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**[50-18]**

**Supporting Document 1**

Dietary exposure assessments and proposed MRL changes – Proposal M1015

**Maximum Residue Limits (2017)**

# Executive summary

This Supporting Document provides information relating to the results of the dietary exposure assessments (DEA) undertaken for the requested agricultural and veterinary (agvet) chemicals and food commodities for the 2017 Maximum Residue Limit (MRL) Harmonisation Proposal, M1015.

A DEA was undertaken for each of the requested chemicals where the Australian Pesticides and Veterinary Medicines Authority (APVMA) or the Joint Food and Agriculture Organization / World Health Organization Meeting on Pesticide Residues (JMPR) have established a relevant Health Based Guidance Value (HBGV), such as an Acceptable Daily Intake (ADI) or Acute Reference Dose (ARfD). The DEA methods used are consistent with internationally accepted methodologies, the APVMA’s risk assessment framework for approving and registering agricultural chemical products for use in Australia and the process used by both the APVMA and FSANZ for establishing and reviewing MRLs in Schedule 20 of the Code.

The National Estimated Daily Intake (NEDI) was calculated for each of the requested chemicals and food commodities to represent chronic dietary exposure. The NEDI estimate was then compared to the Acceptable Daily Intake (ADI) for that chemical. The National Estimated Short Term Intake (NESTI) was also calculated as an acute (short-term) dietary exposure for each of the requested chemicals and food commodities and then compared to the relevant Acute Reference Dose (ARfD).

The Food consumption data used for the dietary exposure assessment were sourced from the 2011–12 National Nutrition and Physical Activity Survey (NNPAS), a component of the 2011–13 Australian Health Survey. The mean food consumption data for all survey respondents (n=7,735, aged 2years and above) on two days of 24-hour recall were used for the NEDI. This mean value represents the average intake of a food commodity for the whole population. For the NESTI calculations, food consumption data at the 97.5th percentile for all respondents (aged 2years and above) were extracted. To derive NESTI estimates for specific sub-population groups, food consumption data for the groups were derived. The population sub-groups included children aged 2–6 years and women of childbearing age (16–44 years).

An additional assessment was conducted for the agvet chemicals to determine their suitability for the establishment of an *All other foods except animal food commodities* MRL. The assessment process for this MRL category followed the principles set out in *Proposal P1027 – Managing Low-level Ag & Vet Chemicals without Maximum Residue Limits*. The proposed MRLs for the category allow for low level inadvertent presence of the chemical in food following legitimate use but limit 'off-label' use.

The dietary exposure estimates for all chemicals with proposed MRLs in M1015 are below relevant HBGVs, indicating negligible health and safety concerns to Australian consumers. The proposed MRL changes, origin of requests, commodity descriptions, comparisons with Codex MRLs and the dietary exposure estimates for the Australian population are given in Table 1 of this document. The summaries of dietary exposure assessment and proposed *All other foods except animal food commodities* MRLs are set out in the Appendix.

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# 1 Introduction

This Supporting Document provides information relating to the results of the dietary exposure assessments undertaken for each of the requested agricultural and veterinary (agvet) chemicals and food commodities for the 2017 MRL Harmonisation Proposal, M1015.

The harmonisation requests were to align MRLs in Schedule 20 of the *Australian New Zealand Food Standards Code* (the Code) with the MRLs proposed by the requestors which were either established by the Codex Alimentarius Committee (Codex) or the countries in which the foods were produced. These standards all reflect legitimate use of permitted agvet chemicals in the production of the food commodities. The Proposal also includes requests from the Australian Pesticides and Veterinary Medicines Authority (APVMA) to align the Code with the APVMA MRL Standard, including removal of certain MRLs as a result of chemical review.

The risk assessment involves estimating dietary exposure for all agvet chemicals where the APVMA or JMPR have established a relevant Health Based Guidance Value (HBGV), such as an Acceptable Daily Intake (ADI) or Acute Reference Dose (ARfD).

For each chemical considered in this Proposal an additional assessment was conducted for suitability to establish an *All other foods except animal food commodities* MRL. Assessment and allocation of this MRL category followed the principles set out in *Proposal P1027 – Managing Low-level Ag & Vet Chemicals without Maximum Residue Limits*.

The methods used for the dietary exposure estimates are consistent with the APVMA’s risk assessment framework for approving and registering agricultural chemical products in Australia (based on internationally recognised best practice) and the process used by both the APVMA and FSANZ for establishing and reviewing MRLs in Schedule 20.

# 2 Chronic Dietary Exposure Assessment

The National Estimated Daily Intake (NEDI) represents an estimate of chronic dietary exposure. In chronic dietary exposure assessments, the chemical residues in all food commodities that could result from the permitted use of the agricultural chemicals are considered. Chemical residue trial data, as opposed to the MRL, are the preferred concentration data used if available, as they provide a more realistic estimate of dietary exposure.

The estimated mean exposure from each food commodity is added together to provide the total mean dietary exposure to a chemical from all foods with MRLs. The estimated mean dietary exposure is divided by the mean body weight for the population to provide the amount of chemical consumed per day per kg of body weight for the Australian population. This result is then compared to the Acceptable Daily Intake (ADI) established for the chemical.

The NEDI calculation may incorporate more specific data. This may include food consumption data for particular sub-groups of the population. The NEDI calculation may also take into account factors such as the proportion of the crop or commodity treated with the chemical, the residues in edible portions and the effects of processing and cooking on the residue levels. It may use supervised trials median residue (STMR) levels rather than the MRLs to represent chemical residue levels. Data from monitoring and surveillance activities or the Australian Total Diet Studies (ATDS) may also be used if necessary.

If data are not available on the specific residues in a food, a cautious approach is taken and the MRL value is used in the calculation. However, use of the MRL in dietary exposure estimates may result in considerable overestimates because it assumes that:

* the agricultural chemical will be used on all the crops for which there is a registered use or an approved permit
* treatment occurs at the maximum application rate
* the maximum number of permitted treatments have been applied
* the minimum withholding period applies
* the entire crop contains residues equivalent to the MRL.

In reality, only a portion of a specific crop is treated with the chemical and most treated crops at harvest contain residues well below the MRL. The levels of residues are usually reduced during storage, preparation, commercial processing, and cooking. It is also unlikely that every food for which an MRL is proposed will have been treated with the same pesticide throughout the lifetime of consumers that eat those foods. However, for the purposes of undertaking a risk assessment, it is prudent to be protective of consumers, particularly in the absence of data that could further refine the dietary exposure estimates.

# 3 Acute Dietary Exposure Assessment

The National Estimated Short Term Intake (NESTI) is used to estimate acute (short-term) dietary exposure. Acute dietary exposure assessments are undertaken where the APVMA has set an ARfD for a chemical or advised it is appropriate to use a JMPR ARfD.

The NESTI is calculated in a similar way to chronic dietary exposure, but uses the ARfD rather than ADI as the HBGV and food consumption data at the 97.5th percentile instead of the mean. The calculation can take into account factors such as the highest residue on a composite sample of an edible portion, the STMR, processing factors (which affect changes from the raw commodity to the consumed food) and a 'variability factor' (to account for variations in residues between individual pieces of a commodity) where appropriate.

The exact equations for calculating the NESTI differ depending on the type or size of the commodity. These equations are agreed and used internationally. The calculations provide information on the level of exposure to a chemical from consuming an individual food commodity (e.g. wheat) and take into account the consumption of processed foods that contain the commodity (e.g. apple pie and bread). The estimated exposure for each individual food is compared to the ARfD.

# 4 *All other foods except animal food commodities* MRLs

All agvet chemicals that required a dietary exposure assessment were considered for suitability for setting an *All other foods except animal food commodities* MRL using the principles established in P1027[[1]](#footnote-2). The proposed MRLs are high enough to allow for inadvertent presence of the chemical in food from legitimate use but low enough to limit the potential for 'off-label' use of the chemical. This approach is consistent with the APVMA’s risk assessment framework for approving and registering agvet chemical products, and with the risk assessment approach for establishing MRLs in the Code.

Agvet chemicals that are not considered for setting *All other foods except animal food commodities* MRLsare the following:

* Agvet chemical is not currently listed in Schedule 20
* Active constituent (agvet chemical) is not registered for use in Australia
* Active constituent of residue listed only as a Schedule 7 poison
* Agvet chemical is a veterinary medicine
* Agvet chemical has an Extraneous Residue Limit listed in Schedule 21
* Agvet chemical is currently nominated by the APVMA for formal review.

In addition, an *All other foods except animal food commodities* MRL is not set for agvet chemicals where the level is high enough to allow inadvertent presence of the chemical in food, but is higher than or at the level of existing commodity MRLs and therefore, not low enough to limit the potential for 'off-label' use of the chemical.

# 5 Food consumption data used

## 5.1 NEDI calculation

Mean food consumption data derived from all respondents (eaters and non-eaters of the foods containing the chemical residue) were used for NEDI calculations where respondents (n=7,735) had two days of 24-hour recall data from the 2011–12 National Nutrition and Physical Activity Survey (NNPAS) which was a component of the 2011–13 Australian Health Survey. This subset of NNPAS respondents was weighted using a specific set of sample weights to ensure the consumption data represented the Australian population’s dietary intake. Consumption data generally represent the mean intake of a food commodity measured in grams/kg bw/day for the whole population aged 2 years and above and in which each individual’s consumption of a commodity was divided by their own body weight before the summary population statistics were derived.

If no consumption was recorded for a food commodity, a default value of 0.0001 g/kg bw/day was assigned, except in the case of edible vegetable oils, where ‘market share’ data from Euromonitor 2016 was used to estimate the consumption. The percentage of market share data from Euromonitor for ‘other vegetable oils’ was used to calculate a percentage of the total consumption of vegetable oils.

## 5.2 NESTI calculation

NESTI calculations use food consumption data at the 97.5th percentile, only for consumers of the food of interest, based on a single day using 24-hour recall data from the 2011-12 NNPAS.

Consumption data were also derived from the subset of survey respondents with two days of 24-hour recall data. However, in this case the two days of recall data were pooled. This means the second day of recall data for each respondent was treated as a separate respondent, giving a larger number of total respondents (n=15470) with a single day of food recall data. The 97.5th percentile of consumption represents a high consumer of the particular food commodity from a single meal or over a 24-hour period, and is also termed the ‘large portion’.

ARfDs for chemicals may be set for specific population sub-groups where necessary. Therefore, large portion food consumption data was derived for three population sub-groups: the entire population aged two years and above; children aged 2–6 years and women of childbearing age (16–44 years).

# 6 Results of assessment

For all MRLs proposed in M1015, the dietary exposure estimates are below the relevant HBGVs, indicating that the residues pose negligible health and safety concerns to Australian consumers. The proposed MRL changes, origin of requests, comparisons with Codex MRLs and the dietary exposure estimates for the Australian population are listed in Table 1. Summaries of dietary exposure assessment for the proposed *All other foods except animal food commodities* MRLs for all chemicals considered are set out in the Appendix to this document. The Interpretive Guide (Figure 1) is only an **example** that provides relevant information to assist with interpreting Table 1.

*Pre-M1015 MRLs sourced from Schedule 20 of the Code (ID: F2018C00074; registered 23/Jan/2018).*

*How the MRL is proposed to be changed? i.e*

*new, increased, decreased, maintained or deleted.*

*Provided where the origin of MRL is not Codex and different to requested commodity.*

*Origin of the proposed MRL change: trading partner, Codex, the APVMA or FSANZ.*

*Provided where different from the requested commodity/MRL. Not provided for APVMA/ FSANZ requests.*

| **Chemical and commodity requested** | | **Pre-M1015 MRL mg/kg** | **Post-M1015 MRL mg/kg** | **MRL change** | **Origin of MRL requested** | **Commodity description in origin (other than Codex)** | **Commodity description in Codex, MRL mg/kg (year established)** | **Dietary Exposure Estimates** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **NEDI**  **(%ADI)** | **NESTI**  **(%ARfD)**  **2-6 years** | **NESTI**  **(%ARfD)**  **2+ years** |
| **Acetamiprid** | |  |  |  |  |  |  | 3 |  |  |
|  | Goji berries | None | 2 | New | China | Berries & other small fruits | Commodity not listed |  | 32 | 22 |
|  | Oilseed | T\*0.001 | 3.5 | New | US | Oilseed group 20 | Oilseed 1 (2010) |  | 4 | <1 |
|  | Nectarine | 1.9 | 9 | Increased | Codex |  | Nectarine 9 (2010) |  | 52 | 23 |

*Food/s to which the proposed MRLs apply.*

*The National Estimate of Short Term Intake (NESTI) is an assessment of the acute exposure which is compared to the acute reference dose (ARfD). Not all chemicals have an ARfD.*

*The NESTI reflects a worst case scenario.*

*Not provided for APVMA deletions/reductions (where the net effect is a reduction in estimated exposure).*

*The National Estimate of Dietary Intake (NEDI) is an assessment of the chronic exposure which is compared to the acceptable daily intake**(ADI).*

