

Off-label Use of Agrichemicals

in horticulture



Guideline for Growers

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Disclaimer: This Guideline is intended to provide general advice on off-label use of agrichemicals. It is not to be taken as providing a definitive interpretation of legislation.

The information contained in this guideline was correct at the time of preparation (December 2021). NZGAP does not accept any liability in respect of loss or damage arising from the use of this guideline.

1

INTRODUCTION AND BACKGROUND

Off-label use of agrichemicals is needed to manage pests, diseases and weeds in a number of minor fruit and vegetable crops. While the practice is legal, growers are responsible for ensuring that off-label use of agrichemicals is necessary, safe and compliant. There are several important management steps that growers need to follow to ensure that the correct products are used and the residue levels on the harvested crop are within regulatory and customer limits.

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Off-label use is when an agrichemical product is used on a crop or a pest that is not listed on the label¹

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Off-label use is when an agrichemical product is used on a crop or a pest that is not listed on the label¹. Off-label use occurs when crop protection companies do not consider registration of a label claim viable, but growers need to use the product. While the flexibility of being able to use agrichemicals off-label is critical to NZ growers, they are unable to rely on label directions to ensure regulatory controls are complied with. Without label guidance, there is a risk that off-label use may result in exceedance of MRLs or other compliance breaches.

Results from residue testing programmes over a number of years show that where residue levels exceeded maximum residue limits (MRLs), these incidents were sometimes as a result of agrichemicals being used off-label. While MRL failure rates from off-label use are broadly similar to failure rates from on label use, it is recognised that better guidance on the use of agrichemicals off-label is of value to growers, particularly for growers of minor crops.

¹ The term can also be used to describe when a registered product is used contrary to label directions but this guideline focuses on the use of agrichemicals that are not registered for the specific use.

1.1 INTENDED AUDIENCE

This guide provides practical information around off-label use of agrichemicals to ensure growers meet regulatory requirements under the ACVM, HSNO, HSW and Food Acts. Growers and those who provide information to growers about off-label use should use this guide to assist them in understanding their obligations. This group includes certification bodies and auditors, agrichemical sales personnel, consultants, distributors and wholesalers. Growers producing export crops should contact their exporter for advice on meeting export requirements.

1.2 SCOPE

This guideline relates only to the off-label use of registered agrichemical crop protection products (such as insecticides, fungicides, herbicides and plant growth regulators) on fresh horticultural food crops produced in NZ and intended for human consumption.

This guideline does not cover the use of exempt products (such as fertilisers and surfactants) or uses that are listed on label. This guideline also excludes the use of agrichemicals on (or in) animal feed crops (such as cereals, pasture etc.) This guideline is not intended for on label use, where label directions must be followed.

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LEGISLATION AND REGULATION

There are three main Acts relevant to off-label use. These are:

- ACVM Act – administered by MPI
- HSNO Act - administered by EPA
- Food Act – administered by MPI

In general, ACVM is the regulator for issues relating to food safety and trade and EPA is the regulator responsible for the environment, worker and bystander safety.

Worksafe NZ administers the Health and Safety at Work Act and is also relevant when using agrichemicals.

Off-label use is legal in NZ providing that:

- The agrichemical is registered in NZ
- Off-label use is not restricted by use of ACVM Conditions #31 or 87 (section 2.1)
- All EPA and ACVM controls are met
- Growers demonstrate how obligations will be met before the agrichemical is applied
- All other label requirements are adhered to

Customer requirements

There are also non-legislative requirements such as NZGAP (Section C4.2) and GLOBALG.A.P. V5 (ref CB 7.1.2) and some markets (such as supermarkets, marketing companies, exporters or importers) may have separate rules covering off-label use of agrichemicals, or restrictions on the use of specific products.

These differ considerably depending upon the crop and the customer. In all cases, off-label use must be justified, meaning that the grower has firstly considered and prioritised products that are registered for the crop, and use products off-label only where there are no alternative products or efficacious control methods.

Growers are advised to consult their exporter or customers for advice on their individual requirements and confirmation that the off-label use of a product is acceptable.

2.1 CONDITIONS OF REGISTRATION - ACVM

ACVM is responsible for issues relating to food safety and trade. ACVM regulates the use of agrichemicals under the ACVM Act and set MRLs under the Food Act. ACVM place conditions on agrichemicals when they are first registered.

There are specific conditions that either restrict or allow off-label use:

- Condition #31 - This condition means the product must only be used according to the label directions (i.e. no off-label use is allowed). In this case all label directions (including pests targeted) are mandatory
- Condition #83 - This condition places the obligation on the user to ensure that residues in the crop do not exceed the set or default MRL. The NZ default MRL is 0.1 mg/kg
- Condition #87- This condition means unless specific permission has been granted by MPI to use the product off-label - the product must only be used according to the label directions (i.e. off-label use is not allowed) and all label directions (including pests targeted) are mandatory. Where permission has been granted, use of the product must comply with any additional controls stated in the documentation confirming permission.

ACVM allow off-label use as a general rule, and only restrict this where there are regulatory risks to be managed. Section 3 outlines how to determine what conditions are in place for each agrichemical.

It is important to note that in general, the use of agricultural compounds on animals is prohibited. This is controlled through Condition #84 which states that 'The product must not be used on animals unless the use is approved as part of this registration'. This includes the use of agrichemicals to control birds in crops.

