Diazinon Risk Management and Stewardship Plan

and

Phase-Out Schedule

Updated for Extended Use of Diazinon 5G, Reg. No 12538.
- December 2014
Diazinon Risk Management Plan Summary
As of 31 December 2013 the Pest Management Regulatory Agency (PMRA) requires the implementation of the Diazinon Risk Management Plan (Re-evaluation Note, REV2013-01). The objective is to further minimize potential health and environmental risks associated with diazinon uses identified for phase-out. The plan outlines the mandatory risk mitigation measures to be implemented and specifies the diazinon phase-out schedule.

Health and Environmental Risks Associated with Diazinon
An overexposure to diazinon may occur by contact, ingestion and vapour action. Symptoms may include headaches, giddiness, blurred vision, nervousness, weakness, nausea, cramps, diarrhea, discomfort in the chest, sweating, miosis, tearing, salivation and other excessive respiratory tract secretion, vomiting, cyanosis, papilledema, uncontrollable muscle twitches, convulsions, coma, loss of reflexes and loss of sphincter control.

Diazinon released into the environment can be found in soil, surface water, air and rain. It volatilizes from moist surfaces and water, reaches surface water readily and may be a concern for groundwater contamination. Granular applications of diazinon pose a high risk to birds and wild mammals. Foliar applications of diazinon are a concern for pollinators, birds and small herbivorous wild mammals, aquatic invertebrates, amphibians, and fish.

Risk Mitigation Measures
These measures aim to further reduce health and environmental risks stemming from exposure to diazinon.

Further details on the mandatory Risk Mitigation Measures (personal protective equipment required for each use, restricted-entry intervals, and required buffer zones by application method and crop) can be found on the registrant’s webpage www.uap.ca under Diazinon Risk Management Plan Booklet, Risk Management Plan Table and on the labels. The link to the registrant webpage can be found on the decal on each unit of the product.

Mandatory posting signs to be placed around areas treated with diazinon are available at the point of purchase or can be obtained from the registrant directly.

Specific requirements pertaining to each particular product under the Diazinon Risk Management Plan can be found on corresponding product labels. In order to protect human and environmental health these directions must be followed by law. All product labels have been updated accordingly.

Diazinon Phase-out Schedule - Phase out dates for airblast, foliar and granular applications, by crop

<table>
<thead>
<tr>
<th>Last Date of Use</th>
<th>Crop</th>
</tr>
</thead>
<tbody>
<tr>
<td>31 December 2013</td>
<td>Apricot, peach, plum and prune</td>
</tr>
<tr>
<td>31 December 2016</td>
<td>Cherry, apple, blackberry, carrot, Christmas tree, cranberry, currant, gooseberry, loganberry, onion (bulb and green), parsnip, pear, radish, raspberry, rutabaga, strawberry, tobacco (greenhouse seedlings) and turnip</td>
</tr>
</tbody>
</table>
Changes to Current Application Practices

Implementation by December 31, 2013:

- Use of mist blower sprayers as an application method on cranberry and strawberry is prohibited where the use of field sprayers is considered to be an effective and feasible alternative.
- Use of hand-held sprayers as an application method on tree fruit is prohibited where the use of field sprayers is considered more effective. Spot applications using hand-held sprayers will still be permitted with a limit to a maximum of 500 m² per day.
- Use of chemigation is the preferred method of application for cranberries where the appropriate equipment/infrastructure exists. Exposure risk reductions are expected for applicators during chemigation, though risks to mixers/loaders are not likely to be affected.
- Use of automated fogging for greenhouse tobacco seedlings is required for widespread treatment areas exceeding 500 m² per day. Use of backpack/hand-held sprayers as a foliar drench application is prohibited except for localized spot treatment areas below 500 m².
- Updated buffer zones are required for airblast applications on stone fruit, apple and pear trees. Additional new buffer zones are also required for crops listed on the product label.

Implementation by December 31, 2014:

- Uses of granular formulation are permitted only on carrot, onion, parsnip, radish and turnip until August 31, 2015.
- Uses of granular formulation are prohibited on broccoli, Brussel sprouts, cabbage, cauliflower, corn, rutabaga, and tomato (broadcast application.)
- Use of liquid formulations that can be applied as a soil drench is permitted on carrot, parsnip and radish during the phase-out period until December 31, 2016.
# Diazinon Risk Management and Stewardship Plan – Phase-Out Schedule