*Provided for all chemicals except for deletions or reductions.*

*A ‘T’ indicates the limit is temporary.*

*An asterisk indicates the limit is at or about the limit of analytical quantification.*

*Proposed MRL for preparing draft amendment*

Figure 1: Interpretive guide to the proposed MRL changes

Table 1: Proposed MRL Changes, Origin of Requests, Comparisons with Codex and Dietary Exposure Estimates for the Australian Population

| **Chemical and commodity requested** | | **Pre-M1015 MRL mg/kg** | **Post M1015 MRL mg/kg** | **MRL change** | **Origin of MRL requested** | **Commodity description in trading partners’ standards** | **Commodity description in Codex, MRL mg/kg (and year established)** | **Dietary Exposure Estimates** | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **NEDI (%ADI)** | **NESTI (%ARfD) 2-6 years** | **NESTI (%ARfD) 2+ years** |
| **2,4-DB** | |  |  |  |  |  |  | 26% |  |  |
|  | Peanut | None | 0.2 | New | US | Peanut | Chemical not listed |  | Not required[[2]](#footnote-3) | Not required |
| **Acetamiprid** | |  |  |  |  |  |  | 2% |  |  |
|  | Almonds | None | 0.1 | New | US | Nut, tree, group 14 | Tree Nuts 0.06 (2012) |  | <1% | <1% |
|  | Currants, black, red, white | None | 2 | New | EU | Currants (black, red and white) | Berries and other small fruits, except grapes and strawberries 2 (2012) |  | 13% | 3% |
| **Acetochlor** | | Chemical not listed | Chemical inserted |  |  |  |  | <1% |  |  |
|  | Peanut | None | 0.2 | New | US | Peanut | Commodity not listed |  | <1% | <1% |
| **Aldicarb** | |  |  |  |  |  |  | <1% |  |  |
|  | Citrus fruits | 0.05 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Cotton seed | \*0.05 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Edible offal (mammalian) | \*0.01 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Meat (mammalian) | \*0.01 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Milks | \*0.01 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Peanut | None | 0.05 | New | US | Peanut | Peanut 0.02 (1997) |  | 4% | 2% |
|  | Sugar cane | \*0.02 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Ametoctradin** | |  |  |  |  |  |  | <1% |  |  |
|  | Hops, dry | 30 | 100 | Increased | EU | Hops, Dry | Hops, Dry 30 (2013) |  | Not required | Not required |
|  | Leek | None | 5 | New | EU | Leeks | Commodity not listed |  | Not required | Not required |
| **Amitraz** | |  |  |  |  |  |  | Not required |  |  |
|  | Apple | 0.5 | None | Deleted[[3]](#footnote-4) | APVMA |  |  |  | Not required | Not required |
|  | Stone fruits [except cherries] | 0.5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Amitrole** | |  |  |  |  |  |  | Not required |  |  |
|  | Blueberries | T\*0.01 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Azoxystrobin** | |  |  |  |  |  |  | 39% |  |  |
|  | Rhubarb | None | 0.6 | New | EU | Rhubarb | Commodity not listed |  | Not required | Not required |
| **Benzovindiflupyr** | |  |  |  |  |  |  | 3% |  |  |
|  | Peanut | None | 0.01 | New | US | Peanut | Commodity not listed |  | <1% | <1% |
| **Bitertanol** | |  |  |  |  |  |  | Not required |  |  |
|  | Strawberry | \*0.05 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Buprofezin** | |  |  |  |  |  |  | 94% |  |  |
|  | Almonds | None | 0.05 | New | US | Nut, tree, group 14 | Almonds \*0.05 (n/a) |  | <1% | <1% |
| **Carbendazim** | |  |  |  |  |  |  | 15% |  |  |
|  | Currants, black, red, white | None | 0.1 | New | EU | Currants (black, red and white) | Berries and other small fruits, except grapes 1 (2006) |  | <1% | <1% |
|  | Raspberries, red, black | None | 0.1 | New | EU | Raspberries (red and yellow) | Berries and other small fruits, except grapes 1 (2006) |  | 1% | <1% |
|  | Rhubarb | None | 0.1 | New | EU | Rhubarb | Commodity not listed |  | 3% | 2% |
| **Carbofuran** | |  |  |  |  |  |  | Not required |  |  |
|  | Garlic | T0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Chlorfluazuron** | | Chemical listed | Chemical deleted |  |  |  |  | Not required |  |  |
|  | Cattle meat (in the fat) | 1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Cattle milk | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Cattle, edible offal of | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Cotton seed | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Cotton seed oil, crude | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Cotton seed oil, edible | \*0.05 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Eggs | 0.2 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Poultry meat (in the fat) | 1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Poultry, edible offal of | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Chlorpyrifos** | |  |  |  |  |  |  | 86% |  |  |
|  | Raspberries, red, black | None | 0.01 | New | EU | Raspberries (red and yellow) | Commodity not listed |  | <1% | <1% |
| **Chlorpyrifos-methyl** | |  |  |  |  |  |  | Not required |  |  |
|  | Rice | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Clofentezine** | |  |  |  |  |  |  | 17% |  |  |
|  | All other foods except animal food commodities | None | 0.02 | New | FSANZ |  |  |  | Not required | Not required |
|  | Strawberry | None | 2 | New | EU | Strawberries | Strawberry 2 (2008) |  | Not required | Not required |
| **Clothianidin** | |  |  |  |  |  |  | 9% |  |  |
|  | Almonds | None | 0.01 | New | US | Nut, tree, group 14 | Commodity not listed |  | <1% | <1% |
| **Cyhalothrin** | |  |  |  |  |  |  | 78% |  |  |
|  | Almonds | None | 0.05 | New | US | Nut, tree, group 14 | Tree Nuts 0.01 (2009) |  | <1% | <1% |
|  | Asparagus | None | 0.02 | New | Codex | Asparagus | Asparagus 0.02 (2009) |  | 1% | <1% |
|  | Peanut | None | 0.05 | New | US | Peanut | Oilseed 0.2 (2009) |  | 2% | 1% |
| **Cyprodinil** | |  |  |  |  |  |  | 37% |  |  |
|  | Almonds | \*0.01 | 0.02 | Increased | US | Almond | Almonds \*0.02 (2005) |  | Not required | Not required |
| **Dicamba** | |  |  |  |  |  |  | 1% |  |  |
|  | Cereal grains | \*0.05 | None | Deleted | FSANZ |  |  |  | Not required | Not required |
|  | Cereal grains [except maize] | Cereal grains \*0.05 | \*0.05 | Maintained[[4]](#footnote-5) | FSANZ |  |  |  | Not required | Not required |
|  | Cotton seed | T3 | 3 | ‘T’ removed | US | Cotton, undelinted seed | cotton seed \*0.04 (2011) |  | 1% | 1% |
|  | Maize | Cereal grains \*0.05 | 0.1 | Increased | US | Corn, field, grain | Maize \*0.01 (2011) |  | <1% | <1% |
| **Difenoconazole** | |  |  |  |  |  |  | 66% |  |  |
|  | All other foods except animal food commodities | None | 0.02 | New | FSANZ |  |  |  | <1% | <1% |
|  | Almonds | None | 0.03 | New | US | Nut, tree, group 14-12 | Tree nuts 0.03 (2011) |  | <1% | <1% |
|  | Cherries | 2.5 | None | Deleted | FSANZ |  |  |  | Not required | Not required |
|  | Stone fruits | None | 2.5 | New | US | Fruit, stone, group 12-12 | Peach 0.05 (2008) |  | 26% | 10% |
| **Diflubenzuron** | |  |  |  |  |  |  | 3% |  |  |
|  | Almonds | None | 0.2 | New | US | Nut, tree, group 14-12 | Tree nuts 0.2 (2013) |  | Not required | Not required |
|  | Cereal grains | T2 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Peanut | None | 0.1 | New | US | Peanut | Peanut 0.1 (2013) |  | Not required | Not required |
|  | Wheat bran, unprocessed | T5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Diflufenican** | |  |  |  |  |  |  | <1% |  |  |
|  | All other foods except animal food commodities | None | 0.01 | New | FSANZ |  |  |  | Not required | Not required |
|  | Meat (mammalian) | 0.01 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Meat (mammalian) (in the fat) | None | 0.05 | New | APVMA |  |  |  | Not required | Not required |
| **Dimethenamid-P** | |  |  |  |  |  |  | <1% |  |  |
|  | Peanut | None | 0.01 | New | US | Peanut | Peanut \*0.01 (2006) |  | Not required | Not required.<1%[[5]](#footnote-6) |
| **Dithiocarbamates** | |  |  |  |  |  |  | 96% |  |  |
|  | Coconut | 5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Coffee beans | 5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Hops | T10 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Macadamia nuts | \*0.2 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Peppers, chili (dry) | None | 20 | New | Codex | Peppers Chili, dried | Peppers Chili, dried 20 (2015) |  | Not required | Not required |
|  | Pomegranate | 3 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Strawberry | 5 | 10 | Increased | EU | Strawberries | Strawberry 5 (2001) |  | Not required | Not required |
|  | Swede | T1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Turnip, garden | T1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Wasabi | T2 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Dodine** | |  |  |  |  |  |  | 10% |  |  |
|  | Almonds | None | 0.3 | New | US | Nuts, tree, crop group 14 | Commodity not listed |  | <1% | <1% |
|  | Peanut | None | 0.013 | New | US | Peanut | Commodity not listed |  | <1% | <1% |
| **Emamectin** | |  |  |  |  |  |  | 40% |  |  |
|  | All other foods except animal food commodities | None | 0.005 | New | FSANZ |  |  |  | 3% | <1% |
|  | Almonds | None | 0.02 | New | US | Nut, tree, group 14 | Tree nuts \*0.001 (2015) for Emamectin benzoate |  | <1% | <1% |
| **Endothal** | |  |  |  |  |  |  | Not required |  |  |
|  | All other foods except animal food commodities | 0.01 | None | Deleted | FSANZ |  |  |  | Not required | Not required |
|  | Cotton Seed | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Potato | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Etoxazole** | |  |  |  |  |  |  | 5% |  |  |
|  | Strawberry | None | 0.2 | New | EU | Strawberries | Commodity not listed |  | Not required | Not required |
| **Fenarimol** | |  |  |  |  |  |  | Not required |  |  |
|  | All other foods except animal food commodities | 0.05 | None | Deleted | FSANZ |  |  |  | Not required | Not required |
|  | Berries and other small fruits [except grapes] | T0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Fruiting vegetables, cucurbits | 0.2 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Grapes | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Pome fruits | 0.2 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Fenbuconazole** | |  |  |  |  |  |  | 9% |  |  |
|  | All other foods except animal food commodities | None | 0.02 | New | FSANZ |  |  |  | Not required | Not required |
|  | Almonds | None | 0.05 | New | US | Almond | Tree nuts \*0.01 (2010) |  | Not required | Not required |
|  | Stone fruits [except nectarine] | 1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Fenbutatin oxide** | |  |  |  |  |  |  | Not required |  |  |
|  | Fig | T10 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Fenitrothion** | |  |  |  |  |  |  | 91% |  |  |
|  | Apple | 0.5 | 1 | Increased | APVMA |  |  |  | 42% | 52% |
|  | Cherries | 0.5 | 1 | Increased | APVMA |  |  |  | 7% | 3% |
|  | Fruit [except as otherwise listed under this chemical] | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Grapes | 0.5 | 1 | Increased | APVMA |  |  |  | 60% | 92% |
|  | Vegetables [except as otherwise listed under this chemical] | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Fenpropathrin** | |  |  |  |  |  |  | 37% |  |  |
|  | Peanut | None | 0.01 | New | US | Peanut | Commodity not listed |  | <1% | <1% |
| **Fenpyrazamine** | |  |  |  |  |  |  | 1% |  |  |
|  | All other foods except animal food commodities | None | 0.02 | New | FSANZ |  |  |  | <1% | <1% |
|  | Raspberries, red, black | None | 5 | New | EU | Raspberries (red and yellow) | Chemical not listed |  | 1% | <1% |
| **Fenpyroximate** | |  |  |  |  |  |  | 34% |  |  |
|  | Almonds | None | 0.1 | New | US | Nut, tree, group 14 | Tree nuts \*0.05 (2011) |  | <1% | 1% |
| **Fipronil** | |  |  |  |  |  |  | Not required |  |  |
|  | Bergamot | T0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Burnet, salad | T0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Chervil | T0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Coriander (leaves, roots, stems) | T0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Coriander, seed | T0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Dill, seed | T0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Fennel, seed | T0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Herbs | T0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Kaffir lime leaves | T0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Lemon grass | T0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Lemon verbena (fresh weight) | T0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Mizuna | T0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Peanut | T\*0.01 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Peanut oil, crude | T\*0.01 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Pecan | T\*0.01 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Peppers, sweet | T0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Pome fruits | T\*0.01 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Rucola (rocket) | T0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Florfenicol** | |  |  |  |  |  |  | Not required |  |  |
|  | Fish | T0.5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Fluazinam** | |  |  |  |  |  |  | 3% |  |  |
|  | Peanut | None | 0.02 | New | US | Peanut | Chemical not listed |  | Not required | Not required |
| **Flumioxazin** | |  |  |  |  |  |  | 18% |  |  |
|  | Cranberry | None | 0.07 | New | US | Berry, low growing, subgroup 13-07G | Commodity not listed |  | Not required | Not required. 1%5 |
| **Fluopyram** | |  |  |  |  |  |  | 55% |  |  |
|  | Raspberries, red, black | None | 3 | New | EU | Raspberries (red and yellow) | Raspberries, Red, Black 3 (2015) |  | 1% | <1% |
| **Fluxapyroxad** | |  |  |  |  |  |  | 79% |  |  |
|  | Banana | None | 3 | New | Codex | Banana | Banana 3 (2016) |  | Not required | Not required |
|  | Coffee beans | None | 0.2 | New | Brazil | Coffee beans | Commodity not listed |  | Not required | Not required |
|  | Papaya (pawpaw) | None | 0.5 | New | Brazil | Tropical and subtropical fruit, inedible peel. Crop group 24 | Commodity not listed |  | Not required | Not required |
| **Fosetyl-aluminium** | |  |  |  |  |  |  | 2% |  |  |
|  | Raspberries, red, black | None | 100 | New | EU | Raspberries (red and yellow) | Chemical not listed |  | Not required | Not required |
| **Imazamox** | |  |  |  |  |  |  | <1% |  |  |
|  | Soya bean (dry) | 0.1 | 0.3 | Increased | Brazil | Soya bean | Soya bean (dry) \*0.01 (2015) |  | <1% | <1% |
| **Ipconazole** | |  |  |  |  |  |  | 2% |  |  |
|  | Peanut | None | 0.01 | New | US | Peanut | Chemical not listed |  | Not required | Not required |
| **Iprodione** | |  |  |  |  |  |  | Not required |  |  |
|  | Cabbages, head | T\*0.05 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Cauliflower | T\*0.05 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Isofetamid** | | Chemical not listed | Chemical inserted |  |  |  |  | 8% |  |  |
|  | Almonds | None | 0.01 | New | US | Almond | Chemical not listed |  | <1% | <1% |
|  | Grapes | None | 3 | New | US | Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F | Chemical not listed |  | 2% | 3% |
| **Ivermectin** | |  |  |  |  |  |  | 63% |  |  |
|  | Cattle kidney | \*0.01 | 0.06 | Increased | APVMA |  |  |  | <1% | <1% |
|  | Cattle liver | 0.1 | 0.5 | Increased | APVMA |  |  |  | 2% | 1% |
|  | Cattle meat (in the fat) | 0.04 | 0.2 | Increased | APVMA |  |  |  | 3% | 2% |
| **Levamisole** | |  |  |  |  |  |  | Not required |  |  |
|  | Goat milk | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Maldison** | |  |  |  |  |  |  | 94% |  |  |
|  | Brassica (cole or cabbage) vegetables, head cabbages, flowerhead brassicas [except cauliflower; kohlrabi] | None | 2 | New | APVMA |  |  |  | 4% | 2% |
|  | Brassica leafy vegetables [except kale] | None | 2 | New | APVMA |  |  |  | 2% | <1% |
|  | Carrot | None | 0.5 | New | APVMA |  |  |  | <1% | <1% |
|  | Celery | None | 2 | New | APVMA |  |  |  | 6% | <1% |
|  | Chard (silver beet) | 0.5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Fruiting vegetables, cucurbits [except cucumber] | None | 2 | New | APVMA |  |  |  | 8% | 4% |
|  | Leek | None | 2 | New | APVMA |  |  |  | <1% | <1% |
|  | Legume vegetable [except garden pea] | None | 2 | New | APVMA |  |  |  | <1% | 1% |
|  | Lettuce, head | None | 2 | New | APVMA |  |  |  | 1% | <1% |
|  | Lettuce, leaf | None | 2 | New | APVMA |  |  |  | <1% | <1% |
|  | Linseed | None | 10 | New | APVMA |  |  |  | <1% | <1% |
|  | Onion, bulb | None | 2 | New | APVMA |  |  |  | 1% | <1% |
|  | Oilseed [except peanut] | T10 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Pulses [except beans (dry); lentils (dry)] | None | 2 | New | APVMA |  |  |  | <1% | <1% |
|  | Peanut | 8 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Rape seed | None | 10 | New | APVMA |  |  |  | <1% | <1% |
|  | Safflower seed | None | 10 | New | APVMA |  |  |  | <1% | <1% |
|  | Root and tuber vegetables | 0.5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Sunflower seed | None | 10 | New | APVMA |  |  |  | <1% | <1% |
|  | Turnip, garden | 0.5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Vegetables [except beans (dry); cauliflower; chard; cucumber; fruiting vegetables, other than cucurbits; garden pea; kale; kohlrabi; lentil (dry); onion, Welsh; root and tuber vegetables; shallot; spring onion; turnip, garden] | 2 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **MCPA** | |  |  |  |  |  |  | <1% |  |  |
|  | Cherry | None | 0.05 | New | EU | Cherries (sweet) | Commodity not listed |  | <1% | <1% |
| **Mepanipyrim** | |  |  |  |  |  |  | 2% |  |  |
|  | Raspberries, red, black | None | 4 | New | EU | Raspberries (red and yellow) | Chemical not listed |  | 22% | 2% |