2.2 MAXIMUM RESIDUE LIMIT (MRL)

In NZ, the main purpose of setting a MRL is to ensure that the best methods of crop production – known as Good Agricultural Practice (GAP) – are being used to keep residues in food as low as possible. When registering a compound, registrants must provide information on the least amount of that compound required to control the pest / disease and measure the residue that results from that use (if any). The MRL is then set at that level so that if residues exceed this level it indicates GAP and label directions have not been followed.

The Food Act requires that all crops produced in NZ comply with the MRL Food Notice and it is illegal to sell food with residues above the NZ MRL (or default MRL if none is set). MRLs are one tool used to monitor if GAP is being followed during food production. Breaching an MRL is not necessarily a food safety issue but it does indicate that GAP may not have been followed, thus alerting MPI to a possible compliance issue.

MRLs are outlined in the MRL Food Notice for specific crops or crop groups and compounds. The NZ MRL Food Notice is regularly updated and can be accessed on the MPI website: www.mpi.govt.nz/agriculture/agricultural-compounds-vet-medicines/maximum-residue-levels-agricultural-compounds/

Where a specific MRL is not set in this Food Notice, the default MRL of 0.1 mg/kg applies. This default MRL applies for most compounds used off-label.

Growers must undertake a risk assessment, before the agrichemical is applied, to determine the time between the application and harvest to be sure they will not exceed the MRL at harvest (either set or default). Section 6 outlines how to determine this.

Compliance with the MRL Food Notice is important for a range of reasons, not only to comply with NZ law, but also to ensure access to certain markets. Overseas MRLs for exported produce may be different (i.e. higher or lower or no MRL at all) to those set in NZ. However, in all cases produce grown for export markets must first meet NZ requirements, even where the NZ MRL is lower than what may be set overseas.

2.3 CONTROLS ON SUBSTANCES - EPA

The EPA places controls on agrichemicals to manage risks to people and the environment. The EPA places both generic and specific controls on some agrichemicals that can mean off-label use is not allowed. These controls are often unique to the trade name product and should be checked before the use of any agrichemicals off-label, to ensure all controls are complied with.

EPA controls can restrict how a product can be applied by placing limits on the use pattern. EPA may specify controls such as:

- maximum rates, intervals and number of applications
- the type of application equipment that can be used (i.e. no aerial application or restricting to air blast or boom sprays only)
- buffer zone distances

These additional controls may preclude off-label use if the grower cannot comply with all of the controls. Even if ACVM allow off-label use, growers must ensure compliance with both ACVM and EPA controls before using an agrichemical off-label.

Websites for each Act are provided in section 7. For some newer and recently reassessed products, controls that impose a minimum re-entry interval are set by WorkSafe now rather than the EPA. These can be checked here: <https://worksafe.govt.nz/laws-and-regulations/restricted-entry-intervals-for-pesticides/>

2.4 OTHER REQUIREMENTS

The label should be read fully even when using agrichemicals off-label to ensure compliance with other directions such as transport, PPE, handling, storage, spray drift, buffer zones, bee safety, tracking and record keeping instructions. This guideline does not detail these other requirements. For further details on these requirements contact Growsafe: www.growsafe.co.nz.

3

DECISIONS ON USING A COMPOUND OFF-LABEL

Based on the legal requirements outlined above, there are several factors that a grower must consider before deciding to use an agrichemical off-label. Growers must ensure they are meeting regulatory (ACVM and EPA) and non-regulatory controls (e.g. customer, quality assurance) before using a product off-label. The flow chart in Appendix 1 outlines steps that should be taken to check relevant controls.

3.1 OFF-LABEL RESTRICTION

A grower must ensure that conditions of registration for the product allow off-label use. As described in Section 2.1, Condition #83 allows for off-label use if all other conditions are met. Appendix 1 outlines how to determine what conditions of registration apply to each trade name product.

Products not registered for use

Only agrichemical products that are registered for use in NZ may be applied to crops. If the product is not listed on the ACVM website, then it is not registered and cannot be used. It is important to check the ACVM website to obtain current registration status rather than relying on the wording from a product label which may be out of date or incorrect.

Customers and exporters may also have a list of banned products, or restrictions on the use of products, such as the timing of the last application, or number of times a product may be used on a particular crop.

3.2 CONTROLS

Growers must review the controls for each trade name product as some controls or restrictions are not listed on the label but still must be followed. Particular attention should be paid to the “additional controls” section at the end of the EPA’s controls database webpage (section 77). This is where restrictions on application method (e.g. aerial, ground) may be stated and where maximum application rates may apply.

When searching for a specific trade name product, the website may refer you to a different trade name product that has the same active ingredient. In this case, the controls apply to both compounds even though the trade names differ. If in doubt, contact the EPA to clarify 0800 429 7827 or hazardous.substances@epa.govt.nz.

The EPA’s controls database also displays controls that apply under the Health and Safety at Work (Hazardous Substances) Regulations. This document does not go into Worksafe regulations in detail. Links are provided for more information on Worksafe. Growers are encouraged to contact Growsafe and or Worksafe for further information about compliance with the Health and Safety at Work Act when using agrichemicals both on or off-label.

3.3 RESIDUES

After ensuring that the intended off-label use complies with all controls, growers must then consider how they will ensure residues in the crop will comply with the MRL.

