressed body weight gain (b)Dermatitis : Male	NOAEL: 0.75 mg/kg bw per day	ADI: 0.0075 mg/kg bw	SF:100	—	—	—	—	—	—	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a201308082618&field=301	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a201308082618&field=301	2015/1/13	Evaluated as a group of Deltamethrin and Talomeftrhin. Please see #102.	
403	Triafamone	874195-61-6	Agricultural products : Triafamone(Parent compound only)	Pesticides	Herbicide	Sulfonanilide	Inhibition of acetolactate synthase(ALS)	Negative	Suppressed body weight gain, Liver(Increased organ weight, Hepatocellular hypertrophy), Thyroid(Hypertrophy of follicular cell, Colloid degeneration : Rat)/Increased incidence of hepatocellular adenoma : Rat/Extended gestation period : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Centrilobular hepatocellular hypertrophy	NOAEL: 1.96 mg/kg bw per day	ADI: 0.019 mg/kg bw	SF:100	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	—	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a201410212678&field=501	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a201410212678&field=501	2015/5/12	—	
404	Triazophos	24017-47-8	Agricultural and livestock products : Triazophos(Parent compound only)	Pesticides	Insecticide	Organophosphorus	Inhibition of acetylcholinesterase activity	Negative	Inhibition of ChE activity(more than 20%)	Oral(unspecified)	Repeated-dose toxicity study	3 weeks	Human	Diarrhea, Vomiting, Gastrointestinal disorder	LOAEL: 0.0125 mg/kg bw per day	ADI: 0.00041 mg/kg bw	SF:30 interspecies variation:1 interindividual variation:10 LOAEL is used to estimate the ADI:3	—	—	—	—	—	—	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky200902090084&field=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky200902090084&field=201	2011/2/10	—	
405	Tribufos	78-48-8	Agricultural products : Tribufos(Parent compound only)	Pesticides	Plant Growth Regulator	Organophosphorus	Promotion of defoliation	Negative	Inhibition of brain and erythrocyte ChE activity(more than 20%), Blood(Decreased RBC, Hb and Ht), Eye(Cataract, Corneal opacity, Corneal neovascularization, Intra, Uveitis)/Increased incidence of small bowel adenocarcinoma and hepatic hemangiosarcoma : Male mouse, Increased incidence of bronchiolo and alveolar tumor : Female mouse	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Hyperplasia of small intestinal mucosa	NOAEL: 0.2 mg/kg bw per day	ADI: 0.002 mg/kg bw	SF:100	—	—	—	—	—	—	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky200803110228&field=002	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky200803110228&field=002	2009/1/15	—	
406	Tricyclazole	41814-78-2	• Agricultural and fishery products : Tricyclazole(Parent compound only) • Livestock products : Tricyclazole, 5-hydroxymethyl-1,2,4-triazolo[3,4-b]benzothiazole	Pesticides	Fungicide	—	Inhibition of melanization	Negative	Suppressed body weight gain, Liver(Increased organ weight)	Oral(gavage)	Developmental toxicity study	0 - 20 days of pregnancy	Rat	Suppressed body weight gain : Maternal, Delayed ossification : Fetus	NOAEL: 5 mg/kg bw per day	ADI: 0.05 mg/kg bw	SF:100	—	—	—	—	—	—	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a0100622449c&field=02_203	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a0100622449c&field=02_203	2014/1/20	—	
407	Trifloxystrobin	141517-21-7	Agricultural, livestock and fishery products : Trifloxystrobin(Parent compound only)	Pesticides	Fungicide	Strobilurin	Inhibition of electron transfer system in photosynthesis	Negative	Liver(Hepatocellular hypertrophy)	Oral(capsule)	Chronic toxicity study	1 year	Dog	Increased absolute/relative liver weight	NOAEL: 5 mg/kg bw per day	ADI: 0.05 mg/kg bw	SF:100	—	—	—	—	FSCI concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	—	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky202201190148&field=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky202201190148&field=210	2022/5/10	—	
408	Triflumezopyrim	1263133-33-0	Agricultural and livestock products : Triflumezopyrim(Parent compound only)	Pesticides	Insecticide	mesolonic	Action on the nicotinic acetylcholine receptor, affecting the synapses	Negative	Suppressed body weight gain, Blood(Anemia), Liver(Increased organ weight, Increased T.Chol)/Increased incidence of uterus squamous epithelium carcinoma : Female rat, Increased incidence of hepatocellular adenoma : Male mouse/Reduced blood prolactin level : Female rat, Decreased number of implantation and infant, Tendency for delayed development of reproductive functions : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain : Female	NOAEL: 3.23 mg/kg bw per day	ADI: 0.032 mg/kg bw	SF:100	(a)(b)Oral(gavage)	(a)Acute neurotoxicity study (b)Developmental toxicity study	(a)(b)Rat	(a)Decreased body weight and feed intake, Hypothermia, Decreased locomotor activity, Decreased total exercise frequency (b)Suppressed body weight gain : Maternal	NOAEL: (a)100 mg/kg bw (b)100 mg/kg bw per day	1 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a201702151748&field=202	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a201702151748&field=202	2017/10/3	—	