| **Mesotrione** | |  |  |  |  |  |  | <1% |  |  |
|  | Almonds | None | 0.01 | New | US | Nut, tree, group 14-12 | Commodity not listed |  | Not required | Not required |
| **Metalaxyl** | |  |  |  |  |  |  | 11% |  |  |
|  | Almonds | None | 0.5 | New | US | Almond | Commodity not listed |  | Not required | Not required |
|  | Coriander (leaves, roots, stems) | 2 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Durian | T0.5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Herbs [except chives; thyme] | T0.3 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Kaffir lime leaves | T0.3 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Lemon grass | T0.3 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Lemon verbena (dry leaves) | T0.3 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Peanut | None | 0.2 | New | US | Peanut | Peanut 0.1 (n/a) |  | Not required | Not required |
|  | Rose and dianthus (edible flowers) | T0.3 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Thyme | T0.5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Turmeric, root | T0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Metconazole** | |  |  |  |  |  |  | <1% |  |  |
|  | Almonds | None | 0.04 | New | US | Nut, tree, group 14-12 | Chemical not listed |  | <1% | <1% |
| **Methidathion** | |  |  |  |  |  |  | 71% |  |  |
|  | All other foods except animal food commodities | None | 0.02 | New | FSANZ |  |  |  | 21% | 6% |
|  | Brassica (cole or cabbage) vegetables, head cabbages, flowerhead brassicas | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Coffee beans | T1 | \*0.01 | Decreased | APVMA |  |  |  | <1% | <1% |
|  | Date | T\*0.01 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Date, dried or dried and candied | T\*0.01 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Eggplant | None | 0.1 | New | APVMA |  |  |  | 46% | 20% |
|  | Fruiting vegetables, other than cucurbits | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Lettuce, head | 1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Lettuce, leaf | 1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Longan | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Olive oil, crude | T2 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Olives | T1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Peppers | None | T0.1 | New | APVMA |  |  |  | 14% | 4% |
|  | Persimmon, American | None | 0.5 | New | APVMA |  |  |  | 6% | 2% |
|  | Potato | None | \*0.01 | New | APVMA |  |  |  | 3% | 1% |
|  | Pulses | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Root and tuber vegetables | \*0.01 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Strawberry | \*0.01 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Vegetables [except garlic; lettuce, head; lettuce, leaf; onion, bulb; root and tuber vegetables] | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Methomyl** | |  |  |  |  |  |  | 44% |  |  |
|  | Blackberries | 2 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Coffee beans | T1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Fig | T0.7 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Fruiting vegetables, other than cucurbits [except peppers; sweet corn (corn-on-the-cob)] | None | 1 | New | APVMA |  |  |  | Not required | Not required |
|  | Fruiting vegetables, other than cucurbits [except peppers] | 1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Guava | 3 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Herbs | T10 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Leafy vegetables [except chard; lettuce, head; lettuce, leaf] | 1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Nectarine | 1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Parsley | None | T10 | New | APVMA |  |  |  | 21% | 7% |
|  | Peach | 1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Plantago ovata seed | 0.05 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Stone fruits [except cherries] | None | 1 | New | APVMA |  |  |  | 96% | 36% |
|  | Tree tomato (tamarillo) | T1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Metrafenone** | |  |  |  |  |  |  | 6% |  |  |
|  | All other foods except animal food commodities | None | 0.05 | New | FSANZ |  |  |  | Not required | Not required |
|  | Grapes | 4.5 | 7 | Increased | EU | Grapes | Grapes 5 (2015) |  | Not required | Not required |
|  | Oats | None | 0.6 | New | EU | Oat | Oats 0.5 (2015) |  | Not required | Not required |
|  | Tomato | 0.4 | 0.9 | Increased | US | Vegetable, fruiting, group 8-10 | Tomatoes 0.4 (2015) |  | Not required | Not required |
| **Mevinphos** | |  |  |  |  |  |  | Not required |  |  |
|  | Brassica (cole or cabbage) vegetables, head cabbages, flowerhead brassicas | 0.3 | 0.05 | Decreased | APVMA |  |  |  | Not required | Not required |
| **Naled** | |  |  |  |  |  |  | Not required |  |  |
|  | Cotton seed | T\*0.02 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Edible offal (mammalian) | T\*0.05 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Meat (mammalian) | T\*0.05 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Milks | T\*0.05 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Oxadixyl** | |  |  |  |  |  |  | 50% |  |  |
|  | All other foods except animal food commodities | None | 0.1 | New | FSANZ |  |  |  | Not required | Not required |
|  | Lettuce, head | 1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Lettuce, leaf | 1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Leafy vegetables | None | T5 | New | APVMA |  |  |  | Not required | Not required |
| **Oxathiapiprolin** | |  |  |  |  |  |  | <1% |  |  |
|  | Citrus fruits | None | 0.06 | New | US | Fruit, citrus, group 10-10 | Chemical not listed |  | Not required | Not required |
|  | Citrus oil | None | 2 | New | US | Fruit, citrus, group 10-10 | Chemical not listed |  | Not required | Not required |
| **Pebulate** | |  |  |  |  |  |  | Not required |  |  |
|  | Fruiting vegetables, other than cucurbits | \*0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Tomato | Fruiting vegetables, other than cucurbits \*0.1 | \*0.1 | Maintained | APVMA |  |  |  | Not required | Not required |
| **Penconazole** | |  |  |  |  |  |  | 1% |  |  |
|  | All other foods except animal food commodities | None | 0.02 | New | FSANZ |  |  |  | <1% | <1% |
|  | Raspberries, red, black | None | 0.1 | New | EU | Raspberries (red and yellow) | Commodity not listed |  | <1% | <1% |
| **Permethrin** | |  |  |  |  |  |  | 24% |  |  |
|  | All other foods except animal food commodities | None | 0.05 | New | FSANZ |  |  |  | Not required | Not required |
|  | Almonds | None | 0.05 | New | US | Almond | Almonds 0.1 (n/a) |  | <1% | <1% |
|  | Cotton seed | 0.2 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Fruiting vegetables, cucurbits | 0.2 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Galangal, rhizomes | T5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Kiwifruit | 2 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Lupin (dry) | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Mung bean (dry) | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Soya bean (dry) | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Sunflower seed | 0.2 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Turmeric, root | T5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Phorate** | |  |  |  |  |  |  | 34% |  |  |
|  | Brassica (cole or cabbage) vegetables, flowerhead brassicas [except Brussels sprouts; broccoli; cauliflower; head cabbages] | Vegetables 0.5 | T\*0.01 | Decreased | APVMA |  |  |  | Not required | Not required |
|  | Broccoli | Vegetables 0.5 | 0.5 | Maintained | APVMA |  |  |  | Not required | Not required |
|  | Cabbages, head | Vegetables 0.5 | 0.5 | Maintained | APVMA |  |  |  | Not required | Not required |
|  | Carrot | Vegetables 0.5 | 0.5 | Maintained | APVMA |  |  |  | Not required | Not required |
|  | Cauliflower | Vegetables 0.5 | 0.5 | Maintained | APVMA |  |  |  | Not required | Not required |
|  | Celery | Vegetables 0.5 | T\*0.01 | Decreased | APVMA |  |  |  | Not required | Not required |
|  | Coriander (leaves, roots, stems) | None | T\*0.01 | New | APVMA |  |  |  | <1% | <1% |
|  | Eggplant | Vegetables 0.5 | 0.5 | Maintained | APVMA |  |  |  | Not required | Not required |
|  | Leafy vegetables | Vegetables 0.5 | T\*0.01 | Decreased | APVMA |  |  |  | Not required | Not required |
|  | Onion, bulb | Vegetables 0.5 | 0.5 | Maintained | APVMA |  |  |  | Not required | Not required |
|  | Onion, Welsh | Vegetables 0.5 | 0.5 | Maintained | APVMA |  |  |  | Not required | Not required |
|  | Parsley | None | T\*0.01 | New | APVMA |  |  |  | <1% | <1% |
|  | Peppers | Vegetables 0.5 | 0.5 | Maintained | APVMA |  |  |  | Not required | Not required |
|  | Potato | Vegetables 0.5 | 0.5 | Maintained | APVMA |  |  |  | Not required | Not required |
|  | Shallot | Vegetables 0.5 | 0.5 | Maintained | APVMA |  |  |  | Not required | Not required |
|  | Spring onion | Vegetables 0.5 | 0.5 | Maintained | APVMA |  |  |  | Not required | Not required |
|  | Sweet potato | Vegetables 0.5 | 0.5 | Maintained | APVMA |  |  |  | Not required | Not required |
|  | Tomato | Vegetables 0.5 | 0.5 | Maintained | APVMA |  |  |  | Not required | Not required |
|  | Vegetables | 0.5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Phosmet** | |  |  |  |  |  |  | 92% |  |  |
|  | Currants, black, red, white | None | 2 | New | EU | Currants (black, red and white) | Commodity not listed |  | 2% | 1% |
| **Phosphorous acid** | |  |  |  |  |  |  | Not required |  |  |
|  | Berries and other small fruits [except riberries; strawberry] | T50 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Grapes | None | 200 | New | APVMA |  |  |  | Not required | Not required |
| **Piperonyl butoxide** | |  |  |  |  |  |  | 73% |  |  |
|  | All other foods except animal food commodities | None | 0.5 | New | FSANZ |  |  |  | Not required | Not required |
|  | Herbs | None | 8 | New | APVMA |  |  |  | Not required | Not required |
| **Pirimicarb** | |  |  |  |  |  |  |  |  |  |
|  | Coriander (leaves, roots, stems) | T20 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Herbs | T20 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Hops, dry | 0.5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Lemon balm | T20 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Profenofos** | |  |  |  |  |  |  | 1% |  |  |
|  | All other foods except animal food commodities | None | 0.02 | New | FSANZ |  |  |  | 4% | 1% |
|  | Peppers, chili | None | 3 | New | Codex | Peppers Chili | Peppers Chili 3 (2012) |  | <1% | <1% |
|  | Peppers, chili (dry) | None | 20 | New | Codex | Peppers Chili, dried | Peppers Chili, dried 20 (2012) |  | <1% | <1% |
| **Propachlor** | |  |  |  |  |  |  | Not required |  |  |
|  | Garlic | 2.5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Onion, bulb | 2.5 | 0.7 | Decreased | APVMA |  |  |  | Not required | Not required |
| **Propamocarb** | |  |  |  |  |  |  | 6% |  |  |
|  | All other foods except animal food commodities | None | 0.1 | New | FSANZ |  |  |  | 1% | <1% |
|  | Potato | 0.05 | 0.3 | Increased | Codex | Potato | Potato 0.3 (2007) |  | 1% | <1% |
| **Prothioconazole** | |  |  |  |  |  |  | 8% |  |  |
|  | Soya bean (dry) | None | 0.2 | New | Codex | Soya bean (dry) | Soya bean (dry) 0.2 (2015) |  | Not required | Not required.1%5 |
| **Prothiofos** | |  |  |  |  |  |  | Not required |  |  |
|  | Grapes | 2 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Pome fruits | 0.05 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Table grapes | Grapes 2 | 2 | Maintained | APVMA |  |  |  | Not required | Not required |
|  | Pear | Pome fruits 0.05 | 0.05 | Maintained | APVMA |  |  |  | Not required | Not required |
| **Pyraflufen-ethyl** | |  |  |  |  |  |  | <1% |  |  |
|  | Almonds | None | 0.01 | New | US | Nut, tree, group 14 | Chemical not listed |  | <1% | <1% |
| **Pyriofenone** | |  |  |  |  |  |  | 2% |  |  |
|  | Grapes | 0.5 | 1.5 | Increased | US | Fruit, small vine climbing subgroup 13-07D | Chemical not listed |  | Not required | Not required |
| **Pyriproxyfen** | |  |  |  |  |  |  | 9% |  |  |
|  | Almonds | None | 0.02 | New | US | Nut, tree, group 14 | Commodity not listed |  | Not required | Not required |
|  | Coffee beans | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Passionfruit | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Pyroxasulfone** | |  |  |  |  |  |  | <1% |  |  |
|  | Cereal grains | \*0.01 | None | Deleted | FSANZ |  |  |  | Not required | Not required |
|  | Cereal grains [except maize; popcorn] | Cereal grains \*0.01 | \*0.01 | Maintained | FSANZ |  |  |  | Not required | Not required |
|  | Maize | Cereal grains \*0.01 | 0.02 | Increased | US | Maize, Corn, field, grain | Chemical not listed |  | Not required | Not required |
|  | Popcorn | Cereal grains \*0.01 | 0.015 | Increased | US/Canada | Corn, pop, grain | Chemical not listed |  | Not required | Not required |
|  | Soya bean (dry) | None | 0.06 | New | US/Canada | Soya beans (dry) | Chemical not listed |  | Not required | Not required |
|  | Soya bean oil | None | 0.06 | New | US | Soya beans (dry) | Chemical not listed |  | Not required | Not required |
|  | Sunflower oil | None | 0.3 | New | US | Sunflower oil | Chemical not listed |  | Not required | Not required |
|  | Sunflower seed | None | 0.3 | New | US | Sunflower seeds | Chemical not listed |  | Not required | Not required |
|  | Sweet corn (corn-on-the-cob and kernels) | None | 0.015 | New | US/Canada | Corn, sweet, kernel plus cob with husks removed | Chemical not listed |  | Not required | Not required |
| **Quinoxyfen** | |  |  |  |  |  |  | 2% |  |  |
|  | All other foods except animal food commodities | None | 0.02 | New | FSANZ |  |  |  | Not required | Not required |
|  | Strawberry | T\*0.01 | 0.3 | Increased | EU | Strawberries | Strawberry 1 (2007) |  | Not required | Not required |
| **Spinetoram** | |  |  |  |  |  |  | 15% |  |  |
|  | Peanut | None | 0.04 | New | US | Peanut | Commodity not listed |  | Not required | Not required |
| **Spinosad** | |  |  |  |  |  |  |  |  |  |
|  | Herbs | 5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Safflower seed | T\*0.01 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Spirodiclofen** | |  |  |  |  |  |  | 41% |  |  |
|  | Almonds | None | 0.1 | New | US | Nut, tree, group 14 | Tree nuts 0.05 (2010) |  | Not required | Not required |
|  | Currants, black, red, white | None | 1 | New | EU | Currants (black, red and white) | Currants, Black, Red, White 1 (2010) |  | Not required | Not required |
| **Spiromesifen** | |  |  |  |  |  |  | 4% |  |  |
|  | Strawberry | None | 1 | New | EU | Strawberries | Chemical not listed |  | Not required | Not required |
| **Spirotetramat** | |  |  |  |  |  |  | 17% |  |  |
|  | Blueberries | T2 | 3 | Increased | US | Bushberry subgroup 13-07B | Bush berries 1.5 (2014) |  | 2% | <1% |
|  | Pineapple | T0.1 | 0.3 | Increased | US | Pineapple | Commodity not listed |  | 3% | 1% |
|  | Tree nuts [except almonds] | None | 0.5 | New | Codex | Tree nuts | Tree nuts 0.5 (2009) |  | <1% | <1% |
| **Teflubenzuron** | | Chemical not listed | Chemical inserted |  |  |  |  | <1% |  |  |
|  | Coffee beans | None | 0.3 | New | Codex | Coffee bean | Coffee bean 0.3 (2017) |  | Not required | Not required |
| **Tetraconazole** | |  |  |  |  |  |  | 24% |  |  |
|  | All other foods except animal food commodities | None | 0.02 | New | FSANZ |  |  |  | 1% | <1% |
|  | Peanut | None | 0.03 | New | US | Peanut | Chemical not listed |  | <1% | <1% |
|  | Strawberry | None | 0.2 | New | EU | Strawberries | Chemical not listed |  | 7% | 2% |
| **Thiodicarb** | |  |  |  |  |  |  | Not required |  |  |
|  | Peppers, sweet | T5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Sorghum | T0.5 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Thiophanate-methyl** | |  |  |  |  |  |  | 10% |  |  |
|  | Almonds | None | 0.1 | New | US | Almond | Chemical not listed |  | Not required | Not required. <1%5 |
|  | Currants, black, red, white | None | \*0.1 | New | EU | Currants (black, red and white) | Chemical not listed |  | Not required | Not required. <1%5 |
|  | Raspberries, red, black | None | \*0.1 | New | EU | Raspberries (red and yellow) | Chemical not listed |  | Not required | Not required. <1%5 |
|  | Rhubarb | None | \*0.1 | New | EU | Rhubarb | Chemical not listed |  | Not required | Not required. <1%5 |
|  | Strawberry | None | \*0.1 | New | EU | Strawberries | Chemical not listed |  | Not required | Not required. <1%5 |
| **Trichlorfon** | |  |  |  |  |  |  | Not required |  |  |
|  | Macadamia nuts | Tree nuts 0.1 | 0.1 | Maintained | APVMA |  |  |  | Not required | Not required |
|  | Tree nuts | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Tridemorph** | |  |  |  |  |  |  | Not required |  |  |
|  | Banana | T\*0.05 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Barley | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
|  | Fruiting vegetables, cucurbits | 0.1 | None | Deleted | APVMA |  |  |  | Not required | Not required |
| **Trifloxystrobin** | |  |  |  |  |  |  | 23% |  |  |
|  | Raspberries, red, black | None | 3 | New | EU | Raspberries (red and yellow) | Commodity not listed |  | Not required | Not required |
| **Trifluralin** | |  |  |  |  |  |  | 9% |  |  |
|  | All other foods except animal food commodities | None | 0.01 | New | FSANZ |  |  |  | Not required | Not required |
|  | Almonds | None | 0.05 | New | US | Nut, tree, group 14 | Chemical not listed |  | Not required | Not required |
| **Tylosin** | |  |  |  |  |  |  | Not required |  |  |
|  | Fish muscle | T\*0.002 | None | Deleted | APVMA |  |  |  | Not required | Not required |