Firstly, growers must have information about what MRL applies to the crop being produced. The NZ MRL Food Notice is regularly updated and can be accessed on the MPI website here: www.mpi.govt.nz/processing/agricultural-compounds-and-vet-medicines/maximum-residue-levels-for-agricultural-compounds/

Growers must refer to this Food Notice to determine if an MRL is set for the crop that the product will be used on. If the compound is not listed in Schedule 1, then growers should check to see if it is exempt from an MRL in Schedule 2. If the compound is not listed, or an MRL is not set for the crop, the NZ default (0.1 mg/kg) MRL applies. In some cases, an MRL will be set for a crop group which incorporates several different crops.

Growers should be familiar with the crop group that their crop falls into. NZ uses the Codex crop grouping system and more information can be found here: https://www.fao.org/fao-who-codexalimentarius/sh-proxy/en/?Ink=1&url=https%253A%252F%252Fworkspace.fao.org%252Fsites%252Fcodex%252FStandards%252FCXA%2B4-1989%252FCXA_004e.pdf

After establishing what the MRL is, growers must then consider how the MRL will be met before applying the compound to their crop. If the product is potentially going to be exported, consideration must be given to importing country MRLs which may differ from NZ (and may be set at a lower limit or not at all – i.e. nil detect).

In the first instance, growers must meet the NZ MRL even if it is lower than the export MRL. Some retailers set their own MRL's for specific compounds, which are often lower than the country MRL's. Retailer MRL's are usually stated in their supply conditions. Growers should contact their packhouse, marketer, exporter or industry association for advice on export MRLs.

There are several key ways growers can ensure the application of a compound off-label will result in compliance with MRLs:

- Some industry associations have undertaken research to set pre-harvest intervals (PHIs) for off-label use. If a PHI has been set for off-label use then growers can refer to this as justification for their application. Growers should contact their Product Group to ascertain if this information exists.
- Growers can undertake their own residue testing and set PHIs for off-label use.
- Growers can carry out tests to ensure residues in the harvested crop will be compliant before sale. This involves analysing samples of the crop before harvest. There are several laboratories that provide this service (see section 4 for more details). However, growers cannot just rely on pre-harvest clearance testing, they must consider likely residues before applying the product.
- Existing labelled crops may provide a reference for off-label use. For example, if a kumara grower wants to use a product off-label, following the potato label directions (including application rate, frequency and PHI) may mean that residues are likely to be similar. However, the grower will also need to consider the MRL and how it compares with the off-label default MRL of 0.1 mg/kg, especially since the labelled use may have a higher MRL set (i.e. the potato MRL maybe above the default MRL).
- Growers may have information from overseas registrations which indicate likely residues at harvest. Care must be taken in considering overseas PHI's as they may be based on higher MRLs than the NZ off-label default MRL.

When considering the appropriate PHI to ensure compliance, growers should take care to consider season or weather impacts and the potential impact of surfactants and other additives. If plant growth has been slower or faster than normal, residue levels may vary. Other variables such as the use of surfactants or application equipment may also impact on residue levels. For these reasons and even if growers have information that shows off-label use will result in compliant MRLs, it is strongly advised that residue tests are carried out before harvest to ensure compliance (see Section 4).

Growers are encouraged to talk to their industry association about information needs for off-label use.

Recording off-label applications

Application records (spray diaries) for products used off-label should include the same information as other applications, including the PHI calculated by the grower to reach the default (0.1 mg/kg) MRL.

3.4 RESISTANCE MANAGEMENT

Resistance management should be considered when using agrichemicals. This means that the same agrichemical or group of agrichemicals (i.e. mode of action / MOA) should not be used continuously without alternating applications with different MOA.s

More information on resistance management can be found on the label or at www.resistance.nzpps.org

3.5 PLANT SAFETY

When registering a product, trials are undertaken to ensure the product does not harm the crop (i.e. does not cause phytotoxic effects or affect crop safety) and that the product provides efficacious control against the target pest / disease or weed listed on the label. When a product is used off-label, these trials have not necessarily been completed. Growers should check if there are any registrations for the product in other countries, or trial the product on a small number of plants before applying over large areas. It is the growers' responsibility to ensure the product is safe to apply to their crop when using it off-label.

3.6 ADVERSE EVENT REPORTING

If there is an unexpected effect associated with the application of an agrichemical, this is considered to be an adverse event. It is a condition of registration that all adverse events must be reported to ACVM, even from off-label use. An adverse event may include unacceptable residues, lack of efficacy, target crop safety, GAP, and / or issues during application from sprayers, sedimentation, unexpected interactions with other products and /or compatibility issues). The link to report an adverse event to ACVM is in Section 7.

3.7 REASSESSMENTS AND CHANGES TO OFF-LABEL USE

ACVM and EPA have a reassessment programme for agrichemicals. This often results in changes to the product's label and the way it can be used. In some cases, the product or group of products may be heavily restricted, phased out or banned as a result of reassessments.

Recently the Organophosphate and carbamate group of insecticides were reassessed by the EPA and ACVM. This has resulted in the whole group of products being heavy restricted, some banned and some on phase outs.

Growers using these products must be aware of the new controls as many products must only be used strictly according to the label. MRLs for these products have also (in some cases) been reduced significantly. Some product groups have produced summaries of controls and MRLs which can be requested from your business manager.

