Agricultural and Veterinary Chemicals Code (Agricultural Active Constituents) Standards Amendment Instrument (No. 1) 2024

I, Sheila Logan, Executive Director at the Australian Pesticides and Veterinary Medicines Authority, make the following instrument.

Dated 30 April 2024

Sheila Logan
Executive Director
Risk Assessment Capability
With the delegated authority under sections 11, 32 and 44 of the *Agricultural and Veterinary Chemicals (Administration) Act 1992*

1 Name of instrument

This Instrument is the *Agricultural and Veterinary Chemicals Code (Agricultural Active Constituents) Standards Amendment Instrument (No. 1) 2024.*

2 Authority

This Instrument is made under subsection 6E(1) of the Agricultural and Veterinary Chemicals Code (the Code) scheduled to the *Agricultural and Veterinary Chemicals Code Act 1994.*

3 Commencement

This Instrument commences on the day after the day it is registered.

4 Schedule

The *Agricultural and Veterinary Chemicals Code (Agricultural Active Constituents) Standards 2022* is amended as set out in Schedule 1 to this instrument.

Schedule 1 – Amendments

Agricultural and Veterinary Chemicals Code (Agricultural Active Constituents) Standards 2022

1 Amend definition of *Validated Analytical Method*

Omit the definition for Validated Analytical Method and insert instead:

Validated Analytical Method means an analytical method validated in accordance with generally accepted scientific principles for the purpose of analysis of the relevant chemical.

2 Omission of footnote to the table in the Schedule

Omit the asterisk from column C in the header row of the table in the Schedule and omit the associated footnote in its entirety.

3 Additions to the table in the Schedule

Insert in alphabetical order the following entries to the table in the Schedule.

Column A Identification of the active constituent	Column B Description	Column C Minimum Purity	Column D Maximum Impurity Levels
Common Name: Aminocyclopyrachlor **Chemical Name:** 6-amino-5-chloro-2-cyclopropylpyrimidine-4-carboxylic acid **CAS Number:** 858956-08-8	The material shall consist of aminocyclopyrachlor together with related manufacturing impurities and shall be a white amorphous solid with a mild fruity odour, free from visible extraneous matter and added modifying agents.	887 g/kg minimum	
Common Name: Bromethalin **Chemical Name:** *N*-Methyl-2,4-dinitro-*N*-(2,4,6-tribromophenyl)-6-(trifluoromethyl)aniline **CAS Number:** 63333-35-7	The material shall consist of bromethalin together with related manufacturing impurities and shall be a yellow odourless powder, free from visible extraneous matter and added modifying agents.	950 g/kg minimum	
Common Name: Calcined kaolin **Chemical Name:** Dialuminium(3+) [(trioxidosilyl)oxy]silanetris(olate) **CAS Number:** 92704-41-1	The material shall consist of calcined kaolin together with related impurities and shall be a white odourless powder, free from visible extraneous matter and added modifying agents.	995 g/kg minimum	Respirable crystalline silica: maximum 1 g/kg
Common Name: cis-Jasmone **Chemical Name:** 3-methyl-2-[(*Z*)-pent-2-en-1-yl]cyclopent-2-enone **CAS Number:** 488-10-8	The material shall consist of cis-jasmone together with related manufacturing impurities and shall be a colourless to pale yellow oily liquid with a strong floral odour, free from visible extraneous matter and adding modifying agents, excepting that it may be stabilised through addition of 0.1% alpha-tocopherol as an antioxidant.	900 g/kg minimum	Methyl eugenol: maximum 0.1 g/kg
Common Name: Cyflumetofen **Chemical Name:** 2-Methoxyethyl (2*RS*)-2-(4-*tert*-butylphenyl)-2-cyano-3-oxo-3-[2-(trifluoromethyl)phenyl]propanoate **CAS Number:** 400882-07-7	The material shall consist of cyflumetofen together with related manufacturing impurities and shall be a white to pale yellow odourless powder, free from visible extraneous matter and added modifying agents.	975 g/kg minimum	
Common Name: Dichlorprop-P **Chemical Name:** (2*R*)-2-(2,4-dichlorophenoxy)propanoic acid **CAS Number:** 15165-67-0	The material shall consist of dichlorprop-P together with related manufacturing impurities and shall be colourless crystals, free from visible extraneous matter and added modifying agents.	900 g/kg minimum	Free phenols, calculated as 2,4-dichlorophenol: maximum 3 g/kg
Common Name: Dichlorprop-P-etexyl **Chemical Name:** (2*RS*)-2-ethylhexyl (2*R*)-2-(2,4-dichlorophenoxy)propanoate **CAS Number:** 865363-39-9	The material shall consist of dichlorprop-P-etexyl together with related manufacturing impurities and shall be an amber liquid with a characteristic phenolic odour, free from visible extraneous matter and added modifying agents.	850 g/kg minimum	Free phenols, calculated as 2,4-dichlorophenol: maximum 3 g/kg

