



NNZL/336

Proposed amendment to the New Zealand (Maximum Residue Limits of Agricultural Compounds) Food Standards 2005 (No.2)

Proposal to set an MRL for azoxystrobin

It is proposed that an MRL is set for azoxystrobin when used as a fungicide on maize.

It is proposed that Table One of the NZ (MRL) Food Standards 2005 (No. 2) is amended to include an MRL of 0.01 mg/kg for maize, and that the entry for cereal grains is amended to exclude maize, as follows:

Compound	CAS#	Residue definition	Food	Maximum Residue Limit (mg/kg)
Azoxystrobin	131860-33-8	Azoxystrobin and its z-isomer	Cereal grains (except maize) Maize	0.2 0.01(*)

NOTE: (*) indicates that the maximum residue limit has been set at or about the analytical limit of quantification

Chemical Information

Common name of compound	Azoxystrobin
Use of compound	Fungicide
Chemical Abstract Services (CAS) Registry number	131860-33-8
Type of compound	Strobilurin
Administration method	Foliar spray

Residues Information

Azoxystrobin is proposed for use on maize as a preventative spray against Rust and Northern Leaf Blight. Treatment is up to two applications per growing season at a rate of 250gai/ha, with an interval of 14 days between applications and a withholding period of 56 days.

Azoxystrobin residues are not expected to be found in maize treated according to the Good Agricultural Practice specified above. Therefore, an MRL at the analytical limit of quantification of 0.01 mg/kg is proposed for maize to support Good Agricultural Practice.

Dietary Risk Assessment

Acceptable Daily Intake (ADI)	0.03mg/kg bw/day
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The calculated dietary burden from the consumption of the likely residues occurring in crop commodities treated with azoxystrobin is equivalent to 12% of the ADI. It is therefore concluded that the chronic dietary exposure is small and the risk is acceptable.

Toxicological Assessment

It has been determined that the use of azoxystrobin as a fungicide for use on maize, according to the Good Agricultural Practice specified above, is very unlikely to pose any health risk from consumption of the harvested commodity.

Current MRLs

Compound	CAS#	Residue definition	Food	Maximum Residue Limit (mg/kg)
Azoxystrobin	131860-33-8	Azoxystrobin and its z-isomer	Cereal grains Grapes	0.2 1.0

International MRLs

Compound	Food	Maximum Residue Limit (mg/kg)
USA		
Azoxystrobin	Corn, field, grain	0.05



Proposed amendment to the New Zealand (Maximum Residue Limits of Agricultural Compounds) Food Standards 2005 (No.2)

Proposal to set an MRL for flusilazole

It is proposed that an MRL is set for flusilazole when used as a fungicide for citrus fruits.

It is proposed that Table One of the NZ (MRL) Food Standards 2005 (No. 2) is amended to include:

Compound	CAS#	Residue definition	Food	Maximum Residue Limit (mg/kg)
Flusilazole	85509-19-9	Flusilazole	Citrus fruits	0.1

Chemical Information

Common name of compound	Flusilazole
Use of compound	Fungicide
Chemical Abstract Services (CAS) Registry number	85509-19-9
Type of compound	Triazole
Administration method	Foliar spray

Residues Information:

Flusilazole is proposed as a fungicide for use on lemons, limes and mandarins. Application may be up to twice per growing season, once at flowering and again between 14-28 days after fruitset when sprayed to run off at a concentration of 0.03gai/litre, with a withholding period of 14 days.

Flusilazole residues of up to 0.1mg/kg can be expected in lemons, limes and mandarins treated according to the Good Agricultural Practice specified above. Therefore an MRL of 0.1 mg/kg on citrus fruits is proposed to support Good Agricultural Practice. The MRL has been extended to include the whole crop grouping (citrus fruits) as supported by the residues information.

Dietary Risk Assessment

Acceptable Daily Intake (ADI)	0.001 mg/kg bw/day
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The calculated dietary burden from the consumption of likely residues occurring in any crop commodities treated with flusilazole is equivalent to 3% of the ADI. It is therefore concluded that the chronic dietary exposure is small and the risk is acceptable.

Toxicological Assessment

It has been determined that the use of flusilazole as a fungicide for use on citrus fruits, according to the Good Agricultural Practice specified above, is very unlikely to pose any health risks from consumption of the harvested commodity.

Current MRLs

Compound	Food	Maximum Residue Limit (mg/kg)
Flusilazole	All foods	0.1 (default)

International MRLs

Compound	Food	Maximum Residue Limit (mg/kg)
Australia		
Flusilazole	Grapes	0.5
	Pome fruits	0.2
	Sugar cane	0.02(*)
Netherlands		
Flusilazole	Citrus fruits	0.05(*)

NOTE: (*) indicates that the maximum residue limit has been set at or about the analytical limit of quantification



Proposed amendment to the New Zealand (Maximum Residue Limits of Agricultural Compounds) Food Standards 2005 (No.2)

Proposal to set an MRL for prohexadione-calcium

It is proposed that an MRL is set for prohexadione-calcium when used as a plant growth regulator for pome fruits.