# Appendix – Dietary exposure assessment summaries for the proposed *All other foods except animal food commodities* MRLs

All assessments for the chemicals considered follow the principles for establishing *All other foods except animal food commodities* MRLsasset out by FSANZ in 20161.

This appendix relates to all chemicals requested for inclusion in Proposal M1015. It should be noted that not all of the requested chemicals were progressed to the stage of dietary exposure estimates during the risk assessment process and therefore some requested chemicals were not included in the draft Amendment. Chemicals excluded from M1015 may still be listed in this appendix to indicate that they were also not considered for establishment of an *All other foods except animal food commodities* MRL.

It is important to note that if the registered use of a chemical on a specific commodity is proposed to be removed from Schedule 20 (for example, by the APVMA) and a previous harmonisation MRL request for that commodity/chemical combination has been received, the commodity and MRL will remain in Schedule 20. Similarly, if a chemical is being deleted from the APVMA MRL Standard, and previous harmonisation requests for the chemical have been received, these will also remain in Schedule 20.

However, if a chemical had a registered use in Australia and FSANZ had established an *All other foods except animal food commodities* (AoF) MRL and the chemical has subsequently been removed from Schedule 20, the AoF MRL will also be removed. Any MRL for specific commodities included in Schedule 20 under a harmonisation request for that chemical will remain in Schedule 20 (unless other considerations warrant them being removed).

FSANZ has assumed in the National Estimate of Dietary Intake (NEDI) calculations that 10% of this consumption amount would be likely to contain residues. This assumption does not apply to calculation of the Estimated Short-Term Dietary Intake (NESTI).

The relevant Health Based Guidance Values for the NEDI and NESTI are the Acceptable Dietary Intake (ADI) and the Acute Reference Dose (ARfD) respectively.

## 2,4-Dichlorophenoxyacetic acid (2,4-D)

2.4-Dichlorophenoxyacetic acid was excluded from consideration of an *All other foods except animal food commodities* MRL as the NEDI from existing permissions was >80% of the ADI.

## 2,4-DB

It was not considered appropriate at this time to establish an *All other foods except animal food commodities* MRL for 2,4-DB, as all current MRLs are set at the Limit of Detection (LOD) and a practical MRL which would limit off label use was not able to be established. Therefore, no *All other foods except animal food commodities* MRLis proposed.

## Acephate

Acephate was excluded from consideration of an *All other foods except animal food commodities* MRL because the NEDI from existing permissions is >80% of the ADI.

## Acetamiprid

An MRL of 0.1 mg/kg for all other foods except animal food commodities for acetamiprid was established in M1014. This MRL was reviewed as part of M1015 and no change is proposed.

## Acetochlor

Acetochlor was excluded from consideration of an *All other foods except animal food commodities* MRL as it is not listed in Schedule 20, and there is no registered use of acetochlor in Australia.