An information paper on the OPC Reassessment outcomes is available here: [Organophosphate Carbamate Reassessment](#)

Appendix 4 links to a poster designed for vegetable growers to ensure legal use of acephate and methamidophos (organophosphate insecticides). These activities are not allowed to be used off-label. This is a legal requirement and these restrictions have been in force since 2015.

WorkSafe produced a range of fact sheets on using OPCs which can be viewed here:

<https://worksafe.govt.nz/topic-and-industry/hazardous-substances/guidance/substances/using-insecticides-safely/>

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MONITORING AND TESTING FOR COMPLIANCE

There are four main regulatory compliance entities responsible for monitoring and auditing agrichemical use. These are:

- MPI
- EPA
- Regional, City and District councils
- Worksafe NZ

Non-regulatory compliance checks may also be carried out by other agencies such as NZGAP, packhouses, supermarkets, exporters and importers.

The risk of non-compliance is reduced when growers ensure that agrichemicals are used responsibly in accordance with both government and private requirements. Growers must be aware of all regulations and are strongly encouraged to document all considerations when contemplating using a product off-label. Appendix 2 provides a checklist to assist growers with this.

4.1 RESIDUE ANALYSIS

One of the key methods for ensuring compliance is residue testing and this is routinely undertaken by packers, wholesalers, and retailers (i.e. supermarkets). Growers are strongly encouraged to complete their own residue testing to ensure compliance before any crop is harvested.

The main NZ laboratories that undertake residue testing are listed at the end of this section. They should be contacted well in advance of harvesting the test sample to obtain a quote and turnaround times.

Typical turnaround times from testing to reporting of results can vary greatly depending upon the type of tests required and the time of year. If urgent turnaround is required, this must be signalled in advance and may involve additional cost.

Multi-residue testing is the most common analysis used to ensure compliance. This involves screening for a range of different compounds in a single test. While most of the commonly used compounds are included in multi residue tests, each laboratory offers different inclusions. Growers should check with their intended laboratory to ensure that all the compounds they have applied are included in the multi residue screens.

Active	Example of trade name/s
Dithiocarbamates (e.g. Mancozeb, Thiram)	Aliette Super, Vitaflo 200, Acrobat, Kotek, Max MZ, Nautile, Diathane
Acid Herbicides	2,4-D
Sulfonyl Urea's	Escort, Answer, Glean
Glyphosate	Round-up
Maleic Hydrazide	Sprout-Stop
Paraquat / Diquat	Preeglone
Dithianon	Delan, Define, Alaris

It is important to note that some commonly used compounds are excluded from multi-residue tests and include:

In order to test for residues of these compounds, a request for specific tests that include them is required. If growers apply an agrichemical that contains a compound not included in the multi residue screen, it will not be analysed and will not show up in the results. The grower should provide the list of compounds used (from spray diaries) to the laboratory to confirm they are all included in the multi residue analysis and if not, request advice on what specific tests are required. This should be regularly checked as newly registered compounds can take some time to be included in multi residue screens.

Export growers should also confirm each residue definition of each compound they have used. This is because some overseas regulators specify a different residue definition for a compound to that used in NZ e.g. the NZ definition may be for the parent compound whereas the overseas definition may be for the parent plus the sum of metabolites.

Growers also need to be aware that in some cases, the multi residue screen will only detect the parent compound. Some compounds break down into the parent and metabolite compounds. The NZ MRL Food Notice provides the definition of the residue that needs to be complied with to meet NZs MRLs requirements. Where this definition includes metabolites, growers should ask the laboratory if these metabolites will be detected with the multi residue screen.

There are three main laboratories that provide multi residue analysis in NZ. These are:

- AsureQuality: www.asurequality.com/our-services/laboratory-testing/
- Eurofins: www.eurofins.co.nz/laboratory-locations/
- Hill Laboratories: www.hill-laboratories.com/contact-us/

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ADDITIONAL INFORMATION

Agrichemical retailers can provide advice on off-label use if this is actively sought out by growers but the advice could be very limited as there may not be data available to support off-label use.

Crop protection companies (or the NZ registrant) are not (legally) allowed to advertise or endorse off-label use. The transfer of information on off-label use is also sometimes discouraged. Crop protection companies (in some instances) may be able to provide limited advice if growers seek this for off-label use of their products. However, as there is generally no residue, efficacy or crop safety information for unregistered crops, crop protection companies will most likely be reluctant to offer advice for off-label uses.

Appendix 3 links to a poster for growers that provides further guidance when using products off-label.

6

DEFINITIONS / GLOSSARY

Active ingredient - The chemical or biological compound/s in a trade name product, that are primarily responsible for the effect being claimed and is distinct from other components of the product (such as adjuvants or additives).

ACVM - Agricultural Compounds and Veterinary Medicines (ACVM) Act – administered by MPI.

Adverse event - Any observation in the target or non-target crop that occurs after the use of an agrichemical and the impact is unintended. This may include; unintended effects, unacceptable residues, lack of efficacy, GAP issues, application issues (such as sprayer issues as a result of a poor-quality product, sedimentation or compatibility issues). All unfavourable or unintended adverse events that are recognised outcomes of product use and that may or may not be identified on the label are classified as adverse events.