<table>
<thead>
<tr>
<th>Registrant</th>
<th>Product Name</th>
<th>Implementation by December 31, 2013</th>
<th>Implementation by December 31, 2014</th>
<th>Implementation by December 31, 2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agrium Advanced Technologies RP Inc.</td>
<td>Pro Diazinon 50 EC, Registration Number 16518</td>
<td>Last date of use is December 31, 2013 for foliar applications on: Apricot, Peach, Plum, Prune</td>
<td></td>
<td>Last date of use is December 31, 2016 for foliar applications on: Cherry, Apple, Blackberry, Carrot, Christmas Tree, Cranberry, Currant, Gooseberry, Loganberry, Onion (bulb and green), Parsnip, Pear, Radish, Raspberry, Rutabaga, Strawberry, Turnip</td>
</tr>
</tbody>
</table>

**Revised Application Practices:**

- **Cranberry:**
  - Chemigation is the preferred application method where appropriate equipment/infrastructure exists.
  - Foliar/field sprayer will still be acceptable where chemigation application is not feasible.

- **Cranberry and strawberry:**
  - Application with mistblower sprayers is strictly prohibited.

- **Tree fruit:**
  - Application with hand-held sprayers exceeding 500 m² per day is strictly prohibited. Airblast sprayers are permitted for
applications above 500 m² per day.

Refer to product label.

Additional Risk Mitigation Measures:
Buffer Zones
Updated buffer zones are required for airblast applications on:
Apple trees
Christmas trees
Pear trees
Stone fruit

Additional/New buffer zones for all other crops are required.

Refer to product label.

Personal Protective Equipment (PPE)
Follow PPE requirements as per revised label.

Restricted-Entry Intervals (REI)
Follow required REIs as per revised label

| Interprovincial Cooperative Limited | Diazinon 50 EC Insecticide, Registration Number 27538 | Last date of use is December 31, 2013 for foliar applications on: Apricot Peach Plum Prune | Last date of use is December 31, 2016 for foliar applications on: Cherry Apple Blackberry |
**Revised Application Practices:**

Cranberry:
Chemigation is the preferred application method where appropriate equipment/infrastructure exists.

Foliar/field sprayer will still be acceptable where chemigation application is not feasible.

**Cranberry and strawberry:**
Application with mistblower sprayers is strictly **prohibited**.

Tree fruit:
Application with hand-held sprayers exceeding 500 m² per day is strictly **prohibited**. Airblast sprayers are permitted for applications above 500 m² per day.

Refer to product label.

**Additional Risk Mitigation Measures:**

Buffer Zones
Updated buffer zones are required for airblast applications on:
Apple trees
Pear trees

Carrot
Cranberry
Currant
Gooseberry
Loganberry
Onion (bulb and green)
Parsnip
Pear
Raspberry
Rutabaga
Strawberry
Turnip
| Makhteshim Agan of North America Inc. | Diazol 50 EC, Registration Number 15921 | Stone fruit  
Additional/New buffer zones for all other crops are required.  
Refer to product label.  
**Personal Protective Equipment (PPE)**  
Follow PPE requirements as per revised label.  
**Restricted-Entry Intervals (REI)**  
Follow required REIs as per revised label.  
**Revised Application Practices:**  
**Strawberry:**  
Application with mistblower sprayers is strictly **prohibited.**  
**Tree fruit:**  
Application with hand-held sprayers exceeding 500 m² per day is strictly **prohibited.** Airblast sprayers are permitted for applications above 500 m² per day.  
**Last date of use is December 31, 2013 for foliar applications on:**  
Apricot  
Peach  
Plum  
**Last date of use is December 31, 2016 for foliar applications on:**  
Cherry  
Apple  
Blackberry  
Loganberry  
Pear  
Raspberry  
Rutabaga  
Strawberry  
Turnip |
Refer to product label.

**Additional Risk Mitigation Measures:**

**Buffer Zones**
Updated buffer zones are required for airblast applications on:
- Apple trees
- Pear trees
- Stone fruit

Additional/New buffer zones for all other crops are required.

Refer to product label.

**Personal Protective Equipment (PPE)**
Follow PPE requirements as per revised label.

**Restricted-Entry Intervals (REI)**
Follow required REIs as per revised label.

| Loveland Products Canada Inc. | Diazinon 500 E, Registration Number 11889 | Last date of use is December 31, 2013 for foliar applications on: Apricot Peach Plum Prune | Revised Application Practices: Soil drench application permitted during phase out period until December 31, 2016 for: Carrots – Carrot rust fly Maggots | Last date of use is December 31, 2016 for foliar applications on: Cherry Apple Blackberry Carrot Christmas Tree |
### Practices:

**Cranberry:**
Chemigation is the preferred application method where appropriate equipment/infrastructure exists.

Foliar/field sprayer will still be acceptable where chemigation application is not feasible.