## Acrinathrin

Acrinathrin was excluded from consideration of an *All other foods except animal food commodities* MRL as there are no registered uses of acrinathrin in Australia[[6]](#footnote-7).

## Aldicarb

Aldicarb was not considered for an *All other foods except animal food commodities* MRL as all existing registered uses of aldicarb in Australia are being removed6.

## Ametoctradin

An MRL of 0.2 mg/kg for all other foods except animal food commodities for ametoctradin has already been established as part of P1027 and is currently listed in Schedule 20. This MRL was reviewed as part of M1015 and no change is proposed.

## Amitraz

Although the harmonisation request was for the deletion of existing commodity MRLs only, FSANZ did assess amitraz for an *All other foods except animal food commodities* MRL as part of M1015. An *All other foods except animal food commodities* MRL at the lowest possible limit (i.e. at the LOD) was considered, however, even at this limit, the NESTI for the 2–6 years population exceeded the ARfD. Therefore, no *All other foods except animal food commodities* MRLis proposed.

## Amitrole

A dietary exposure assessment was not required for amitrole as the request was for deletion of an existing commodity MRL. Therefore, amitrole was not considered for an *All other foods except animal food commodities* MRL.

## Azoxystrobin

An MRL of 0.1 mg/kg for *All other foods except animal food commodities* for azoxystrobin was gazetted in 2017 and is currently listed in Schedule 20. This MRL was reviewed as part of M1015 and no change is proposed.

## Benoxacor

Benoxacor was excluded from consideration of an *All other foods except animal food commodities* MRL as there are no registered uses of benoxacor in Australia**Error! Bookmark not defined.**.

## Benzovindiflupyr

Benzovindiflupyr was excluded from consideration of an *All other foods except animal food commodities* MRL as it is not listed in Schedule 20, and there is no registered use of benzovindiflupyr in Australia.

## Bitertanol

A dietary exposure assessment was not required for bitertanol as the harmonisation request was for deletion of an existing commodity MRL. Therefore, bitertanol was not considered for an *All other foods except animal food commodities* MRL.

## Boscalid

An *All other foods* MRL has been established by the APVMA and is currently listed in Schedule 20. This MRL was not reviewed as part of M1015.

## Buprofezin

Buprofezin was excluded from consideration of an *All other foods except animal food commodities* MRL because the NEDI from existing permissions is >80% of the ADI.

## Carbendazim

Carbendazim was excluded from consideration of an *All other foods except animal food commodities* MRL as it is a Schedule 7 only poison.

## Carbofuran

A dietary exposure assessment was not required for carbofuran as the request was for deletion of an existing commodity MRL. Therefore, carbofuran was not considered for an *All other foods except animal food commodities* MRL.

## Chlorfluazuron

A dietary exposure assessment was not required for chlorfluazuron as the request was for deletion of this chemical from Schedule 20. Therefore, chlorfluazuron was not considered for an *All other foods except animal food commodities* MRL.

## Chlorimuron

Chlorimuron was excluded from consideration of an *All other foods except animal food commodities* MRL as there are no registered uses of chlorimuron in Australia**Error! Bookmark not defined.**.

## Chlorpyrifos

Chlorpyrifos was excluded from consideration of an *All other foods except animal food commodities* MRL because the NEDI from existing permissions is >80% of the ADI.

## Chlorpyrifos-methyl

A dietary exposure assessment was not required for chlorpyrifos-methyl as the request was for deletions of existing commodity MRLs. Therefore, chlorpyrifos-methyl was not considered for an *All other foods except animal food commodities* MRL.

## Clofentezine

An *All other foods except animal food commodities* MRL of 0.02 mg/kg is proposed based on the following considerations:

|  |  |
| --- | --- |
| **Considerations** | **Comments** |
| Limit of determination (LOD) | 0.01 mg/kg (indicated by \* on existing MRLs) |
| Lowest plant commodity MRL | \*0.01 mg/kg |
| Magnitude of existing plant commodity MRLs | The range of existing MRLs is \*0.01 mg/kg (Banana) to 1 mg/kg (Grapes; Tomato) |
| Lowest plant commodity MRL that is not the LOD | 0.1 mg/kg |
| Most relevant reference point to minimise off-label use | 0.01 mg/kg |
| Consumption amount (g/kg bw/day) used in NEDI calculation for *All other foods except animal commodities* | 41.23 g/kg bw/day |
| Chronic dietary exposure (NEDI) considering existing permissions only | 17% of the ADI |
| Proposed *All other foods except animal commodities* MRL**1** | 0.02 mg/kg |
| NEDI including *All other foods except animal commodities* MRL and existing permissions | 17% of the ADI |
| Percentage contribution of *All other foods except animal commodities* to total chronic dietary exposure | An *All other foods except animal commodities* MRL of 0.02 mg/kg represents a contribution of 2% to total dietary exposure which is within the 20% target and is considered acceptable. |
| Acute dietary exposure assessment (NESTI) | An acute dietary exposure assessment is considered unnecessary for clofentezine because the APVMA has not established an ARfD and JMPR consider an ARfD unnecessary. |
| Conclusion | After considering the principles established and agreed in FSANZ proposal P1027, an *All other foods except animal commodities* MRL of 0.02 mg/kg is acceptable because it has been shown to be practical, adequately manages the risk of off-label use and does not increase the level of concern about the risk to public health. |

## Clothianidin

An MRL of 0.02 mg/kg for all other foods except animal food commodities for Clothianidin has already been established as part of routine dietary exposure assessments. This MRL was reviewed as part of M1015 and no change is proposed.

## Copper compounds (Copper)

Copper compounds (Copper) were excluded from consideration of an *All other foods except animal food commodities* MRL as copper compounds are listed in Table 5 (list of substances where MRLs are not necessary) of the APVMA MRL Standard. MRLs are not necessary in situations where residues do not or should not occur in foods or animal feeds; or where the residues are identical to or indistinguishable from natural food components; or otherwise are of no toxicological significance.

## Cyflumetofen

Cyflumetofen was excluded from consideration as part of M1015 as the same request was considered in M1014. In M1014, cyflumetofen was excluded from consideration of an *All other foods except animal food commodities* MRL as it is not listed in Schedule 20 and there is no registered use of cyflumetofen in Australia.

## Cyhalothrin (Gamma and Lambda Cyhalothrin)

Cyhalothrin was excluded from consideration of an *All other foods except animal food commodities* MRL as it is a Schedule 7 only poison.

## Cyprodinil

An MRL of 0.05 mg/kg for all other foods except animal food commodities for cyprodinil has already been established as part of M1014. This MRL was reviewed as part of M1015 and no change is proposed.

## Dicamba

An MRL of 0.05 mg/kg for all other foods except animal food commodities for Dicamba has been proposed and supported as part of routine dietary exposure assessments. This MRL was reviewed as part of M1015 and no change is proposed.

## Dichlormid

Dichlormid was excluded from consideration of an *All other foods except animal food commodities* MRL as there are no registered uses of diclosulam in Australia6.

## Diclosulam

Diclosulam was excluded from consideration of an *All other foods except animal food commodities* MRL as there are no registered uses of diclosulam in Australia**Error! Bookmark not defined.**.

## Difenoconazole

An *All other foods except animal food commodities* MRL of 0.02 mg/kg is proposed based on the following considerations:

|  |  |
| --- | --- |
| **Considerations** | **Comments** |
| Limit of determination (LOD) | 0.01 – 0.05 mg/kg (indicated by \* on existing MRLs) |
| Lowest plant commodity MRL | \*0.01 mg/kg |
| Magnitude of existing plant commodity MRLs | The range of existing MRLs is 0.01 mg/kg (Poppy seed; Macadamia nuts; Cereal grains) to 20 mg/kg (Coriander (leaves, stems, roots)) |
| Lowest plant commodity MRL that is not the LOD | 0.2 mg/kg |
| Most relevant reference point to minimise off-label use | 0.05 mg/kg |
| Consumption amount used in NEDI calculation for *All other foods except animal commodities* | 36.17 g/kg bw/day |
| Chronic dietary exposure (NEDI) considering existing permissions only | 65% of the ADI |
| Proposed *All other foods except animal commodities* MRL**1** | 0.02 mg/kg |
| NEDI including *All other foods except animal commodities* MRL and existing permissions | 66% of the ADI |
| Percentage contribution of *All other foods except animal commodities* to total chronic dietary exposure | An *All other foods except animal commodities* MRL of 0.02 mg/kg represents a contribution of 1% to total dietary exposure which is within the 20% target, and is considered acceptable. |
| Acute dietary exposure assessment (NESTI) | Children 2-6 years of age (worse case - pineapples), <1% of the ARfD.  Population aged 2 years and above (worse case - all commodities), <1% of the ARfD. |
| Conclusion | After considering the principles established and agreed in FSANZ proposal P1027, an *All other foods except animal commodities* MRL of 0.02 mg/kg is acceptable because it has been shown to be practical, adequately manages the risk of off-label use and does not increase the level of concern about the risk to public health. |

## Diflubenzuron

Diflubenzuron has been used as a pesticide and veterinary medicine. As such, according to the principles established in P1027, diflubenzuron was excluded from consideration of an *All other foods except animal food commodities* MRL as it is used as a veterinary medicine.

## Diflufenican

An *All other foods except animal food commodities* MRL of 0.01 mg/kg is proposed based on the following considerations:

|  |  |
| --- | --- |
| **Considerations** | **Comments** |
| Limit of determination (LOD) | 0.002 mg/kg (indicated by \* on existing MRLs) |
| Lowest plant commodity MRL | \*0.002 mg/kg |
| Magnitude of existing plant commodity MRLs | The range of existing MRLs is \*0.002 mg/kg (Grapes) to 0.05 mg/kg (Barley; Oats; Peas; Pulses; Rye and Triticale) |
| Lowest plant commodity MRL that is not the LOD | 0.02 mg/kg |
| Most relevant reference point to minimise off-label use | 0.02 mg/kg |
| Consumption amount used in NEDI calculation for *All other foods except animal commodities* | 42.2 g/kg bw/day |
| Chronic dietary exposure (NEDI) considering existing permissions only | 0.1% of the ADI |
| Proposed *All other foods except animal commodities* MRL**1** | 0.01 mg/kg |
| NEDI including *All other foods except animal commodities* MRL and existing permissions | 0.1% of the ADI |
| Percentage contribution of *All other foods except animal commodities* to total chronic dietary exposure | An *All other foods except animal commodities* MRL of 0.01 mg/kg represents a contribution of 15% to total dietary exposure which is within the 20% target, and is considered acceptable. |
| Acute dietary exposure assessment (NESTI) | An acute dietary exposure assessment is considered unnecessary for diflufenican because the APVMA has not established an ARfD. |
| Conclusion | After considering the principles established and agreed in FSANZ proposal P1027, an *All other foods except animal commodities* MRL of 0.01 mg/kg is acceptable because it has been shown to be practical, adequately manages the risk of off-label use and does not increase the level of concern about the risk to public health. |

## Dimethenamid-P

It was not considered appropriate at this time to establish an *All other foods except animal food commodities* MRL for dimethenamid-P as all current MRLs are set at the LOD and a practical MRL which would limit off label use was not able to be established. Therefore, no *All other foods except animal food commodities* MRLis proposed.

## Dimethoate

Dimethoate was excluded from consideration of an *All other foods except animal food commodities* MRL because the NEDI from existing permissions is >80% of the ADI.

## Dithiocarbamates (mancozeb, metham, metiram, thiram, zineb and ziram)

Dithiocarbamates was excluded from consideration of an *All other foods except animal food commodities* MRL because the NEDI from existing permissions is >80% of the ADI.

## Dodine

It was not considered appropriate at this time to establish an *All other foods except animal food commodities* MRL for dodine. The small number of plant commodities and the large variation in associated MRL values creates considerable uncertainty about the occurrence of dodine residues in the Australian food supply. Therefore, no *All other foods except animal food commodities* MRL is proposed at this time.

## Emamectin

An *All other foods except animal food commodities* MRL of 0.005 mg/kg is proposed based on the following considerations:

|  |  |
| --- | --- |
| **Considerations** | **Comments** |
| Limit of determination (LOD) | 0.002 and 0.01 mg/kg (indicated by \* on existing MRLs) |
| Lowest plant commodity MRL | \*0.002 mg/kg |
| Magnitude of existing plant commodity MRLs | The range of existing MRLs is \*0.002 (Grapes; Sweet corn (corn-on-the-cob)) to T0.5 (Leafy vegetables [except lettuce head; lettuce leaf; mizuna]; Mizuna). |
| Lowest plant commodity MRL that is not the LOD | 0.005 mg/kg |
| Most relevant reference point to minimise off-label use | 0.005 mg/kg |
| Consumption amount used in NEDI calculation for *All other foods except animal commodities* | 42.1 g/kg bw/day |
| Chronic dietary exposure (NEDI) considering existing permissions only | 40% of the ADI |
| Proposed *All other foods except animal commodities* MRL**1** | 0.005 mg/kg |
| NEDI including *All other foods except animal commodities* MRL and existing permissions | 44% of the ADI |
| Percentage contribution of *All other foods except animal commodities* to total chronic dietary exposure | An *All other foods except animal commodities* MRL of 0.005 mg/kg represents a contribution of 10% to total dietary exposure which is within the 20% target and is considered acceptable. |
| Acute dietary exposure assessment (NESTI) | Children 2-6 years of age (worse case - pineapples), 3% of the ARfD.  Population aged 2 years and above (worse case - milk), <1% of the ARfD. |
| Conclusion | After considering the principles established and agreed in FSANZ proposal P1027, an *All other foods except animal commodities* MRL of 0.005 mg/kg is acceptable because it has been shown to be practical, adequately manages the risk of off-label use and does not increase the level of concern about the risk to public health. |

## Endothal

An *All other foods except animal food commodities* MRL of 0.01 mg/kg for endothal was proposed for endothal as part of M1014. However, the *All other foods except animal food commodities* MRL was reviewed as part of M1015 and is now proposed to be removed because endothal is no longer registered for use in Australia.