It is proposed that Table One of the NZ (MRL) Food Standards 2005 (No. 2) is amended to include:

Compound	CAS#	Residue definition	Food	Maximum Residue Limit (mg/kg)
Prohexadione-calcium	127277-53-6	Prohexadione-calcium	Pome fruits	0.02(*)

NOTE: (*) indicates that the maximum residue limit has been set at or about the analytical limit of quantification

Chemical Information

Common name of compound	Prohexadione-calcium
Use of compound	Plant growth regulator
Chemical Abstract Services (CAS) Registry number	127277-53-6
Type of compound	Acylcyclohexanedione
Administration method	Ground spray

Residues information

Prohexadione-calcium is proposed for use as a plant growth regulator for apple trees. Application may be 2-3 times per plant growing season, at a rate of 100-150gai/ha, with an interval of 21-28 days between treatments and a withholding period of 56 days.

Prohexadione-calcium residues of up to 0.02mg/kg can be expected in apples treated according to the Good Agricultural Practice specified above. Therefore an MRL of 0.02 mg/kg on pome fruit is proposed to support Good Agricultural Practice. The MRL has been extended to include the whole crop grouping (pome fruits) as supported by the residues information.

Dietary Risk Assessment

Acceptable Daily Intake (ADI)	Not determined
PDE_{food}**	0.16 mg/kg bw/day

The calculated dietary burden from the consumption of likely residues occurring in crop commodities treated with prohexadione-calcium is equivalent to 0.01% of the PDE_{food}. It is therefore concluded that the chronic dietary exposure is small and the risk is acceptable.

Toxicological Assessment

It has been determined that the use of prohexadione-calcium as a plant growth regulator for use on apple trees, according to the Good Agricultural Practice specified above, is very unlikely to pose any health risks from consumption of the harvested commodity.

Current MRLs

Compound	Food	Maximum Residue Limit (mg/kg)
Prohexadione-calcium	All foods	0.1 (default)

International MRLs

Compound	Food	Maximum Residue Limit (mg/kg)
USA		
Prohexadione-calcium	Pomefruit	3.0
UK		
Proheadione and its salts, expressed as proheadione	All foods	0.05(*)

NOTE: (*) indicates that the maximum residue limit has been set at or about the analytical limit of quantification

** The PDE_{food} is a value determined by the Environmental Risk Management Authority (ERMA NZ), following toxicological evaluation, that gives the Potential Daily Exposure (PDE) to a substance via food. It has been used here in place of an Average Daily Intake (ADI) for the purposes of dietary intake calculation.



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Proposal to set an MRL for trifloxystrobin

It is proposed that an MRL is set for trifloxystrobin when used as a fungicide on kiwifruit.

It is proposed that Table One of the NZ (MRL) Food Standards 2005 (No. 2) is amended to include:

Compound	CAS#	Residue definition	Food	Maximum Residue Limit (mg/kg)
Trifloxystrobin	141517-21-7	Sum of: Trifloxystrobin and its free acid metabolite. Expressed as: Trifloxystrobin equivalents	Kiwifruit	0.02(*)

NOTE: (*) indicates that the maximum residue limit has been set at or about the analytical limit of quantification

Chemical Information

Common name of compound	Trifloxystrobin
Use of compound	Protective fungicide
Chemical Abstract Services (CAS) Registry number	141517-21-7
Type of compound	Synthetic strobilurin derivative
Administration method	Foliar spray

Residues Information

Trifloxystrobin is proposed for use as a protective fungicide for kiwifruit. Application may be once per growing season at a rate of 7.5 gai/ha, with a withholding period of "do not apply after 30% flowering".

Trifloxystrobin residues are not expected to be found in kiwifruit treated according to the Good Agricultural Practice specified above. Therefore, an MRL at the analytical limit of quantification of 0.02 mg/kg is proposed for kiwifruit to support Good Agricultural Practice.

Dietary Risk Assessment

Acceptable Daily Intake (ADI)	0.04 mg/kg bw/day
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The calculated dietary burden from the consumption of the likely residues occurring in all crop commodities treated with trifloxystrobin is equivalent to less than 1% of the ADI. It is therefore concluded that the chronic dietary exposure is small and the risk is acceptable.

Toxicological Assessment

It has been determined that the use of trifloxystrobin as a fungicide for use on kiwifruit, according to the Good Agricultural Practice specified above, is very unlikely to pose any health risks from consumption of the harvested commodity.

Current MRLs

Compound	CAS#	Residue definition	Food	Maximum Residue Limit (mg/kg)
Trifloxystrobin	141517-21-7	<i>Sum Of:</i> Trifloxystrobin and its free acid metabolite <i>Expressed as:</i> Trifloxystrobin equivalents	Cereal grains Cucurbits (inedible peel) Pome fruits	0.05(*) 0.02(*) 0.02(*)

International MRLs

Compound	Food	Maximum Residue Limit (mg/kg)
Australia		
Trifloxystrobin	Dried grapes Edible offal (mammalian) Grapes Meat (mammalian) Milks Pome fruit Strawberry Bananas	2 0.05(*) 0.5 0.05(*) 0.02(*) 0.3 2 0.5

NOTE: (*) indicates that the maximum residue limit has been set at or about the analytical limit of quantification