Agrichemical - Any product used to produce food. This includes products such as insecticides, fungicides herbicides and Plant Growth Regulators both conventional and organic / biological. They can be naturally occurring in the environment or manufactured. These products are subject to the provisions of the ACVM Act and the NZ MRL Food Notice.

Condition 31 – prevents off-label use of an agrichemical and states: 'This product must only be used as specified in the label content.'

Condition 83 – is the condition that allows off-label use under ACVM. This condition states: 'Any person using the product must ensure that residues of any substance in the product that may occur in:

- a) Plant material intended for human consumption produced from plants or plant material treated with the product, or
- b) Animal material as defined in the Animal Products Act 1999 intended for human consumption produced from grazing or direct feeding plants or plant material treated with the product to food producing animals does not exceed the lower of either:
 - i) the specified residue level in the current Food Notice: Maximum Residue Levels for Agricultural Compounds; or
 - ii) where a maximum residue level for that substance has not been specified, the default maximum residue level in the current Food Regulations 2015 and its amendments.'

Condition 84 - prohibits the use of the agrichemical on animals. This means all agrichemical labels that have only crop label claims cannot be used on animals under any circumstances. Additionally, most labels carry the statement 'it is an offense to use this product on animals' to display the control that relates to this condition. Condition 84 states: 'The product must not be used on animals unless the use is approved as part of this registration.'

Condition 87 - prevents off-label use of an agrichemical and states: 'This product must only be used according to the label except where permission for an off-label use has been granted by the Ministry for Primary Industries. Where permission has been granted, use of the product must comply with any additional controls stated in the documentation confirming permission.'

Crop groups – are established when residue data for representative crops is used to establish MRLs for a whole group of crops that are botanically or taxonomically similar. Representatives of a crop group are those crops whose residue data can be used to establish an MRL on the entire crop group (eg all root vegetables). Refer to Section 7 here: www.mpi.govt.nz/dmsdocument/19520-residue-data-for-agricultural-chemical-registration

Default MRL – the NZ default MRL is 0.1mg/kg and applies where a specific MRL has not been set for the commodity.

EPA – Environmental Protection Authority.

GAP – Good Agricultural Practice. In the context of application of agrichemicals, GAP is using the minimum quantity of agrichemical necessary to achieve adequate efficacy, applied in a manner to leave a residue which is the smallest amount practicable.

HSNO – Hazardous Substances and New Organisms.

HSR – Unique HSNO approval number issued by EPA (found on the product label).

Maximum Residue Limit (MRL) - is the highest acceptable level of a residue in a crop.

Minor crop - those crops where uses of plant protection products is considered to be of low economic importance at the national level. It should be noted that a minor use in one country may be a major use in another country (each country is responsible for defining its own minor uses).

Mode of Action (MOA) – the classification system of agrichemicals based on their mode of action:

- Insecticide classifications: www.irac-online.org
- Fungicide classifications: www.frac.info/
- Herbicide classifications: www.hracglobal.com

MPI – NZs Ministry for Primary Industries.

NZGAP - New Zealand Good Agricultural Practice. Provides assurance for the safe and sustainable production of fruit and vegetables in New Zealand www.nzgap.co.nz

Off-label use - the use of agrichemicals on crops or for a use pattern that is not registered on the label. This may be on a different crop or using a contrary use pattern (i.e. against a target pest or disease, at a different rate etc) that is not labelled.

PHI (Pre-harvest Interval) - the minimum number of days that must elapse between the last application and harvest of the crop. Sometimes called withholding period (WHP)

Registrant - the company or person who applied to register the agrichemical. This usually appears on the product label. Also called crop protection company.

Worksafe NZ – the Government agency that regulates workplace health and safety. Worksafe's role under HSNO is to undertake (on behalf of the EPA) certain hazardous substances functions under the HSNO Act including:

- Approvals of HS workplaces codes of practice
- Development of guidance material and other information resources for the safe use of HSs in the workplace
- Setting workplace controls for HSs

More information can be found here: <https://worksafe.govt.nz/topic-and-industry/hazardous-substances/>

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IMPORTANT WEBSITE REFERENCES

ACVM database of registered agrichemicals

<https://eatsafe.nzfsa.govt.nz/web/public/acvm-register>

ACVM background information on agricultural compounds

www.mpi.govt.nz/processing/agricultural-compounds-and-vet-medicines/

NZ MRL Food Notice

www.mpi.govt.nz/agriculture/agricultural-compounds-vet-medicines/maximum-residue-levels-agricultural-compounds/

Adverse event reporting guideline and template

www.mpi.govt.nz/agriculture/agricultural-compounds-vet-medicines/adverse-events-with-acvms/

EPA background information for hazardous substances

www.epa.govt.nz/industry-areas/hazardous-substances/

EPA Controls database

www.epa.govt.nz/database-search/approved-hazardous-substances-with-controls/

WorkSafe NZ Hazardous Substances Information

<https://worksafe.govt.nz/topic-and-industry/hazardous-substances/>

WorkSafe Pesticides on Farms Guidance

<https://worksafe.govt.nz/topic-and-industry/agriculture/chemicals-and-fuels-on-farms/pesticides-on-farms/>

WorkSafe Re-entry intervals for new and reassessed products

<https://worksafe.govt.nz/laws-and-regulations/restricted-entry-intervals-for-pesticides/>