## Ethalfluralin

Ethalfluralin was excluded from consideration of an *All other foods except animal food commodities* MRL as there are no registered uses of ethalfluralin in Australia**Error! Bookmark not defined.**.

## Etoxazole

An MRL of 0.02 mg/kg for all other foods except animal food commodities for etoxazole has already been established as part of routine dietary exposure assessments. This MRL was reviewed as part of M1015 and no change is proposed.

## Fenarimol

All registered uses of fenarimol in Australia are being removed. As a result, the *All other foods except animal food commodities* MRL of 0.05 mg/kg established as part of M1014 will be removed from Schedule 20 as part of M1015.

## Fenbuconazole

An *All other foods except animal food commodities* MRL of 0.02 mg/kg is proposed based on the following considerations:

|  |  |
| --- | --- |
| **Considerations** | **Comments** |
| Limit of determination (LOD) | 0.01 mg/kg (indicated by \* on existing MRLs) |
| Lowest plant commodity MRL | 0.01 mg/kg |
| Magnitude of existing plant commodity MRLs | The range of existing MRLs is \*0.01 mg/kg (Wheat) to 0.5 mg/kg (Banana, cranberry, nectarine) |
| Lowest plant commodity MRL that is not the LOD | 0.3 mg/kg |
| Most relevant reference point to minimise off-label use | 0.01mg/kg |
| Consumption amount used in NEDI calculation for *All other foods except animal commodities* | 43.7 g/kg bw/day |
| Chronic dietary exposure (NEDI) considering existing permissions only | 7% of the ADI |
| Proposed *All other foods except animal commodities* MRL**1** | 0.02 mg/kg |
| NEDI including *All other foods except animal commodities* MRL and existing permissions | 9% of the ADI |
| Percentage contribution of *All other foods except animal commodities* to total chronic dietary exposure | An *All other foods except animal commodities* MRL of 0.02 mg/kg represents a contribution of 17% to total dietary exposure which is within the 20% target, and is considered acceptable. |
| Acute dietary exposure assessment (NESTI) | An acute dietary exposure assessment is considered unnecessary for fenbuconazole because the APVMA has considered an ARfD unnecessary. |
| Conclusion | After considering the principles established and agreed in FSANZ proposal P1027, an *All other foods except animal commodities* MRL of 0.02 mg/kg is acceptable because it has been shown to be practical, adequately manages the risk of off-label use and does not increase the level of concern about the risk to public health. |

## Fenbutatin oxide

A dietary exposure assessment was not required for fenbutatin oxide as the request was for deletion of an existing commodity MRL. Therefore, fenbutatin oxide was not considered for an *All other foods except animal food commodities* MRL.

## Fenitrothion

Fenitrothion was excluded from consideration of an *All other foods except animal food commodities* MRL because the NEDI from existing permissions is >80% of the ADI.

## Fenpropathrin

Fenpropathrin was excluded from consideration of an *All other foods except animal food commodities* MRL as there is no registered use of fenpropathrin in Australia.

## Fenpyrazamine

An *All other foods except animal food commodities* MRL of 0.02 mg/kg is proposed based on the following considerations:

|  |  |
| --- | --- |
| **Considerations** | **Comments** |
| Limit of determination (LOD) | * 1. mg/kg (as indicated by \* in the European Union pesticide database) |
| Lowest plant commodity MRL | 0.05 mg/kg |
| Magnitude of existing plant commodity MRLs | The range of existing MRLs is 0.05 mg/kg (Table grapes) to 10 mg/kg (Dried grapes) |
| Lowest plant commodity MRL that is not the LOD | 0.05 mg/kg |
| Most relevant reference point to minimise off-label use | 0.05 mg/kg |
| Consumption amount used in NEDI calculation for *All other foods except animal commodities* | 45.5 g/kg bw/day |
| Chronic dietary exposure (NEDI) considering existing permissions only | 1% of the ADI |
| Proposed *All other foods except animal commodities* MRL**1** | 0.02 mg/kg |
| NEDI including *All other foods except animal commodities* MRL and existing permissions | 1% of the ADI |
| Percentage contribution of *All other foods except animal commodities* to total chronic dietary exposure | An *All other foods except animal commodities* MRL of 0.02 mg/kg represents a contribution of 6% to total dietary exposure which is within the 20% target, and is considered acceptable. |
| Acute dietary exposure assessment (NESTI) | Children 2-6 years of age (worse case - all commodities) <1% of the ARfD.  Population aged 2 years and above (worse case - all commodities) <1% of the ARfD. |
| Conclusion | After considering the principles established and agreed in FSANZ proposal P1027, an *All other foods except animal commodities* MRL of 0.02 mg/kg is acceptable because it has been shown to be practical, adequately manages the risk of off-label use and does not increase the level of concern about the risk to public health. |

## Fenpyroximate

An *All other foods except animal food commodities* MRL of 0.1 mg/kg has already been established as part of M1014. This MRL was reviewed as part of M1015 and no change is proposed.

## Fipronil

A dietary exposure assessment was not required for fipronil as the request was for deletions of existing commodity MRLs. An *All other foods except animal food commodities* MRL for fipronil is not under consideration at this point in time.

## Florfenicol

A dietary exposure assessment was not required for florfenicol as the request was for deletions of existing commodity MRLs. An *All other foods except animal food commodities* MRL for florfenicol is not under consideration at this point in time.

## Fluazinam

Fluazinam was considered for an *All other foods except animal food commodities* MRL as part of routine APVMA / FSANZ processes. No practical MRL could be established because the lowest possible MRL (0.01 mg/kg) results in >20% of total dietary exposure.

## Flumioxazin

An MRL of 0.02 mg/kg for all other foods except animal food commodities for flumioxazin has already been established as part of routine FSANZ/APVMA MRL processes (gazettal in process). This MRL was reviewed as part of M1015 and no change is proposed.

## Fluopyram

An MRL of 0.1 mg/kg for all other foods except animal food commodities for fluopyram has already been established as part of M1014. This MRL was reviewed as part of M1015 and no change is proposed.

## Flutriafol

Flutriafol was removed from M1015 and has been considered as part of the routine MRL dietary exposure assessments. Flutriafol will be considered for an *All other foods except animal food commodities* MRL as part of that process.

## Fluxapyroxad

An MRL of 0.1 mg/kg for *All other foods* for Fluxapyroxad has been established by the APVMA and is currently listed in Schedule 20 and no change is proposed.

## Folpet

Folpet was excluded from consideration of an *All other foods except animal food commodities* MRL as there are no registered uses of folpet in Australia**Error! Bookmark not defined.**.

## Formetanate hydrochloride

Formetanate hydrochloride was excluded from consideration of an *All other foods except animal food commodities* MRL as there are no registered uses of Formetanate hydrochloride in Australia6.

## Fosetyl-aluminium

Fosetyl-aluminium was excluded from consideration of an *All other foods except animal food commodities* MRL as there are no registered uses of Fosetyl-aluminium in Australia.

## Imazamox

An MRL of 0.05 mg/kg for all other foods except animal food commodities for Imazamox has already been established as part of routine dietary exposure assessments and no change is proposed.

## Indaziflam

Indaziflam was excluded from consideration of an *All other foods except animal food commodities* MRL as there are no registered uses of indaziflam in Australia

## Ipconazole

It was not considered appropriate at this time to establish an *All other foods except animal food commodities* MRL for Ipconazole, as there is only one plant commodity MRL (at the level of determination of (0.01 mg/kg) in Australia. Therefore, no *All other foods except animal food commodities* MRL is proposed at this time.

## Iprodione

A dietary exposure assessment was not required for iprodione as the request was for deletions of existing commodity MRLs. An *All other foods except animal food commodities* MRL for iprodione is currently listed in Schedule 20.

## Isofetamid

Isofetamid was excluded from consideration of an *All other foods except animal food commodities* MRL as it is not listed in Schedule 20, and there is no registered use of isofetamid in Australia.

## Ivermectin

Ivermectin was excluded from consideration of an *All other foods except animal food commodities* MRL as it is a veterinary medicine.

## Lenacil

Lenacil was excluded from consideration of an *All other foods except animal food commodities* MRL as there are no registered uses of lenacil in Australia.

## Levamisole

A dietary exposure assessment was not required for levamisole as the request was for deletion of existing commodity MRL. An *All other foods except animal food commodities* MRL for levamisole is not under consideration at this point in time.

## Maldison

Maldison was excluded from consideration of an *All other foods except animal food commodities* MRL because the NEDI from existing permissions is >80% of the ADI.

## MCPA

It was not considered appropriate at this time to establish an *All other foods except animal food commodities* MRL as all current MRLs for plant commodities are set at a Limit of Detection and a practical MRL which would limit off label use was not able to be established. Therefore, no *All other foods except animal food commodities* MRLis proposed.

## Mepanipyrim

Mepanipyrim was excluded from consideration of an *All other foods except animal food commodities* MRL as there is no registered use of mepanipyrim in Australia.

## Meptyldinocap

Meptyldinocap was excluded from consideration of an *All other foods except animal food commodities* MRL as there is no registered use of meptyldinocap in Australia.

## Mesotrione

Mesotrione was excluded from consideration of an *All other foods except animal food commodities* MRL as there is no registered use of mesotrione in Australia.

## Metalaxyl (Metalaxyl-M) (Mefenoxam)

An MRL of 0.05 mg/kg for all other foods except animal food commodities for metalaxyl was gazetted in 2017 and is currently listed in Schedule 20. This MRL was reviewed as part of M1015 and no change is proposed.

## Metconazole

Metconazole was excluded from consideration of an *All other foods except animal food commodities* MRL as there is no registered use of metconazole in Australia.

## Methidathion

An *All other foods except animal food commodities* MRL of 0.02 mg/kg is proposed based on the following considerations:

|  |  |
| --- | --- |
| **Considerations** | **Comments** |
| Limit of determination (LOD) | 0.01 mg/kg (indicated by \* on existing MRLs) |
| Lowest plant commodity MRL | \*0.01 mg/kg |
| Magnitude of existing plant commodity MRLs | The range of existing MRLs is \*0.01 mg/kg (Cereal grains; Garlic; Macadamia nuts; Onion, bulb; Potato; Stone fruits) to 5 mg/kg (Mandarins) |
| Lowest plant commodity MRL that is not the LOD | 0.1 mg/kg |
| Most relevant reference point to minimise off-label use | 0.1 mg/kg |
| Consumption amount used in NEDI calculation for *All other foods except animal commodities* | 34.45 g/kg bw/day |
| Chronic dietary exposure (NEDI) considering existing permissions only | 67% of the ADI |
| Proposed *All other foods except animal commodities* MRL**1** | 0.02 mg/kg |
| NEDI including *All other foods except animal commodities* MRL and existing permissions | 71% of the ADI |
| Percentage contribution of *All other foods except animal commodities* to total chronic dietary exposure | An *All other foods except animal commodities* MRL of 0.02 mg/kg represents a contribution of 5% to total dietary exposure which is within the 20% target, and is considered acceptable. |
| Acute dietary exposure assessment (NESTI) | Children 2-6 years of age (worse case - pineapples), 11% of the ARfD.  Population aged 2 years and above (worse case - milk), 3% of the ARfD. |
| Conclusion | After considering the principles established and agreed in FSANZ proposal P1027, an *All other foods except animal commodities* MRL of 0.02 mg/kg is acceptable because it has been shown to be practical, adequately manages the risk of off-label use and does not increase the level of concern about the risk to public health. |

## Methomyl

An MRL of 0.05 mg/kg for all other foods except animal food commodities for methomyl was established as part of P1027 and is currently listed in Schedule 20. This MRL was reviewed as part of M1015 and no change is proposed.