409	Triflumizole	68694-11-1	Agricultural, livestock and fishery products : Tetranilprole(Parent compound only)	Pesticides	Fungicide	Imidazole	Inhibition of ergosterol biosynthesis	Negative	Suppressed body weight gain, Liver(Hepatocellular hypertrophy, Fatty degeneration, Hepatocellular necrosis)/Increased placenta weight : Rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Centrilobular hepatocellular hypertrophy : Female	LOAEL: 4.6 mg/kg bw per day	ADI: 0.015 mg/kg bw	SF:300 interspecies variation:10 interindividual variation:10 LOAEL is used to estimate the ADI:3	Oral(gavage)	Acute neurotoxicity study	Rat	Listless, Muscle weakness of forelimb	NOAEL: 25 mg/kg bw	0.25 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky202112082478&field=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky202112082478&field=210	2022/1/19	—	
410	Trifluralin	1582-09-8	Agricultural, livestock and fishery products : Trifluralin(Parent compound only)	Pesticides	Herbicide	Dinitroaniline	Inhibition of cell division	Negative	Kidney(Progressive glomerulonephropathy, Renal calculus, Renal pelvic epithelial hyperplasia), Liver(Increased organ weight), Anemia/Increased urinary bladder transitional cell papilloma/carcinoma, renal transitional cell carcinoma and thyroid follicular epithelial cell adenoma : Rat	Oral(capsule)	Chronic toxicity study	1 year	Dog	Decreased RBC and Hb	NOAEL: 2.4 mg/kg bw per day	ADI: 0.024 mg/kg bw	SF:100	—	—	—	—	—	—	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky200902240104&field=201	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky200902240104&field=201	2012/1/26	—	
411	Triflusaluron-methyl	126535-15-7	Agricultural products : Triflusaluron-methyl(Parent compound only)	Pesticides	Herbicide	Sulfonyleurea	Inhibition of acetolactate synthase(ALS)	Negative	Suppressed body weight gain, Liver(Increased AST, ALT and ALP, Increased absolute/relative weight), Blood(Reduced RBC, Hb and Ht, Increased number of reticulocyte), Testis(Seminiferous tubular atrophy, Decreased absolute/relative weight)/Hyperplasia of testis interstitial cell, Increased testis interstitial cell adenoma : Male rat	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Decreased body weight	NOAEL: 2.44 mg/kg bw per day	ADI: 0.024 mg/kg bw	SF:100	—	—	—	—	—	—	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky200803030095&field=002	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky200803030095&field=002	2009/3/19	—	
412	Triforime	26644-46-2	Agricultural and livestock products : Triforime(Parent compound only)	Pesticides	Fungicide	Piperazine	Inhibition of ergosterol biosynthesis	Negative	Suppressed body weight gain, Blood(Anemia)/Increased incidence of bronchiolo and alveolar epithelium adenoma, Increased incidence of total bronchiolo and alveolar epithelium adenoma/adenocarcinoma : Female mouse	Oral(feed)	Chronic toxicity study	2 years	Dog	Increased T.Bil	NOAEL: 2.39 mg/kg bw per day	ADI: 0.023 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Decreased body weight, Suppressed body weight gain : Maternal	NOAEL: 150 mg/kg bw per day	1.5 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky201804180168&field=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky201804180168&field=210	2018/5/22	—	
413	Trinexapac-ethyl	95266-40-3	Agricultural and livestock products : Trinexapac-ethyl, 4-(cyclopropyl- α -hydroxymethylene)-3,5-dioxocyclohexane-1-carboxylic acid	Pesticides	Plant Growth Regulator	Cyclohexanedi-one	Inhibition of gibberellin biosynthesis	Negative	Suppressed body weight gain, Kidney(Pigment deposition of tubular epithelium : Rat)	Oral(feed)	Two-generation reproductive activity study	—	Rat	Suppressed body weight gain : Male parent	NOAEL: 0.59 mg/kg bw per day	ADI: 0.0059 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rabbit	Suppressed body weight gain : Maternal, Increased postimplantation loss rate, Decreased number of viable fetus : Fetus	NOAEL: 60 mg/kg bw per day	0.6 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky202112082468&field=210	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky202112082468&field=210	2022/5/10	—	