Hazardous Substances Tool box

www.hazardoussubstances.govt.nz/

GROWSAFE manual:

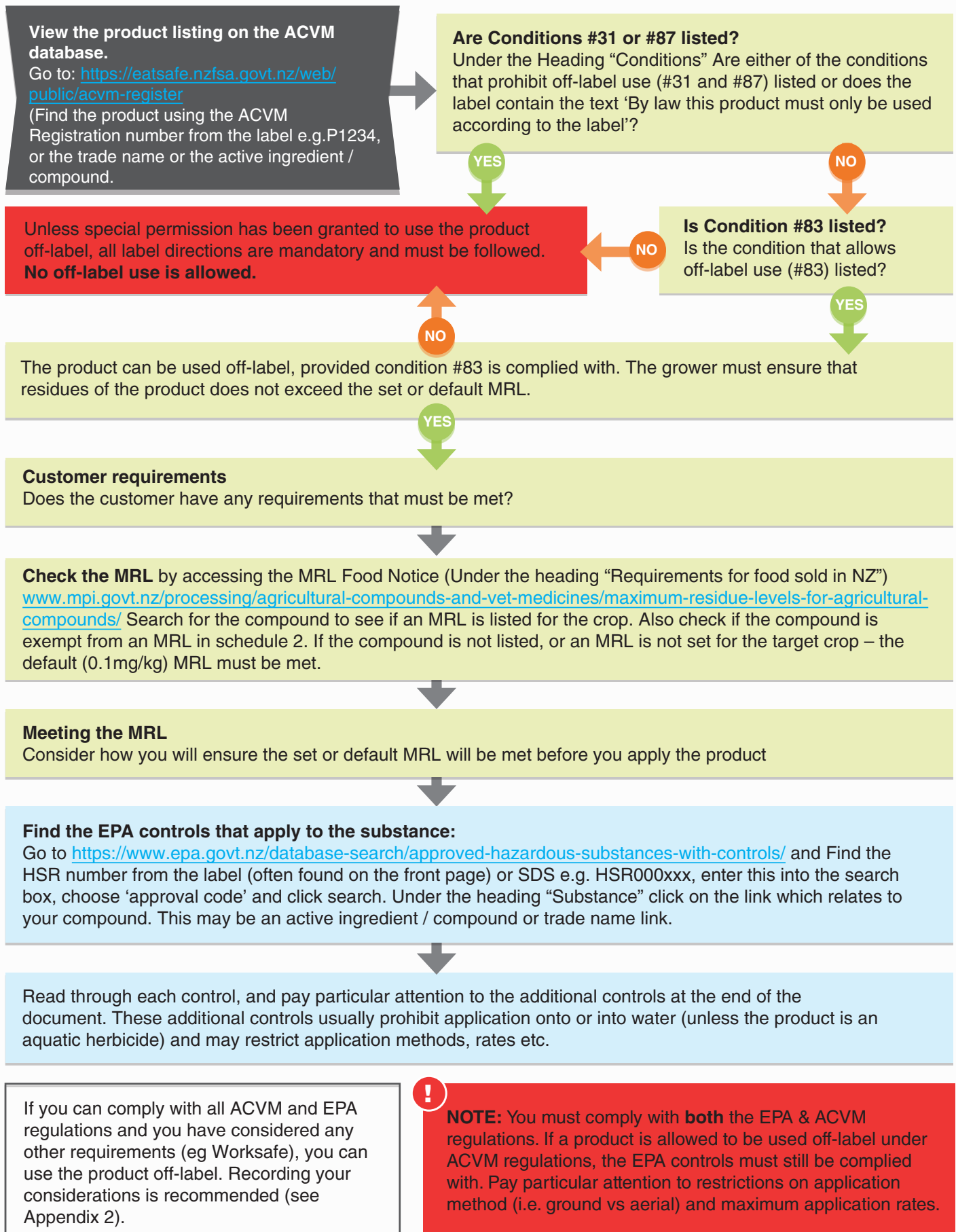
www.growsafe.co.nz/StandardManual/Introduction/StandardManual/Introduction.aspx?hkey=ce37cc62-e527-4ddb-ade6-a6be28afc6ed

MPI MRL Database

<https://www.mpi.govt.nz/news-and-resources/resources/registers-and-lists/maximum-residue-levels-database>

APPENDIX 1: Decision tree for determining if an agrichemical can be used off-label

Key: = ACVM Act regulations = HSNO Act regulations



APPENDIX 2: Checklist for ensuring compliance on off-label use

Name of agrichemical product:	
Crop:	
Production areas / blocks:	
Application rate:	
Proposed date/s of application:	

Label

Completed

Review the label carefully

State HSR# (required to check the EPA website) HSR

ACVM

Check for conditions

#31 & #87 (prohibits off-label use)

#83 (allows off-label use)

What MRL applies (if no MRL is listed default 0.1 mg/kg applies)

How are you ensuring the MRL will be met?

Pre-harvest interval set by industry association?

Pre-harvest interval set by self?

Residue testing prior to harvest?

Similar labelled crop?

Overseas information?

Other:

EPA

Search the EPA database for controls using the HSR number

What specific conditions apply? (State below)

Customer

Customer requirements and specifications reviewed?