## Metrafenone

An *All other foods except animal food commodities* MRL of 0.05 mg/kg is proposed based on the following considerations:

|  |  |
| --- | --- |
| **Considerations** | **Comments** |
| Limit of determination (LOD) | 0.01 mg/kg (as indicated by \* in the European Union pesticide database) |
| Lowest plant commodity MRL | 0.06mg/kg |
| Magnitude of existing plant commodity MRLs | The range of existing MRLs is 0.06 mg/kg (Wheat) to 70 mg/kg (Hops, dry). |
| Lowest plant commodity MRL that is not the LOD | 0.06 mg/kg |
| Most relevant reference point to minimise off-label use | 0.06 mg/kg |
| Consumption amount used in NEDI calculation for *All other foods except animal commodities* | 39.6 g/kg bw/day |
| Chronic dietary exposure (NEDI) considering existing permissions only | 6% of the ADI |
| Proposed *All other foods except animal commodities* MRL**1** | 0.05 mg/kg |
| NEDI including *All other foods except animal commodities* MRL and existing permissions | 6% of the ADI |
| Percentage contribution of *All other foods except animal commodities* to total chronic dietary exposure | An *All other foods except animal commodities* MRL of 0.05 mg/kg represents a contribution of 1% to total dietary exposure which is within the 20% target and is considered acceptable. |
| Acute dietary exposure assessment (NESTI) | An acute dietary exposure assessment is considered unnecessary for metrafenone because the APVMA and JMPR consider an ARfD unnecessary. |
| Conclusion | After considering the principles established and agreed in FSANZ proposal P1027, an *All other foods except animal commodities* MRL of 0.05 mg/kg is acceptable because it adequately manages the risk of off-label use and does not increase the level of concern about the risk to public health. |

## Mevinphos

A dietary exposure assessment was not required for mevinphos as the request was for a reduction in the existing commodity MRL. An *All other foods except animal food commodities* MRL for mevinphos is not under consideration at this point in time.

## Naled

A dietary exposure assessment was not required for naled as the request was for the deletion of the chemical from Schedule 20. An *All other foods except animal food commodities* MRL for naled is not under consideration at this point in time.

## Oxadixyl

An *All other foods except animal food commodities* MRL of 0.1 mg/kg is proposed based on the following considerations:

|  |  |
| --- | --- |
| **Considerations** | **Comments** |
| Limit of determination (LOD) | 0.01 |
| Lowest plant commodity MRL | 0.5 mg/kg |
| Magnitude of existing plant commodity MRLs | The range of existing MRLs is 0.5 mg/kg (Fruiting vegetables, Cucurbits; Onion, bulb) to 5 mg/kg (Leafy vegetables). |
| Lowest plant commodity MRL that is not the LOD | 0.5 mg/kg |
| Most relevant reference point to minimise off-label use | 0.5 mg/kg |
| Consumption amount used in NEDI calculation for *All other foods except animal commodities* | 43.45 g/kg bw/day |
| Chronic dietary exposure (NEDI) considering existing permissions only | 45% of the ADI |
| Proposed *All other foods except animal commodities* MRL**1** | 0.1 mg/kg |
| NEDI including *All other foods except animal commodities* MRL and existing permissions | 50% of the ADI |
| Percentage contribution of *All other foods except animal commodities* to total chronic dietary exposure | Although An *All other foods except animal commodities* MRL of 0.2 could have been established as at this limit it contributed <20% to total dietary exposure, this limit was not considered practical. An *All other foods except animal commodities* MRL of 0.1 mg/kg represents a contribution of 8% to total dietary exposure which is within the 20% target and is considered acceptable. |
| Acute dietary exposure assessment (NESTI) | An acute dietary exposure assessment is considered unnecessary for oxadixyl because the APVMA and JMPR consider an ARfD unnecessary. |
| Conclusion | After considering the principles established and agreed in FSANZ proposal P1027, an *All other foods except animal commodities* MRL of 0.1 mg/kg is acceptable because it has been shown to be practical, adequately manages the risk of off-label use and does not increase the level of concern about the risk to public health. |

## Oxathiapiprolin

An MRL of 0.02 mg/kg for all other foods except animal food commodities for oxathiapiprolin has already been established as part of M1014. This MRL was reviewed as part of M1015 and no change is proposed.

## Pebulate

Pebulate was not included for a dietary exposure assessment as the M1015 request was for a reduction in the existing MRL. An *All other foods except animal food commodities* MRL for pebulate is not under consideration at this point in time.

## Penconazole

An *All other foods except animal food commodities* MRL of 0.02 mg/kg is proposed based on the following considerations:

|  |  |
| --- | --- |
| **Considerations** | **Comments** |
| Limit of determination (LOD) | 0.01 to 0.05 mg/kg (Dept. of Agriculture) |
| Lowest plant commodity MRL | 0.05 mg/kg |
| Magnitude of existing plant commodity MRLs | The range of existing MRLs is 0.05 mg/kg (Brussels sprouts; Herbs) to 0.1 mg/kg (Grapes; Pome fruits; Spices; Tea, green, black) |
| Lowest plant commodity MRL that is not the LOD | 0.05 mg/kg |
| Most relevant reference point to minimise off-label use | 0.05 mg/kg |
| Consumption amount used in NEDI calculation for *All other foods except animal commodities* | 43.48 g/kg bw/day |
| Chronic dietary exposure (NEDI) considering existing permissions only | 1% of the ADI |
| Proposed *All other foods except animal commodities* MRL**1** | 0.02 mg/kg |
| NEDI including *All other foods except animal commodities* MRL and existing permissions | 2% of the ADI |
| Percentage contribution of *All other foods except animal commodities* to total chronic dietary exposure | An *All other foods except animal commodities* MRL of 0.02 mg/kg represents a contribution of 18% to total dietary exposure which is within the 20% target and is considered acceptable. |
| Acute dietary exposure assessment (NESTI) | Children 2-6 years of age (worse case - all commodities), <1% of the ARfD.  Population aged 2 years and above (worse case - all commodities), <1% of the ARfD. |
| Conclusion | After considering the principles established and agreed in FSANZ proposal P1027, an *All other foods except animal commodities* MRL of 0.02 mg/kg is acceptable because it has been shown to be practical, adequately manages the risk of off-label use and does not increase the level of concern about the risk to public health. |

## Penoxsulam

Penoxsulam was excluded from consideration of an *All other foods except animal food commodities* MRL as there are no registered uses of Penoxsulam in Australia**Error! Bookmark not defined.**.

## Permethrin

An *All other foods except animal food commodities* MRL of 0.05 mg/kg is proposed based on the following considerations:

|  |  |
| --- | --- |
| **Considerations** | **Comments** |
| Limit of determination (LOD) | 0.05 and 0.1 mg/kg (indicated by \* on existing MRLs) |
| Lowest plant commodity MRL | \*0.05 mg/kg |
| Magnitude of existing plant commodity MRLs | The range of existing MRLs is 0.05 (Potato; Sweet corn (corn-on-the-cob)) to 30 (Coriander (leaves, stem, roots); Herbs; Kaffir lime leaves; Lemon balm; Lemon grass). |
| Lowest plant commodity MRL that is not the LOD | 0.05 mg/kg |
| Most relevant reference point to minimise off-label use | 0.05 mg/kg |
| Consumption amount used in NEDI calculation for *All other foods except animal commodities* | 38.68 g/kg bw/day |
| Chronic dietary exposure (NEDI) considering existing permissions only | 24% of the ADI |
| Proposed *All other foods except animal commodities* MRL**1** | 0.05 mg/kg |
| NEDI including *All other foods except animal commodities* MRL and existing permissions | 24% of the ADI |
| Percentage contribution of *All other foods except animal commodities* to total chronic dietary exposure | An *All other foods except animal commodities* MRL of 0.05 mg/kg represents a contribution of 2% to total dietary exposure which is within the 20% target and is considered acceptable. |
| Acute dietary exposure assessment (NESTI) | Children 2-6 years of age (worse case – pineapple), <1% of the ARfD.  Population aged 2 years and above (worse case - milk), <1% of the ARfD. |
| Conclusion | After considering the principles established and agreed in FSANZ proposal P1027, an *All other foods except animal commodities* MRL of 0.05 mg/kg is acceptable because it has been shown to be practical, adequately manages the risk of off-label use and does not increase the level of concern about the risk to public health. |

## Phorate

A level of phorate that would limit off label use could not be established by FSANZ. Therefore, no *All other foods except animal food commodities* MRL is proposed at this point in time.

## Phosmet

Phosmet was excluded from consideration of an *All other foods except animal food commodities* MRL because the NEDI from existing permissions is >80% of the ADI.

## Phosphorous acid

Phosphorous acid residues are not of toxicological significance, and MRLs are established for the purposes of compliance and trade only. On this basis, an exposure assessment is not required as part of M1015. An *All other foods except animal food commodities* MRL was not proposed at this point in time.

## Piperonyl Butoxide

An *All other foods except animal food commodities* MRL of 0.5 mg/kg is proposed based on the following considerations:

|  |  |
| --- | --- |
| **Considerations** | **Comments** |
| Limit of determination (LOD) | 0.1 mg/kg (Report of the 2001 JMPR FAO/WHO Meeting of Experts) |
| Lowest plant commodity MRL | 8 mg/kg |
| Magnitude of existing plant commodity MRLs | The range of existing MRLs is 8 mg/kg (Dried fruits; Dried vegetables; Fruits; Oilseeds; Tree nuts and Vegetables) to 50 mg/kg (Wheat germ) |
| Lowest plant commodity MRL that is not the LOD | 8 mg/kg |
| Most relevant reference point to minimise off-label use | 8 mg/kg |
| Consumption amount (g/kg bw/day) used in NEDI calculation for *All other foods except animal commodities* | 31.8 g/kg bw/day |
| Chronic dietary exposure (NEDI) considering existing permissions only | 73% of the ADI |
| Proposed *All other foods except animal commodities* MRL**1** | 0.5 mg/kg |
| NEDI including *All other foods except animal commodities* MRL and existing permissions | 75% of the ADI |
| Percentage contribution of *All other foods except animal commodities* to total chronic dietary exposure | An *All other foods except animal commodities* MRL of 1 mg/kg represents a contribution of 1% to total dietary exposure which is within the 20% target and is considered acceptable. |
| Acute dietary exposure assessment (NESTI) | An acute dietary exposure assessment is considered unnecessary for Piperonyl butoxide because the APVMA has not established an ARfD and JMPR consider an ARfD unnecessary. |
| Conclusion | After considering the principles established and agreed in FSANZ proposal P1027, an *All other foods except animal commodities* MRL of 0.5 mg/kg is acceptable because it has been shown to be practical, adequately manages the risk of off-label use and does not increase the level of concern about the risk to public health. |

## Pirimicarb

A dietary exposure assessment was not required for pirimicarb as the request was for the deletion of existing commodity MRLs. An *All other foods except animal food commodities* MRL for pirimicarb already exists in Schedule 20. This MRL was reviewed as part of M1015 and no change is proposed.

## Profenofos

An *All other foods except animal food commodities* MRL of 0.02 mg/kg is proposed based on the following considerations:

|  |  |
| --- | --- |
| **Considerations** | **Comments** |
| Limit of determination (LOD) | 0.05 mg/kg (P1027 chemical list, 17/4/2015). |
| Lowest plant commodity MRL | 0.3 mg/kg |
| Magnitude of existing plant commodity MRLs | The range of existing MRLs is 0.3 (Cotton seed oil, edible) to 20 (Peppers, chili (dry)). |
| Lowest plant commodity MRL that is not the LOD | 0.3 mg/kg |
| Most relevant reference point to minimise off-label use | 0.02 mg/kg |
| Consumption amount used in NEDI calculation for *All other foods except animal commodities* | 46.18 g/kg bw/day |
| Chronic dietary exposure (NEDI) considering existing permissions only | 1% of the ADI |
| Proposed *All other foods except animal commodities* MRL**1** | 0.02 mg/kg |
| NEDI including *All other foods except animal commodities* MRL and existing permissions | 1% of the ADI |
| Percentage contribution of *All other foods except animal commodities* to total chronic dietary exposure | An *All other foods except animal commodities* MRL of 0.02 mg/kg represents a contribution of 22% to total dietary exposure which is slightly above the 20% target and is considered acceptable. |
| Acute dietary exposure assessment (NESTI) | Children 2-6 years of age (worse case – pineapple), 4% of the ARfD.  Population aged 2 years and above (worse case - milk), 1% of the ARfD. |
| Conclusion | After considering the principles established and agreed in FSANZ proposal P1027, an *All other foods except animal commodities* MRL of 0.02 mg/kg is acceptable because it has been shown to be practical, adequately manages the risk of off-label use and does not increase the level of concern about the risk to public health. |

## Propachlor

A dietary exposure assessment was not required for propachlor as the request was for the deletion and reduction of existing commodity MRLs. Therefore, prothiofos was not considered for an *All other foods except animal food commodities* MRL.