Common Name: Florylpicoxamid **Chemical Name:** (2*S*)-1,1-bis(4-fluorophenyl)propan-2-yl *N*-({[3-acetyloxy)-4-methoxypyridin-2-yl]carbonyl}-L-alaninate **CAS Number:** 1961312-55-9	The material shall consist of florylpicoxamid together with related manufacturing impurities and shall be an off-white powder with no discernible odour, free from visible extraneous matter and added modifying agents.	930 g/kg minimum	
Common Name: Fluazaindolizine **Chemical Name:** 8-chloro-*N*-[(2-chloro-5-methoxyphenyl)sulfonyl]-6-(trifluoromethyl)imidazo[1,2-*a*]pyridine-2-carboxamide **CAS Number:** 1254304-22-7	The material shall consist of fluazaindolizine together with related manufacturing impurities and shall be an off-white to brown crystalline powder with no characteristic odour, free from visible extraneous matter and added modifying agents.	961 g/kg minimum	
Common Name: Fluoxapiprolin **Chemical Name:** 2{(5*RS*)-3-[2-(1-{[3,5-bis(difluoromethyl)-1*H*-pyrazol-1-yl]acetyl}piperidin-4-yl)-1,3-thiazol-4-yl]-4,5-dihydro-1,2-oxazol-5-yl}-3-chlorophenyl methanesulfonate **CAS Number:** 1360819-11-9	The material shall consist of fluoxapiprolin together with related manufacturing impurities and shall be a light beige powder with a solvent-like odour, free from visible extraneous matter and added modifying agents.	950 g/kg minimum	
Common Name: Fomesafen **Chemical Name:** 5-[2-chloro-4-(trifluoromethyl)phenoxy-*N*-(methylsulfonyl)-2-nitrobenzamide **CAS Number:** 72178-02-0	The material shall consist of fomesafen together with related manufacturing impurities and shall be a white powder with no characteristic odour, free from visible extraneous matter and added modifying agents.	950 g/kg minimum	
Common Name: Iodomethane **Chemical Name:** Iodomethane, methyl iodide **CAS Number:** 74-88-4	The material shall consist of iodomethane together with related manufacturing impurities and shall be a bright yellow volatile liquid, free from visible extraneous matter and adding modifying agents.	990 g/kg minimum	
Common Name: Isocycloseram **Chemical Name:** a mixture comprised of 80-100% 4-[(5*S*)-5-(3,5-dichloro-4-fluorophenyl)-5-(trifluoromethyl)-4,5-dihydro-1,2-oxazol-3-yl]-*N*-((4*R*)-2-ethyl-3-oxo-1,2-oxazolidin-4-yl)-2-methylbenzamide and 20-0% of the (5*R*,4*R*), (5*R*,4*S*) and (5*S*,4*S*) isomers **CAS Number:** 2061933-85-3	The material shall consist of isocycloseram together with related manufacturing impurities and shall be an off-white powder with a sweetish odour, free from visible extraneous matter and added modifying agents.	Isocycloseram [sum of 4 stereoisomers, (5*S*,4*R*), (5*S*,4*S*), (5*R*,4*R*) and (5*R*,4*S*)] minimum 960 g/kg (5*S*,4*R*) isomer minimum 875 g/kg	(5*S*,4*S*) isomer maximum 30 g/kg (5*R*,4*R*) isomer maximum 55 g/kg (5*R*,4*S*) isomer maximum 1 g/kg