414.1	Uniconazole P	83657-17-4	Agricultural products : Uniconazole P (E)-(R)-1-(4-chlorophenyl)-4,4-dimethyl-2-(1H-1,2,4-triazol-1-yl)pent-1-en-3-ol	Pesticides	Plant Growth Regulator	Triazole	Inhibition of gibberellin biosynthesis	Negative	Suppressed body weight gain, Liver(Increased organ weights, Hepatocellular hypertrophy : Rat, Mouse and Dog, hepatocellular vacuolation, Hepatocellular single cell necrosis : Rat and Mouse)	Oral(gavage)	Chronic toxicity study	1 year	Dog	Increased ALP	NOAEL: 2 mg/kg bw per day	ADI: 0.02 mg/kg bw	SF:100	Oral(gavage)	Acute toxicity study	Rat	Decreased motor activity, Ataxic gait, Tetraplegia, Loss of righting reflex, Irregular respiration, hepatocellular vacuolation : Male, Decreased motor activity, Ataxic gait, Tetraplegia, Loss of righting reflex, Irregular respiration : Female	NOAEL: 100 mg/kg bw (for general population)	1 mg/kg bw (for general population)	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a202011111388&field=213	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a202011111388&field=213	2021/5/25	—	

ID	Substance	CAS No	Residue definitions(for estimation of dietary intake)	Category	Use	Chemical Class	Mechanism of Action	Genotoxicity	Toxicological findings	Data for ADIs						Data for ARIDs						Reports			Remarks				
										Point of Departure					Reference value	SF, UF	Point of Departure					ARID	SF	English (Summary/Full)		Japanese	Date of latest evaluation		
										Route	Test	Duration	Species	Endpoint			Value	Route	Test	Species	Endpoint							Value	
414.2	Uniconazole P	83657-17-4	Agricultural products : Uniconazole P, (E)-(R)-1-(4-chlorophenyl)-4-(dimethyl-2-(1H-1,2,4-triazol-1-yl)pent-1-en-3-yl	Pesticides	Plant Growth Regulator	Triazole	Inhibition of gibberellin biosynthesis	Negative	Suppressed body weight gain, Liver(Increased organ weights, Hepatocellular hypertrophy : Rat, Mouse and Dog, hepatocellular vacuolation, Hepatocellular single cell necrosis : Rat and Mouse)	Oral(gavage)	Chronic toxicity study	1 year	Dog	Increased ALP	NOAEL: 2 mg/kg bw per day	ADI: 0.02 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Increased incidence of 14 ribs : Fetus	NOAEL: 5 mg/kg bw per day	0.05 mg/kg bw (for women of childbearing age)	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a2020111138&field=213	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2022011314&field=210	2021/5/25	—	
415	Validamycin (Validamycin A)	37248-47-8	Agricultural products : Validamycin(Parent compound only)	Pesticides	Fungicide	Glycoside	Inhibition of trehalase	Negative	Suppressed body weight gain : Rat, GI tract (Diarrhea, Soft feces) / Skeletal and external anomaly : Rabbit(Fetus)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Suppressed body weight gain : Male	NOAEL: 36.8 mg/kg bw per day (converted into validamycin A)	ADI: 0.36 mg/kg bw (converted into validamycin A)	SF:100	Oral(capsule)	Subacute toxicity study	Dog	Soft feces	NOAEL: 327 mg/kg bw per day (converted into validamycin A)	3.2 mg/kg bw (converted into validamycin A)	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20160323546&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky2022011314&field=210	2022/8/31	The English report is the first edition published on September 29, 2020	
416	Zoxamide	156052-68-5	Agricultural products : Zoxamide(Parent compound only)	Pesticides	Fungicide	Benzamide	Inhibition of cell division	Negative	Suppressed body weight gain, Liver(Increased organ weight, Diffuse hepatocellular hypertrophy) : Dog	Oral(feed)	Chronic toxicity study	1 year	Dog	Suppressed body weight gain : Female	NOAEL: 47.5 mg/kg bw per day	ADI: 0.47 mg/kg bw	SF:100	—	—	—	—	—	FSCJ concluded that it was not necessary to establish an ARID, in view of the absence of adverse effect that would be elicited by a single oral dose.	Not Applicable	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20220119013&field=210	2022/5/26	—
417	1-methylcyclopropane	3100-04-7	Agricultural products : 1-methylcyclopropane(Parent compound only)	Pesticides	Plant Growth Regulator	—	Inhibition of ethylene activity	Negative	Suppressed body weight gain, Decreased number of erythrocyte, Increased hemosiderin deposition : Liver and Spleen	—	—	—	—	—	—	Can not be set	—	—	—	—	—	—	Can not be set	—	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20181121127&field=0308030&field=211	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20220308030&field=210	2023/5/17	The English report is the second edition published on September 1, 2020. FSCJ determined that ADI and ARID from oral exposure could not be established because the pesticide is a gas. However, FSCJ considered that as long as pesticides are used appropriately, the likelihood of their affecting human health through food products is very low.	