## Propamocarb

An *All other foods except animal food commodities* MRL of 0.1 mg/kg is proposed based on the following considerations:

|  |  |
| --- | --- |
| **Considerations** | **Comments** |
| Limit of determination (LOD) | 0.01 mg/kg (as indicated by \* in the European Union pesticide database) |
| Lowest plant commodity MRL | 0.05 mg/kg |
| Magnitude of existing plant commodity MRLs | The range of existing MRLs is 0.05mg/kg (Potato) to 70 mg/kg (Lettuce head). |
| Lowest plant commodity MRL that is not the LOD | 0.05 mg/kg |
| Most relevant reference point to minimise off-label use | 0.1 mg/kg |
| Consumption amount used in NEDI calculation for *All other foods except animal commodities* | 43.9 g/kg bw/day |
| Chronic dietary exposure (NEDI) considering existing permissions only | 6% of the ADI |
| Proposed *All other foods except animal commodities* MRL**1** | 0.1 mg/kg |
| NEDI including *All other foods except animal commodities* MRL and existing permissions | 6% of the ADI |
| Percentage contribution of *All other foods except animal commodities* to total chronic dietary exposure | An *All other foods except animal commodities* MRL of 0.1 mg/kg represents a contribution of 2% to total dietary exposure which is within the 20% target and is considered acceptable. |
| Acute dietary exposure assessment (NESTI) | Children 2-6 years of age (worse case - pineapples), 1% of the ARfD.  Population aged 2 years and above (worse case - watermelon), <1% of the ARfD. |
| Conclusion | After considering the principles established and agreed in FSANZ proposal P1027, an *All other foods except animal commodities* MRL of 0.1mg/kg is acceptable because it has been shown to be practical, adequately manages the risk of off-label use and does not increase the level of concern about the risk to public health. |

## Prothioconazole

An MRL of 0.02 mg/kg for all other foods except animal food commodities for prothioconazole has already been established as part of M1014. This MRL was reviewed as part of M1015 and no change is proposed.

## Prothiofos

A dietary exposure assessment was not required for prothiofos as the request was for deletion of existing commodity MRLs and reduction in registered uses. Therefore, prothiofos was not considered for an *All other foods except animal food commodities* MRL.

## Pyraflufen-ethyl

Pyraflufen-ethyl was considered for an *All other foods except animal food commodities* MRL as part of routine APVMA / FSANZ processes. No practical MRL could be established. If there were to be a change in the registered uses/permissions, it may be possible to establish an *All other foods except animal food commodities* MRL.

## Pyriofenone

An MRL of 0.05 mg/kg for all other foods except animal food commodities for pyriofenone has already been established as part of routine dietary exposure assessments. This MRL was reviewed as part of M1015 and no change is proposed.

## Pyriproxyfen

An MRL of 0.1 mg/kg for all other foods except animal food commodities for Pyriproxyfen has already been established as part of routine dietary exposure assessments. This MRL was reviewed as part of M1015 and no change is proposed.

## Pyroxasulfone

Pyroxasulfone was considered for an *All other foods except animal food commodities* MRL. However, no practical MRL could be established because the lowest possible MRL (0.01 mg/kg) results in >20% contribution to total dietary exposure.

## Quinoxyfen

An *All other foods except animal food commodities* MRL of 0.02 mg/kg is proposed based on the following considerations:

|  |  |
| --- | --- |
| **Considerations** | **Comments** |
| Limit of determination (LOD) | 0.01 mg/kg (indicated by \* on existing MRLs) |
| Lowest plant commodity MRL | \*0.01 mg/kg |
| Magnitude of existing plant commodity MRLs | The range of existing MRLs is \*0.01 (Barley; Strawberry) to 5 (Coriander (leaves, roots and stems); Chervil; Herbs; Mizuna and Rucola [Rocket]) |
| Lowest plant commodity MRL that is not the LOD | 0.7 mg/kg |
| Most relevant reference point to minimise off-label use | 0.01 mg/kg |
| Consumption amount used in NEDI calculation for *All other foods except animal commodities* | 43.9 g/kg bw/day |
| Chronic dietary exposure (NEDI) considering existing permissions only | 2% of the ADI |
| Proposed *All other foods except animal commodities* MRL**1** | 0.02 mg/kg |
| NEDI including *All other foods except animal commodities* MRL and existing permissions | 2% of the ADI |
| Percentage contribution of *All other foods except animal commodities* to total chronic dietary exposure | An *All other foods except animal commodities* MRL of 0.02 mg/kg represents a contribution of 3% to total dietary exposure which is within the 20% target and is considered acceptable. |
| Acute dietary exposure assessment (NESTI) | An acute dietary exposure assessment is considered unnecessary for quinoxyfen because the APVMA consider an ARfD unnecessary. |
| Conclusion | After considering the principles established and agreed in FSANZ proposal P1027, an *All other foods except animal commodities* MRL of 0.02 mg/kg is acceptable because it has been shown to be practical, adequately manages the risk of off-label use and does not increase the level of concern about the risk to public health. |

## Spinetoram

An MRL of 0.01 mg/kg for all other foods except animal food commodities for spinetoram has already been established as part of M1014. This MRL was reviewed as part of M1015 and no change is proposed.

## Spinosad

A dietary exposure assessment was not required for spinosad as the request was for the deletion of existing commodity MRLs. Therefore, spinosad was not considered for an *All other foods except animal food commodities* MRL.

## Spirodiclofen

Spirodiclofen was excluded from consideration of an *All other foods except animal food commodities* MRL as there is no registered use of spirodiclofen in Australia.

## Spiromesifen

Spiromesifen was excluded from consideration of an *All other foods except animal food commodities* MRL as it is not listed in Schedule 20, and there is no registered use of spiromesifen in Australia.

## Spirotetramat

An MRL of 0.1 mg/kg for all other foods except animal food commodities for spirotetramat has already been established and is currently listed in Schedule 20. This MRL was reviewed as part of M1015 and no change is proposed.

## Sulfentrazone

Sulfentrazone was excluded from consideration of an *All other foods except animal food commodities* MRL as there are no registered uses of sulfentrazone in Australia**Error! Bookmark not defined.**.

## Sulfoxaflor

An MRL of 0.01 mg/kg forall other foods except animal food commodities for sulfoxaflor has already been established and is listed in Schedule 20. This MRL was not reviewed as part of M1015 as sulfoxaflor was not considered in M1015 because the harmonisation request is already listed in Schedule 20.

## Teflubenzuron

Teflubenzuron was excluded from consideration of an *All other foods except animal food commodities* MRL as it is not listed in Schedule 20, and there is no registered use of teflubenzuron in Australia.

## Tetraconazole

An *All other foods except animal food commodities* MRL of 0.02 mg/kg is proposed based on the following considerations:

|  |  |
| --- | --- |
| **Considerations** | **Comments** |
| Limit of determination (LOD) | 0.02 mg/kg (as indicated by \* in the European Union pesticide database) |
| Lowest plant commodity MRL | 0.5 mg/kg |
| Magnitude of existing plant commodity MRLs | There is currently only one plant commodity MRL (0.5 mg/kg) for grapes listed in Schedule 20. |
| Lowest plant commodity MRL that is not the LOD | 0.5 mg/kg |
| Most relevant reference point to minimise off-label use | 0.5 mg/kg |
| Consumption amount used in NEDI calculation for *All other foods except animal commodities* | 45.49 g/kg bw/day |
| Chronic dietary exposure (NEDI) considering existing permissions only | 21% of the ADI |
| Proposed *All other foods except animal commodities* MRL**1** | 0.02 mg/kg |
| NEDI including *All other foods except animal commodities* MRL and existing permissions | 24% of the ADI |
| Percentage contribution of *All other foods except animal commodities* to total chronic dietary exposure | An *All other foods except animal commodities* MRL of 0.02 mg/kg represents a contribution of 10% to total dietary exposure which is within the 20% target and is considered acceptable. |
| Acute dietary exposure assessment (NESTI) | Children 2-6 years of age (worse case - apple, pineapples, milk), 1% of the ARfD.  Population aged 2 years and above (worse case - apple, pineapples, milk), <1% of the ARfD. |
| Conclusion | After considering the principles established and agreed in FSANZ proposal P1027, an *All other foods except animal commodities* MRL of 0.02 mg/kg is acceptable because it has been shown to be practical, adequately manages the risk of off-label use and does not increase the level of concern about the risk to public health. |

## Thifensulfuron

Chemical name of thifensulfuron was changed to thifensulfuron-methyl – see Thifensulfuron-methyl.

## Thifensulfuron-methyl

Name changed from thifensulfuron to thifensulfuron-methyl as part of M1014. DEA not required as part of M1015 as there were no increases to existing MRLs. An *All other foods except animal food commodities* MRL was not proposed at this point in time.

## Thiodicarb

An MRL of 0.1 mg/kg for all other foods except animal food commodities for thiodicarb was established as part of P1027. This MRL was reviewed as part of M1015 and no change is proposed.

## Thiophanate-methyl

Thiophanate-methyl was excluded from consideration of an *All other foods except animal food commodities* MRL as the only registered use of thiophanate-methyl in Australia is in non-food crops (ornamental plants).

## Tolfenpyrad

The estimated acute dietary exposure exceeded the relevant health based guidance value (HBGV) for the 2-6 years and 2+ years’ populations for the requested commodity (grapes). No residue concentration data was available or provided by the requestor, therefore, the MRL was used in the NESTI calculations to represent the concentration of tolfenpyrad residues in grapes. Tolfenpyrad was excluded from consideration of an *All other foods except animal food commodities* MRL as it is not listed in Schedule 20, and there is no registered use of tolfenpyrad in Australia.

## Trichlorfon

A dietary exposure assessment was not required for trichlorfon as the request was for the deletion and reduction of an existing commodity MRL. Therefore, trichlorfon was not considered for an *All other foods except animal food commodities* MRL.

## Tridemorph

A dietary exposure assessment was not required for tridemorph as the request was for the deletion of existing commodity MRLs. Therefore, tridemorph was not considered for an *All other foods except animal food commodities* MRL.

## Trifloxystrobin

An MRL of 0.05 mg/kg for all other foods except animal food commodities for trifloxystrobin has already been established. This MRL was reviewed as part of M1015 and no change is proposed.

## Trifluralin

An *All other foods except animal food commodities* MRL of 0.01 mg/kg is proposed based on the following considerations:

|  |  |
| --- | --- |
| **Considerations** | **Comments** |
| Limit of determination (LOD) | 0.01 and 0.05 mg/kg (indicated by \* on existing MRLs). |
| Lowest plant commodity MRL | T\*0.01 mg/kg |
| Magnitude of existing plant commodity MRLs | The range of existing MRLs is T\*0.01 (Chia) to 0.5 (Carrot; Fennel, bulb; Galangal, greater; Parsnip; Turmeric, root (fresh)). |
| Lowest plant commodity MRL that is not the LOD | 0.05 mg/kg |
| Most relevant reference point to minimise off-label use | 0.05 mg/kg |
| Consumption amount used in NEDI calculation for *All other foods except animal commodities* | 30.39 g/kg bw/day |
| Chronic dietary exposure (NEDI) considering existing permissions only | 9% of the ADI |
| Proposed *All other foods except animal commodities* MRL**1** | 0.01 mg/kg |
| NEDI including *All other foods except animal commodities* MRL and existing permissions | 9% of the ADI |
| Percentage contribution of *All other foods except animal commodities* to total chronic dietary exposure | An *All other foods except animal commodities* MRL of 0.01 mg/kg represents a contribution of 2% to total dietary exposure which is within the 20% target and is considered acceptable. |
| Acute dietary exposure assessment (NESTI) | An acute dietary exposure assessment is considered unnecessary for Trifluralin because the APVMA has not established an ARfD and JMPR consider an ARfD unnecessary. |
| Conclusion | After considering the principles established and agreed in FSANZ proposal P1027, an *All other foods except animal commodities* MRL of 0.01 mg/kg is acceptable because it has been shown to be practical, adequately manages the risk of off-label use and does not increase the level of concern about the risk to public health. |

## Tylosin

A dietary exposure assessment was not required for tylosin as the request was for a deletion of an existing commodity MRL. Tylosin is a veterinary medicine and would be excluded from consideration of an *All other foods except animal food commodities* MRL according to the principles established in P1027.

1. <http://www.foodstandards.gov.au/code/proposals/Pages/P1027.aspx> (Proposal P1027 – Managing Low-level Ag & Vet Chemicals without Maximum Residue Limits) [↑](#footnote-ref-2)
2. NESTI estimates not required for the chemical for any population group. [↑](#footnote-ref-3)
3. Where all specified food commodities for a chemical are deletions or reductions of the MRLs, new DEAs are not undertaken. [↑](#footnote-ref-4)
4. The food commodity group for a chemical is more likely to be specified as a result of inclusions or exclusions of associated requests in M1015. This is part of the Code maintenance work in FSANZ. [↑](#footnote-ref-5)
5. The ARfD for the chemical applies only to women of child-bearing age. Therefore, no NESTI estimates are required for other population sub-groups. [↑](#footnote-ref-6)
6. If a chemical did not progress to the stage of a dietary exposure estimate during the risk assessment process then in line with the principles established for setting this MRL category, the criteria for assessing agvet chemicals for *All other foods except animal food commodities* MRLs excludes chemicals not currently listed in the Code or those not registered for use in Australia. [↑](#footnote-ref-7)