Other

Consider other issues:

Eg - Principles of Integrated Pest Management (IPM) including resistance management

Name:

Date:

The Vegetables Research & Innovation Board published a poster you can download from the link below, or request to be sent one from your product group business manager. This poster is designed for growers when using a product off-label on a crop or pest that is not registered on the label.

Version # 01 2021

GUIDANCE ON THE USE OF OFF LABEL CROP PROTECTION PRODUCTS

OFF LABEL USE OF CROP PROTECTION PRODUCTS IS NECESSARY AT TIMES TO MANAGE PESTS, DISEASES AND WEEDS

Why use this poster?

- This poster is designed for growers when using a product off label on a crop and/or pest that is not listed on the product label.
- While off label use is legal for most products, growers are responsible for ensuring that off label use is necessary, safe and compliant with all regulatory controls.
- This poster summarises the important steps to follow to ensure off-label use is compliant.

Off label use is severely restricted – especially for newer active ingredients and some older ones that have been reassessed by EPA. This poster serves as a guide only. Growers must check ACVM (who manage food residues for MRL compliance) and EPA (for environmental compliance) websites first in each instance.

Definitions:

MRL - Maximum residue levels
WHP - Withholding period
PHI - Preharvest interval

Step 1:

Check Compliances

The residue must first comply with any set or default NZ MRL as well as the export MRL if it is lower.

Consider what:

- MRL applies. If your crop is destined for the domestic market this may be the default of 0.1 mg/kg
- WHP / PHI is required to achieve the MRL before you apply the product

Step 2:

Record Considerations

Record considerations in NZGAPs template for off label use (available on NZGAPs website).

Step 3:

Check Controls

If there any controls that prohibit off label use **DO NOT USE.**

Step 4:

Read full label content

Read the full label content very carefully – some may have the words: By law, this product must only be used as specific in the label content.

DO NOT USE these products off label.

Active ingredients with off label restrictions include:
 Organophosphate and carbamate insecticides such as acephate, diazinon, fenamiphos and methamidophos.
 Antibiotics (eg streptomycin).

Step 5:

Be Aware


Be aware there may be further restrictions on a product such as restrictions on being able to apply aerially.

Step 6:

Check WorkSafe

Check WorkSafe website for any Restricted Entry Intervals set as all users must comply. If you cannot, do not apply the product.

Disclaimer: This poster is intended as a guide only and should be read in conjunction with the NZGAP off label guidance document (www.nzgap.co.nz). Growers are strongly encouraged to design a spray programme ahead of the season and to account for any off label uses that maybe needed as a result of unexpected pest / disease outbreaks.



APPENDIX 4: Guidance on Acephate and Methamidophos

The Vegetables Research & Innovation Board published this poster as a guide to vegetable growers to ensure legal use of these two actives. Acephate and methamidophos (organophosphates) are insecticides that are not allowed to be used off-label on vegetable crops. This is a legal requirement and these restrictions have been in force since 2015.











































VERSION: JAN 2020


GUIDANCE ON THE USE OF ACEPHATE AND METHAMIDOPHOS INSECTICIDES ON VEGETABLE CROPS


Acephate and methamidophos (organophosphates) are insecticides that are not allowed to be used off-label on vegetable crops. This is a legal requirement and these restrictions have been in force from 2015. This poster is provided as a guide to vegetable growers to ensure legal use of these agrichemicals.

Recommendations:

- Always read the label and strictly follow directions.
- Be aware that older product may not have the current label. Consult your supplier or go to New Zealand Food Safety link: <https://eatsafe.nzfsa.govt.nz/web/public/acvm-register>.
- The Sector Groups recommend growers to use acephate and methamidophos products that have a date of manufacture of 2016 or later.
- The Sector Groups recommend growers to not use any acephate and methamidophos products that are older than 2016 – properly dispose of this product.