**Cranberry and strawberry:**
Application with mistblower sprayers is strictly prohibited.

**Tree fruit:**
Application with hand-held sprayers exceeding 500 m² per day is strictly prohibited. Airblast sprayers are permitted for applications above 500 m² per day.

Refer to product label.

### Additional Risk Mitigation Measures:

**Buffer Zones**
Updated buffer zones are required for airblast applications on:
- Apple trees
- Christmas trees
- Pear trees
- Stone fruit

**Parsnips – Carrot rust fly maggots**
**Radish – Root maggots**

Refer to product label.

**Cranberry**
**Currant**
**Gooseberry**
**Loganberry**
**Onion (bulb and green)**
**Parsnip**
**Pear**
**Radish**
**Raspberry**
**Rutabaga**
**Strawberry**
**Turnip**

Last date of use is December 31, 2016 for soil drench applications on:
- Carrots – Carrot rust fly maggots
- Parsnips – Carrot rust fly maggots
- Radish – Root maggots
| Diazinon 5G Insecticide, Registration Number 12538 | **Additional Risk Mitigation Measures:**  
Personal Protective Equipment (PPE)  
Follow PPE requirements as per revised label.  
Restricted-Entry Intervals (REI)  
Follow required REIs as per revised label. | **Last date of use is August 31, 2015 for:**  
Carrots – Carrot rust fly maggots  
Onion – Root maggots  
Parsnips – Carrot rust fly maggots  
Radish – Root maggots  
Turnip – Root Maggots  
**NOT permitted for use on:**  
Broccoli, Brussel sprouts, cabbage, cauliflower, corn, rutabaga, tomato (broadcast application) |  |
|---|---|---|---|
| Diazinon 50WSP Insecticide, Registration Number 29976 | **Revised Application**  
**Last date of use is December 31, 2013 for foliar applications on:**  
Apricot  
Peach  
Plum  
Prune | **Revised Application Practices:**  
Soil drench application permitted during phase-out period until December 31, 2016 for:  
Carrots – Carrot rust fly maggot | **Last date of use is December 31, 2016 for foliar applications on:**  
Cherry  
Apple  
Blackberry  
Carrot  
Cranberry |
### Practices:

**Cranberry:**
Chemigation is the preferred application method where appropriate equipment/infrastructure exists.

Foliar/field sprayer will still be acceptable where chemigation application is not feasible.

**Cranberry and strawberry:**
Application with mistblower prayers is strictly prohibited.

**Tree fruit:**
Application with hand-held sprayers exceeding 500 m² per day is strictly prohibited. Airblast sprayers are permitted for applications above 500 m² per day.

**Tobacco (seedlings):**
Automated fogging is required for widespread ant treatments for application areas exceeding 500 m² per day.

Refer to product label.

### Additional Risk Mitigation Measures:

**Buffer Zones**

<table>
<thead>
<tr>
<th>Practice Area</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parsnips – Carrot rust fly maggots</td>
<td></td>
</tr>
<tr>
<td>Radish – Root maggots</td>
<td></td>
</tr>
<tr>
<td>Refer to product label</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Practice Area</th>
<th>Treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currant</td>
<td></td>
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<tr>
<td>Gooseberry</td>
<td></td>
</tr>
<tr>
<td>Loganberry</td>
<td></td>
</tr>
<tr>
<td>Onion (bulb and green)</td>
<td></td>
</tr>
<tr>
<td>Parsnip</td>
<td></td>
</tr>
<tr>
<td>Pear</td>
<td></td>
</tr>
<tr>
<td>Raspberry</td>
<td></td>
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<tr>
<td>Rutabaga</td>
<td></td>
</tr>
<tr>
<td>Strawberry</td>
<td></td>
</tr>
<tr>
<td>Tobacco (greenhouse seedlings)</td>
<td></td>
</tr>
<tr>
<td>Turnip</td>
<td></td>
</tr>
</tbody>
</table>

Last date of use is December 31, 2016 for soil drench applications on:

- Carrots – Carrot rust fly maggots
- Parsnips – Carrot rust fly maggots
- Radish – Root maggots
| Updated buffer zones are required for airblast applications on:  
| Apple trees  
| Pear trees  
| Stone fruit  
| Additional/New buffer zones for all other crops are required.  
| Refer to product label.  
| Personal Protective Equipment (PPE)  
| Follow PPE requirements as per revised label.  
| Restricted-Entry Intervals (REI)  
| Follow required REIs as per revised label. |