418	1-naphthaleneacetic acid, sodium salt	61-31-4	Agricultural products : 1-naphthaleneacetic acid, sodium salt/1-naphthaleneacetic acid(including conjugated form and sodium salt)	Pesticides	Plant Growth Regulator	—	Auxin-like effect	Negative	Stomach(Epithelial necrosis of mucosa : Dog), Liver(Periportal hepatocellular vacuolation), Testis(Seminiferous tubular degeneration)	Oral(capsule)	Chronic toxicity study	1 year	Dog	Epithelial necrosis of gastric mucosa : Male	NOAEL: 15 mg/kg bw per day	ADI: 0.15 mg/kg bw	SF:100	Oral(gavage)	Developmental toxicity study	Rat	Low body weight : Maternal	NOAEL: 15 mg/kg bw per day	0.15 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20220519110&field=211	2021/5/19	—	
419	1,3-dichloropropene	542-75-6	Agricultural products : 1,3-dichloropropene(Parent compound only)	Pesticides	Insecticide (Nematicide)	—	Inhibition of enzyme activity by binding to the nucleophilic reactive group of the enzyme.	Negative	Stomach(Squamous epithelial hyperkeratosis/hyperplasia : Forestomach), Urinary bladder(Hyperplasia of transitional epithelium), Blood(Anemia) / Increased incidence of hepatocellular adenomas and squamous epithelial papilloma of forestomach : Rat, Increased incidence of bronchiolo-alveolar adenoma, squamous epithelial papilloma of forestomach and transitional epithelial carcinoma of urinary bladder : Mouse	Oral(gavage)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Hyperplasia/Hyperkeratosis of forestomach squamous epithelium	NOAEL: 2 mg/kg bw per day	ADI: 0.02 mg/kg bw	SF:100	Oral(gavage)	Subacute toxicity study	Dog	Increased incidence of Vomiting	NOAEL: 20 mg/kg bw per day	0.2 mg/kg bw	SF:100	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20190905055&field=210	2019/10/15	—	
420	1,4-dimethylnaphthalene	571-58-4	Agricultural products : 1,4-dimethylnaphthalene, 1-hydroxymethyl-4-methylnaphthalene(including conjugated form)	Pesticides	Plant Growth Regulator	Alkyl naphthalene	—	Negative	Suppressed body weight gain, Kidney(Increased organ weight, Karyomegaly in tubular epithelium : Rat), Liver(Increased organ weight, Increased T.Chol : Rat)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Increased T.Chol, Karyomegaly in renal tubular epithelium : Female	NOAEL: 10 mg/kg bw per day	ADI: 0.1 mg/kg bw	SF:100	—	—	—	—	NOAEL: Exceed cut-off value (500 mg/kg bw per day) for setting ARID	Not Applicable	—	—	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20221208244&field=210	2023/5/9	—	
421	2,4-D	94-75-7	Agricultural products : 2,4-D, 2,4-dichlorophenol - Livestock products : 2,4-D(Parent compound only)	Pesticides	Herbicide	Phenoxy	Promotion of auxin action	Negative	Suppressed body weight gain, Kidney(Tubular epithelium degeneration), Liver(Hepatocellular hypertrophy), Testis(Decreased organ weight), Eye(Retinopathy : Rat)	Oral(feed)	Combined chronic toxicity/carcinogenicity study	2 years	Rat	Pigment deposition of renal tubule	NOAEL: 0.99 mg/kg bw per day	ADI: 0.0099 mg/kg bw	SF:100	Oral(gavage)	Acute neurotoxicity study	Rat	Abnormal gait : Female	NOAEL: 15 mg/kg bw	0.15 mg/kg bw	SF:100	Summary https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky-a20130612152&field=202	https://www.fsc.go.jp/fscis/attachedFile/download?retrieveId=ky20130612152&field=201	2017/5/16	—	

※1 : as a group of Azoxystrobin and Cyhexatin
 ※2 : as a group of Cartap hydrochloride, Thiocyclam hydrogen oxalate and Bensultap
 ※3 : as a group of Dazomet, Metam and Methyl isothiocyanate
 ※4 : as a group of Deltamethrin and Tralomethrin
 ※5 : as a group of Quizalofop ethyl and Quizalofop P tefuryl
 ※6 : evaluated as Iminocadine