ACEPHATE	METHAMIDOPHOS
<p style="text-align: center; font-weight: bold; font-size: small;">OFF-LABEL USE IS AN OFFENSE FOR THESE PRODUCTS</p>	<p style="text-align: center; font-weight: bold; font-size: small;">OFF-LABEL USE IS AN OFFENSE FOR THESE PRODUCTS</p>
<p style="font-weight: bold; font-size: small;">TRADE NAMES: Lancer 750DF and Orthene WSG</p>	<p style="font-weight: bold; font-size: small;">TRADE NAMES: Metafort 60SL and Methafos 600</p>
<p style="font-weight: bold; font-size: small;">PERMITTED USES:</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  CABBAGE WHP: 7 days MRL: 2mg/kg </div> <div style="text-align: center;">  CAULIFLOWER WHP: 7 days MRL: 2mg/kg </div> <div style="text-align: center;">  LETTUCE WHP: 14 days MRL: 2mg/kg </div> <div style="text-align: center;">  OUTDOOR TOMATO WHP: 14 days MRL: 1mg/kg </div> </div> <p style="font-size: x-small; margin-top: 5px;">WHP: Witholding Period MRL: Maximum Residue Limit</p>	<p style="font-weight: bold; font-size: small;">PERMITTED USES:</p> <div style="display: flex; justify-content: space-around; align-items: flex-start;"> <div style="text-align: center;">  BROCCOLI WHP: 14 days MRL: 1mg/kg </div> <div style="text-align: center;">  BRUSSEL SPROUTS WHP: 14 days MRL: 1mg/kg </div> <div style="text-align: center;">  CABBAGE WHP: 14 days MRL: 1mg/kg </div> <div style="text-align: center;">  CAULIFLOWER WHP: 14 days MRL: 1mg/kg </div> <div style="text-align: center;">  KUMARA WHP: 14 days MRL: 0.01(LOQ) mg/kg </div> </div> <div style="display: flex; justify-content: space-around; align-items: flex-start; margin-top: 10px;"> <div style="text-align: center;">  ONION WHP: 14 days MRL: 0.05mg/kg </div> <div style="text-align: center;">  OUTDOOR TOMATO WHP: 21 days MRL: 0.1mg/kg </div> <div style="text-align: center;">  POTATO WHP: 14 days MRL: 0.01(LOQ) mg/kg </div> <div style="text-align: center;">  SWEETCORN WHP: 5 days MRL: 0.1mg/kg </div> </div> <p style="font-size: x-small; margin-top: 5px;">WHP: Witholding Period MRL: Maximum Residue Limit</p>
<p style="font-weight: bold; font-size: small;">IMPORTANT:</p> <p style="font-size: x-small;">Use of this product on any crop other than those listed above is strictly prohibited. Use on any leafy vegetables other than lettuces, such as baby leaf or endive is NOT allowed.</p> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;">  BABY LEAF COS LETTUCE </div> <div style="text-align: center;">  ENDIVE </div> <div style="text-align: center;">  CHARD </div> </div>	<p style="font-weight: bold; font-size: small;">IMPORTANT:</p> <p style="font-size: x-small;">Methamidophos can ONLY be used on the vegetable crops listed above. Use on any other vegetable crop is strictly prohibited. Methamidophos CANNOT be used on brassica leafy vegetables such as chard, chicory, Chinese cabbage, endive, kale, and pak-choi.</p> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;">  CHARD </div> <div style="text-align: center;">  CHICORY </div> <div style="text-align: center;">  CHINESE CABBAGE </div> <div style="text-align: center;">  ENDIVE </div> <div style="text-align: center;">  KALE </div> <div style="text-align: center;">  PAK CHOI </div> </div>
<p style="font-weight: bold; font-size: small;">ACEPHATE & METHAMIDOPHOS</p> <p style="font-size: x-small;">See label directions for maximum application rate and frequencies for the target crop. For suggestions on what crop protection products you can use instead of these products – please refer to your Novachem manual or ask your local crop advisor.</p>	
<p style="font-weight: bold; font-size: small;">USE ON FRUITING VEGETABLES:</p> <p style="font-size: x-small;">These products must not be used on any fruiting vegetable other than outdoor tomatoes. Use on other fruiting vegetables such as capsicum is not allowed.</p> <div style="display: flex; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center;">  OUTDOOR TOMATOES </div> <div style="text-align: center;">  INDOOR TOMATOES </div> <div style="text-align: center;">  CAPSICUM </div> </div>	
<p style="font-weight: bold; font-size: small;">EXAMPLES OF LEAFY VEGETABLES THAT ACEPHATE AND METHAMIDOPHOS CANNOT BE USED ON INCLUDE:</p> <p style="font-size: x-small;">baby/mesclun salad leaf, mizuna, tatsoi, beet, brassica leafy vegetables, chard, chicory, Chinese cabbage, endive, herbs, kale, lambs lettuce, pak-choi, rocket, salad leaves, silverbeet, spinach, watercress. Use on fruiting vegetables other than outdoor tomatoes is not allowed.</p> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center; width: 15%;">  BABY LEAF COS LETTUCE </div> <div style="text-align: center; width: 15%;">  MESCLUN </div> <div style="text-align: center; width: 15%;">  MIZUNA </div> <div style="text-align: center; width: 15%;">  TATSOI </div> <div style="text-align: center; width: 15%;">  BEET </div> <div style="text-align: center; width: 15%;">  CHARD </div> <div style="text-align: center; width: 15%;">  CHICORY </div> <div style="text-align: center; width: 15%;">  CHINESE CABBAGE </div> <div style="text-align: center; width: 15%;">  ENDIVE </div> </div> <div style="display: flex; flex-wrap: wrap; justify-content: space-around; align-items: center; margin-top: 10px;"> <div style="text-align: center; width: 15%;">  KALE </div> <div style="text-align: center; width: 15%;">  LAMBS LETTUCE </div> <div style="text-align: center; width: 15%;">  PAK CHOI </div> <div style="text-align: center; width: 15%;">  ROCKET </div> <div style="text-align: center; width: 15%;">  SALAD LEAVES </div> <div style="text-align: center; width: 15%;">  SILVERBEET </div> <div style="text-align: center; width: 15%;">  SPINACH </div> <div style="text-align: center; width: 15%;">  WATERCRESS </div> </div>	
<p style="font-weight: bold; font-size: small;">IMPORTANT NOTES:</p> <p style="font-size: x-small;">Methamidophos is a breakdown product of acephate, and residues can occur following the use of acephate. To ensure compliance with MRLs, avoid the use of acephate and methamidophos in the same season on the same crops. Methamidophos will be phased out by 1st July 2023 and it will be an offense to use this product on any crop after this date. If in doubt – contact your Product Group Manager or HortNZ (04 472 3795) who will direct you to the correct person.</p>	





New Zealand Food Safety
Ministry for Primary Industries
Manatū Ahu Matua