

Impulse®

Contains: 500 g/litre spiroxamine in the form of emulsifiable concentrate

Also contains up to 15% monoethanolamine dodecylbenzenesulfonate (corrosive to the eye).

Net Contents: 2.5/5/10 litres

Fungicide

A systemic fungicide for the control of powdery mildew in grapes, barley and wheat.

Registered pursuant to the ACVM Act 1997, No P7419
See www.foodsafety.govt.nz for registration conditions.

Approved pursuant to the HSNO Act 1996, No HSR007652
See www.epa.govt.nz for approval conditions

DG Information



UN Number e.g. UN 3082
PROPER SHIPPING NAME
PACKING GROUP III
CLASS 9
HAZCHEM CODE

IN A TRANSPORT EMERGENCY DIAL 111 POLICE OR FIRE BRIGADE



DANGER
KEEP OUT OF REACH OF CHILDREN
HSNO Classifications:



Harmful if in contact with skin or if swallowed or inhaled. Causes skin irritation. Causes serious eye damage. May cause allergic skin reaction. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic organisms with long-lasting effects. Hazardous to terrestrial vertebrates.

PRECAUTIONS:

Read label before use.

Do not eat, drink or smoke while using this product.

Wash face, hands and any exposed skin thoroughly after handling.

Avoid skin contact or inhalation. Avoid contact with the 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:

Application: gloves; long-sleeved shirt; long trousers; sturdy footwear; head protection for high crops; face shield

Mixing/Loading: gloves; long-sleeved shirt; long trousers; sturdy footwear; rubber apron; face shield

Re-entry: long-sleeved shirt; long trousers; sturdy footwear

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

SPILLS: 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: Call contact the National Poisons Centre 0800 POISON (0800 764 76 /doctor/physician if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Specific treatment (see supplemental first aid instructions on this label).

If skin irritation occurs: Get medical advice/ attention

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

If skin irritation or rash occurs: Get medical advice/ attention

IMPULSE is a systemic fungicide with protective, curative and eradicated activity for use on powdery mildew in grapes, barley and wheat. It is a member of the morpholine group of fungicides of the new chemical class spiroketalamines.

RESISTANCE MANAGEMENT

Group	5	Fungicide
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Resistance to this fungicide could develop in some disease situations from repeated use. To minimise this risk, use strictly in accordance with the label instructions.

In grapes do not apply more than two applications per season.

In cereals do not apply more than two applications per season.

DIRECTIONS FOR USE:

Mixing:

Half fill the spray tank with water. Then add the required amount of **Impulse** with agitator going and top up the tank with water. Agitate thoroughly prior to and during spraying.

RECOMMENDATIONS:

The dilution rate expressed for grapes is for high volume spraying to the point of run-off. If concentrate spraying, adjust the dilution rate accordingly.

Crop	Disease	Rate	Remarks
Grapes	Powdery mildew	Dilute Spraying 60 mL/100L	<p>Rate is for high volume dilute spraying to the point of run off. For concentrate spraying, adjust the rates accordingly, ensuring the same total amount of product is applied by either dilute or concentrate spraying (see example below).</p> <p>Make no more than 2 applications per season Under low to moderate disease pressure make the first application in the period from pre flowering up to the end of capfall. Under high disease pressure make the first application at pre flower. Ensure a minimum application interval of 28 days.</p> <p>Monitor the crop to see if a second application of Impulse is necessary. Apply as part of a robust season long program using alternative chemistry.</p> <p>Do not apply Impulse after pre-bunch closure</p> <p>EXAMPLE ONLY</p> <ol style="list-style-type: none"> 1. Dilute spray volume as determined above: For example, 1000 L/ha 2. Your chosen concentrate spray volume: For example 400 L/ha 3. The concentration factor in this example is 2.5 (i.e. $1000 \text{ L} \div 400 \text{ L}$)



			= 2.5) 4. If the dilute label rate is 60 mL/100 L, then the concentrate rate becomes 2.5 x 60, that is, 150 mL/100 L of concentrate spray.
Barley, Wheat	Powdery mildew	1.2 litres/ha	Apply on first appearance of disease. If infection reoccurs a follow up application may be required, no later than GS59.



[Signature]
26/07/2021

DILUTE AND CONCENTRATE SPRAYING

Dilute spraying

- Use a sprayer designed to apply high spray volumes, up to the point of run-off and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy. Apply sufficient water to cover the crop to the point of run-off. Avoid excessive run-off.
- The required spray volume may be determined by applying different test volumes, using different settings on the sprayer, or from industry guidelines or expert advice.
- Add the amount of product specified in the Direction for Use table for each 100 L of water. Spray to the point of run-off.
- The required dilute spray volume will change and the sprayer set up and operation may also need to be changed, as the crop grows.

Concentrate spraying

- Use a sprayer designed and set up for concentrate spraying (that is a sprayer which applies spray volumes less than those required to reach the point of run-off) and matched to the crop being sprayed.
- Set up and operate the sprayer to achieve even coverage throughout the crop canopy using your chosen spray volume.
- Determine an appropriate dilute spray volume (See Dilute Spraying above) for the crop canopy. This is needed to calculate the concentrate mixing rate.
- The chosen spray volume, amount of product per 100 L of water, and the sprayer set up and operation may need to be changed as the crop grows.
- For further information on concentrate spraying users are advised to consult relevant industry guidelines and follow industry best practice.

The EPA have applied maximum application rates for Impulse

- **For grapes the maximum application rate is 600 mL product/ha (equivalent to 300 g ai/ha) with a maximum of two treatments per season and a minimum 10 day interval**

- **For cereals the maximum application rate is 1.2L/ha (equivalent to 600 g ai/ha) with a maximum of two treatments per season and a minimum 28 day interval**

A handwritten signature in blue ink, appearing to be "David Farrer".

26/07/2021

COMPATIBILITY:

Impulse is compatible with commonly-used insecticides and fungicides. Do not use with fluazinam and alkaline materials.

It is an offence to use this product on animals.

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

WITHHOLDING PERIOD:

Barley, wheat (grain).....56 days

Barley, wheat (forage)..... 42 days

Grapes.....56 days

Impulse must not be applied onto or into water.

A restriction has been placed on the application method for Impulse. It may be applied by ground-based methods only.

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 Manufacture:

Batch No.

Impulse® is a registered trademark of the Bayer Group

Registered to:

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New Zealand

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EMERGENCY RESPONSE SERVICE (24 hrs) 0800 734 607



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