Betanal® quattro

Net contents: 5 L, 15 L

Herbicide

Claim statement: For the control of broad-leaved weeds in fodder, sugar and red beets

Contains: 60 g/litre phenmedipham, 60 g/litre desmedipham, 60 g/litre ethofumesate and 200 g/litre metamitron in the form of a suspo-emulsion

Registered pursuant to the ACVM Act 1997, No P8851
See www.foodsafety.govt.nz for registration conditions.

Approved pursuant to the HSNO Act 1996, No HSR100882
See www.epa.govt.nz for approval conditions

DG Information

UN 3082
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,
N.O.S. (PHENMEDIPHAM, DESMEDIPHAM, ETHOFUMESATE, METAMITRON SOLUTION)
Packing Group III
CLASS 9
HAZCHEM CODE 3Z

IN A TRANSPORT EMERGENCY DIAL 111 POLICE OR FIRE BRIGADE
WARNING
KEEP OUT OF REACH OF CHILDREN

HSNO Classifications:

6.1D Harmful if inhaled.
6.9B May cause damage to organs through prolonged or repeated exposure
9.1B Toxic to aquatic life with long lasting effects
9.2A Very toxic to the soil environment
9.3C Harmful to terrestrial vertebrates

PRECAUTIONS:
Read label before use
Do not eat, drink or smoke while using this product.
Avoid breathing dust/mist/vapours/spray.
Remove protective clothing and wash hands and face thoroughly before meals and after work.
Avoid contact with the skin and eyes
Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area
Do not apply directly into or onto water

PERSONAL PROTECTION:
When handling, wear full protective clothing such as impervious gloves, respirator, waterproof hat, coat and trousers (worn outside rubber boots).

STORAGE: Store in original container tightly closed and in a locked dry, cool, well-ventilated area, away from foodstuffs.

SPILLS AND DISPOSAL: When dealing with spills wear personal protective clothing and equipment as described in the PERSONAL PROTECTION section.
Contain the spill by damming, recover spilt product by absorbing with sawdust or an inert absorbent material then transfer the recovered spilt material to a properly labelled drum. Deal with all spillages immediately. If contamination of drains, streams, watercourses, etc. is unavoidable, warn the local water authority.
Disposal: Dispose of this product only by using according to the label or at an approved landfill. Avoid contamination of any water supply with product or empty container.
Container Disposal: Triple rinse container and add residue to mixture. Take to an Agrecovery collection site.

FIRST AID:
If swallowed, do NOT induce vomiting. For advice, contact the National Poisons Centre 0800 POISON (0800 764 766) or a doctor immediately. If skin contact occurs, remove contaminated clothing and flush skin with running water. If splashed in eyes, wash out immediately with water, if irritation persists get medical advice. If inhaled, move the victim to fresh air immediately.
**BEWARE:** APPLY THIS PRODUCT CAREFULLY. SPRAY DRIFT MAY CAUSE SERIOUS DAMAGE TO OTHER DESIRABLE PLANTS.

*Betanal quattro* is a post-emergence selective herbicide for broad-leaved weed control in fodder, sugar and red beets.

**DIRECTIONS FOR USE:**

Use Betanal quattro at a rate of 2-5 L/ha. Apply a maximum of 10 litres/ha of Betanal quattro per season. **Do not exceed 3 L/ha (red beet) and 5 L/ha (fodder, sugar beets) of Betanal quattro in a single application.**

As weeds appear use as below at the appropriate rate for the crop stage and weed size present. For larger and denser weeds sequential applications 7-14 days apart may be required.

Betanal quattro is best applied when the crop reaches the 2 true leaf stage. Some temporary damage may occur to plants that have yet to reach that stage. A pre-emergence application of Nortron will improve control.

**RESISTANCE MANAGEMENT**

Metamitron is a triazinone herbicide, while phenmedipham and desmedipham are phenylcarbamate herbicides. These have the inhibition of photosynthesis at photosystem II mode of action. Ethofumesate is a benzofuran herbicide with the non ACCCase inhibition of lipid synthesis mode of action. Despite having two modes of action in Betanal quattro, certain individual biotypes may become resistant. To minimise the risk of these weeds dominating the population, use strictly in accordance with the label directions and use herbicides from alternative mode of action groups at other times.

**RECOMMENDATION:**

<table>
<thead>
<tr>
<th>Crop</th>
<th>Growth Stage</th>
<th>Rate</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fodder beet</td>
<td>For use after emergence of the crop up to the 2</td>
<td>2 L/ha</td>
<td>Apply to actively growing seedling weeds at the cotyledon to 1&lt;sup&gt;st&lt;/sup&gt; true leaf stage.</td>
</tr>
<tr>
<td>Red beet</td>
<td>true leaf growth stage</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar beet</td>
<td>For use after the crop has 2 true leaves fully developed</td>
<td>3 L/ha</td>
<td>Apply to actively growing weeds that have reached the 2-4 true leaf stage</td>
</tr>
<tr>
<td>Red beet</td>
<td>For use after the crop has 2 true leaves fully developed</td>
<td>3 - 5 L/ha</td>
<td>Apply to actively growing weeds that have reached the 2-4 true leaf stage</td>
</tr>
<tr>
<td>Fodder beet</td>
<td>For use after the crop has 2 true leaves fully developed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sugar beet</td>
<td>For use after the crop has 2 true leaves fully developed</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Shake well before use. Do not apply in more than 300 litres of water per hectare. Do not add any surfactants with Betanal quattro unless experience has shown them to be crop safe.

Adequate soil moisture both before and after application will improve control. Avoid application onto crops stressed due to drought, nutrient deficiency or other factors.
following a frost as crop damage may occur. Ensure weeds are actively growing at time of
application, otherwise poor weed control may result.

Susceptible weeds include:
Annual poa, black nightshade, clammy goosefoot, henbit, fathen, field pansy, fumitory,
groundsel, redroot, sharp buttercup, shepherd’s purse, spurrey, willow weed.

Mixing: Ensure spray equipment is thoroughly cleaned before use. Add the required
amount of Betanal quattro to a partly filled spray tank with the agitation system operating.
Add the remaining water and any tank mixture partners. Maintain agitation until spraying is
complete. Flush equipment with clean water after use.

Compatibility: Betanal quattro is compatible with Lorsban 50EC, Pyramin DF and Versatill
Powerflo, otherwise apply Betanal quattro alone unless experience has shown the mix to
be safe. Avoid tank mixing if the crop is stressed or damaged by wind, hail etc.

It is an offence for users of this product to cause residues exceeding the relevant
MRL in the Food Notice: Maximum Residue Levels for Agricultural Compounds.

WITHHOLDING PERIOD:
Fodder Beet/Sugar Beet: Do not graze stock on treated areas or feed stock with treated
crops for 56 days after application

Red Beet – Do not harvest for 50 days after application

CONDITIONS OF SUPPLY: READ THESE CONDITIONS OF SUPPLY BEFORE
BUYING AND USING. IF THESE CONDITIONS ARE UNACCEPTABLE,
RETURN AT ONCE UNOPENED.
To the extent permitted by law Bayer does not accept any liability or responsibility
whatsoever for any loss, damage or injury whether direct, indirect or consequential
howsoever arising in connection with these goods, including without limitation their storage,
application, handling or use. Bayer does not make any warranties (express or implied)
with respect to fitness for purpose, merchantable quality or any other matter.
To the extent only that Bayer is prevented by law from contracting out of the Consumer
Guarantees Act, then these conditions apply subject to that Act. The Act shall not apply
where these goods are acquired for business purposes.

Date of Expiry:
Batch No:

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