Common Name: Isotianil **Chemical Name:** 3,4-dichloro-*N*-(2-cyanophenyl)-1,2-thiazole-5-carboxamide **CAS Number:** 224049-04-1	The material shall consist of isotianil together with related manufacturing impurities and shall be a beige powder with no characteristic odour, free from visible extraneous matter and added modifying agents.	970 g/kg minimum	
Common Name: Metobromuron **Chemical Name:** 3-(4-bromophenyl)-1-methoxy-1-methylurea **CAS Number:** 3060-89-7	The material shall consist of metobromuron together with related manufacturing impurities and shall be a very light yellow crystalline powder with a musty naphthalenic odour, free from visible extraneous matter and added modifying agents.	978 g/kg minimum	
Common Name: Rescalure **Chemical Name:** (3*S*,6*RS*)-6-(Prop-1-en-2-yl)-3-methyldec-9-en-1-yl acetate **CAS Number:** 64309-03-1	The material shall consist of rescalure together with related manufacturing impurities and shall be a light-yellow oily liquid with an aromatic odour, free from visible extraneous matter and added modifying agents.	806.8 g/kg minimum The ratio of the 3*S*,6*R* and 3*S*,6*S* isomers should be 45:55 to 55:45	Sum of Impurity J and its stereoisomers J2 and K (tetrahydro-2-[{3(*RS*)-methyl-6-[1(*RS*)-methylethenyl]-9-decen-1-yl}oxy]-2*H*-pyran): maximum 10 g/kg
Common Name: Triclopyr-butotyl (triclopyr butoxyethyl ester) **Chemical Name:** 2-butoxyethyl [(3,5,6-trichloro-2-pyridyl)oxy]acetate **CAS Number:** 64700-56-7	The material shall consist of triclopyr-butotyl (triclopyr butoxyethyl ester) together with related manufacturing impurities and shall be a brownish yellow liquid, free from visible extraneous matter and added modifying agents.	940 g/kg minimum (dry weight basis)	

4 Deletions from the table in the Schedule

Omit the following entry from the table in the Schedule.

Column A **Identification of the active constituent**	**Column B** **Description**	**Column C** **Minimum Purity**	**Column D** **Maximum Impurity Levels**
Common Name: Triclopyr butoxyethyl **Chemical Name:** 2-butoxyethyl [(3,5,6-trichloro-2-pyridyl)oxy]acetate **CAS Number:** 64700-56-7	The material shall consist of triclopyr butoxyethyl ester together with related manufacturing impurities and shall be a brownish yellow liquid, free from visible extraneous matter and added modifying agents.	940 g/kg minimum (dry weight basis)	

5 Amendments to the table in the Schedule

For each of the active constituents listed below, omit the entire row from the table in the Schedule and insert instead the following entries.

Column A Identification of the active constituent	Column B Description	Column C Minimum Purity	Column D Maximum Impurity Levels
Common Name: 2,4-D **Chemical Name:** (2,4-dichlorophenoxy)acetic acid **CAS Number:** 94-75-7	The material shall consist of 2,4-D together with related manufacturing impurities and shall be white to brown crystals, granules, flakes, powder or lumps with not more than a slight odour and shall be free from visible extraneous matter and added modifying agents.	960 g/kg minimum	Free phenols: maximum 3 g/kg calculated as 2,4-dichlorophenol. Total polychlorinated dibenzo-*p*-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) calculated as the sum of the toxic equivalents (TEQs) of the 17 toxicologically significant PCDD and PCDF congeners, using the WHO (2005) toxic equivalence factors (TEFs): 1 µg/kg (1 ppb) maximum[#]
Common Name: 2,4-D esters (currently 2,4-D-ethyl, 2,4-D-isobutyl, and 2,4-D-2-ethylhexyl are approved) **Chemical Name:** ethyl (2,4-dichlorophenoxy)acetate, 2-methylpropyl (2,4-dichlorophenoxy)acetate, or 2-ethylhexyl (2,4-dichlorophenoxy)acetate **CAS Number:** 533-23-3, 1713-15-1, or 1928-43-4	The material shall consist of the specified 2,4-D ester together with related manufacturing impurities and shall be free from visible water, other extraneous matter or added modifying agents.	The 2,4-D content shall be declared in g/kg of 2,4-D acid equivalents and shall not be lower than the quantity calculated using the formula: Minimum quantity = (221/molecular weight of 2,4-D ester) × 920 g/kg	Free phenols: maximum 3 g/kg calculated as 2,4-dichlorophenol, with respect to the 2,4-D acid equivalents content. Total polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) calculated as the sum of the toxic equivalents (TEQs) of the 17 toxicologically significant PCDD and PCDF congeners, using the WHO (2005) toxic equivalence factors (TEFs): 1 µg/kg (1 ppb) maximum, with respect to the 2,4-D acid equivalents content[#]
Common Name: 2,4-D-sodium **Chemical Name:** sodium (2,4-dichlorophenoxy)acetate monohydrate **CAS Number:** 2702-72-9	The material shall consist of 2,4-D-sodium together with related manufacturing impurities and shall be a white powder free from visible extraneous matter or added modifying agents.	950 g/kg minimum as 2,4-D sodium monohydrate, equivalent to 805 g/kg 2,4-D acid	Free phenols: maximum 3 g/kg calculated as 2,4-dichlorophenol. Total polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) calculated as the sum of the toxic equivalents (TEQs) of the 17 toxicologically significant PCDD and PCDF congeners, using the WHO (2005) toxic equivalence factors (TEFs): 1 µg/kg (1 ppb) maximum, with respect to the 2,4-D acid equivalents content[#].

Common Name: Imazalil **Chemical Name:** 1-[(2*RS*)-2-(2,4-dichlorophenyl)-2-(prop-2-en-1-yloxy)ethyl]-1*H*-imidazole **CAS Number:** 35554-44-0	The material shall consist of imazalil together with related manufacturing impurities and shall be a slightly yellowish to brown crystalline mass, free from visible extraneous matter and added modifying agents.	950 g/kg minimum	
Common Name: Imazalil sulfate **Chemical Name:** 1-[(2*RS*)-2-(2,4-dichlorophenyl)-2-(prop-2-en-1-yloxy)ethyl]-1*H*-imidazole; sulfuric acid **CAS Number:** 58594-72-2	The material shall consist of imazalil sulfate together with related manufacturing impurities and shall be an off-white to yellowish powder, free from visible extraneous matter and added modifying agents.	965 g/kg minimum (equivalent to 725 g/kg imazalil)	
Common Name: Quintozene **Chemical Name:** pentachloronitrobenzene **CAS Number:** 82-68-8	The material shall consist of quintozene together with related manufacturing impurities and shall be an off-white powder, free from visible extraneous matter and added modifying agents.	950 g/kg minimum	Hexachlorobenzene (CAS Number: 11-74-1): 350 mg/kg maximum Pentachlorobenzene (CAS Number: 608-93-5): 0.3 mg/kg maximum Total polychlorinated dibenzo-p-dioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs) calculated as the sum of the toxic equivalents (TEQs) of the 17 toxicologically significant PCDD and PCDF congeners, using the WHO (2005) toxic equivalence factors (TEFs): 5 µg/kg (5 ppb) maximum[#]

Common Name: Spinetoram **Chemical Name:** Major component (J form): (2*R*,3a*R*,5a*R*,5b*S*,9*S*,13*S*,14*R*,16a*S*,16b*R*)-13-{[(2*S*,5*S*,6*R*)-5-(dimethylamino)-6-methyltetrahydro-2*H*-pyran-2-yl]oxy}-9-ethyl-14-methyl-7,15-dioxo-2,3,3a,4,5,5a,5b,6,9,10,11,12,13,14,16a,16b-hexadecahydro-1*H*-as-indaceno[3,2-*d*] oxacyclododecin-2-yl 6- deoxy-3-O-ethyl-2,4-di-*O*-methyl-α-L-mannopyranoside and minor component (L form): (2*S*,3a*R*,5a*S*,5b*S*,9*S*,13*S*,14*R*,16a*S*,16b*S*)-13-{[(2*S*,5*S*,6*R*)-5-(dimethylamino)-6-methyltetrahydro-2*H*-pyran-2-yl]oxy}-9-ethyl-4,14-dimethyl-7,15-dioxo-2,3,3a,5a,5b,6,9,10,11,12,13,14,16a,16b-tetradecahydro-1*H*-as-indaceno[3,2-*d*] oxacyclododecin-2-yl 6-deoxy-3-O-ethyl-2,4-di-*O*-methyl-α-L-mannopyranoside **CAS Number:** J-form: 187166-40-1, L-form: 187166-15-0	The material shall consist of spinetoram together with related manufacturing impurities and shall be an off-white solid with a musty odour, free from visible extraneous matter and added modifying agents.	812 g/kg minimum (sum of J form and L form), of which 50-90% is the J form and 50-10% is the L form.	

6 Addition of a new footnote to the table in the Schedule

The toxic equivalents of the 17 toxicologically significant PCDD and PCDF congeners are calculated using the following formula:

$$TEQ\ (\mu g/kg) = \sum_{i=1}^{17} TEF_i \times C_i\ (\mu g/kg)$$

where TEF_i is the WHO 2005 value of the toxicological equivalence factor for congener i of the 17 PCDD and PCDF congeners of toxicological significance listed below, C_i is the concentration of congener i in µg/kg (ppb) and the summation (TEQ, µg/kg) is performed over all 17 congeners.

The 17 toxicologically significant polychlorinated dibenzodioxin (PCDD) and polychlorinated dibenzofuran (PCDF) congeners:

Name	**Toxicological equivalence factor (TEF)—2005 WHO values**
Polychlorinated dibenzodioxins (PCDDs)	
2,3,7,8-tetrachlorodibenzo-p-dioxin	1
1,2,3,7,8-pentachlorodibenzo-p-dioxin	1
1,2,3,4,7,8-hexachlorodibenzo-p-dioxin	0.1
1,2,3,6,7,8-hexachlorodibenzo-p-dioxin	0.1
1,2,3,7,8,9-hexachlorodibenzo-p-dioxin	0.1
1,2,3,4,6,7,8-heptachlorodibenzo-p-dioxin	0.01
Octachlorodibenzo-p-dioxin	0.0003
Polychlorinated dibenzofurans (PCDFs)	
2,3,7,8-tetrachlorodibenzofuran	0.1
1,2,3,7,8-pentachlorodibenzofuran	0.03
2,3,4,7,8-pentachlorodibenzofuran	0.3
1,2,3,4,7,8-hexachlorodibenzofuran	0.1

Name	Toxicological equivalence factor (TEF)—2005 WHO values
1,2,3,6,7,8-hexachlorodibenzofuran	0.1
1,2,3,7,8,9-hexachlorodibenzofuran	0.1
2,3,4,6,7,8-hexachlorodibenzofuran	0.1
1,2,3,4,6,7,8-heptachlorodibenzofuran	0.01
1,2,3,4,7,8,9-heptachlorodibenzofuran	0.01
Octachlorodibenzofuran	0.0003