# **WARNING**

KEEP OUT OF REACH OF CHILDREN
READ LABEL COMPLETELY BEFORE OPENING OR USING

# Sharpen®

A broadleaf herbicide for use pre-emergence in maize and sweet corn crops, pre-plant burn down in seed bed preparation and conservation tillage, in apple and pear orchards, and in non-agricultural situations.

Contains 700 g/kg saflufenacil in the form of a water dispersible granule.

150g





Registered to and distributed by: BASF New Zealand Limited P.O. Box 407, Auckland 1140

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# Hazard Classification:

6.1E, 6.8B, 6.9A, 9.1A



### WARNING

HARMFUL. May be harmful if swallowed, inhaled or absorbed by the skin. May cause reproductive/developmental damage through repeated oral exposure. TOXIC. May cause organ damage including hepatotoxicity through repeated oral exposure. VERY TOXIC TO AQUATIC ORGANISMS. May cause long-term adverse effects in the aquatic environment. Drift and runoff from treated areas may be hazardous to aquatic plants in adjacent aquatic sites.

# **PRECAUTIONS**

HANDLING: Do NOT handle until all safety precautions have been read and understood. This product must be under the personal control of an APPROVED HANDLER when applied in a wide dispersive manner or used by a commercial contractor.

STORAGE: Store in original container, tightly closed in a dry, cool, well-ventilated place away from food and animal feeds. Protect against moisture and from direct sunlight. Stores containing 100 kg or more of this product require emergency response plans and secondary containment systems and are subject to signage.

SPILLAGE: Prevent further spillage and product from entering waterways. Wear overalls, gloves, footwear and goggles. Sweep and shovel up spill and place in sealable container labelled for disposal. Avoid dust formation. Wash affected area with water and detergent. Absorb and collect washings and place in the same sealable container as the spilled material. Dispose of the waste safely in suitable landfill.

PERSONAL PROTECTION: When mixing or applying, wear overalls buttoned to the neck and wrist, suitable footwear, a washable hat, suitable chemical resistant gloves, and safety goggles or face shield.

GENERAL SAFETY AND HYGIENE MEASURES: Avoid contact with skin, eyes and clothing. Avoid inhalation of spray mist. Do NOT eat, drink or smoke while using this product. Remove protective clothing and wash hands and exposed skin thoroughly with soap and water before meals and after work. Wash protective clothing immediately after use. Store work clothing separately.

USE: Apply by ground based methods only. Do NOT apply onto or into water. Apply with well-maintained and accurately calibrated equipment. Prevent spray drift onto other crops and non-target plants outside of the target area or severe damage may result. Clean out application equipment thoroughly after use. Do NOT contaminate water when disposing of equipment wash waters. Wear personal protective equipment if re-entry work is required within 24 hours of application where this product has been applied at 30 g/ha or greater. Public access is not permitted during this period. RECORD KEEPING: Records of use must be kept if 3 kg or more of this product is applied in a place where it is likely to enter air or water and leave the place.

NOTE: Storage, application and record keeping must be as described in the current version of the New Zealand Standard for the Management of Agrichemicals NZS8409.

DISPOSAL: Container: Ensure container is completely empty. Triple rinse container and add rinsate to the spray tank. Recycle the rinsed container through Agrecovery (0800 247 326, www.agrecovery.co.nz). Product: Dispose of this product only by using according to the label or at an approved landfill. Do NOT burn product. Do NOT contaminate surface water with chemical or empty container. Do NOT reuse this container for any other purpose.

### **FIRST AID**

If exposed or concerned get medical advice/attention. IF SWALLOWED: Do NOT induce vomiting. Rinse mouth. For advice contact the National Poisons Centre 0800 POISONS (0800 764 766) or a doctor. Have product container or label at hand. IF ON SKIN OR HAIR: Remove contaminated clothing and flush skin and hair with running water. Do NOT scrub the skin. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention. IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.

# **CONDITIONS OF SUPPLY**

Read conditions of supply before buying and using. If these conditions are unacceptable, return at once unopened. All goods supplied by BASF New Zealand Limited are of a high grade and conform to the chemical description of the label. However, to the extent permitted by law, neither BASF New Zealand Limited nor any of its Distributors accept any liability or responsibility whatsoever for any loss, damage or injury whether direct, indirect or consequential, howsoever arising, in connection with the supply of those goods including without limitation their storage, application, handling or use. BASF New Zealand Limited, nor any of its Distributors, make no warranties of any kind, express or implied, with respect to fitness for purpose (including crop injury, ineffectiveness or any other unintended consequence), merchantable quality or any other matter with respect to these goods. When you are a consumer as defined in the Consumer Guarantees Act 1993 (the "Act") these conditions will be subject to the provisions of the Act. However the Act will not apply to goods supplied to you for business purposes.

Approved pursuant to the HSNO Act 1996, Code HSR100571. See www.epa.govt.nz for approval controls.

Registered pursuant to the ACVM Act 1997, No. P8391. See www.foodsafety.govt.nz for registration conditions.

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EMERGENCY PHONELINK 24 Hour Advice in an Emergency Only

0800 944 955

# **GENERAL INFORMATION**

SHARPEN is a novel herbicide for use in tank mix with knockdown herbicides such as glyphosate to enhance the speed of knockdown and to broaden the weed spectrum of the knockdown partner. Symptoms of herbicidal activity are visible soon after application with death ensuing in a few days. SHARPEN is systemic but thorough coverage of the target weed is necessary for best results. Best results are obtained from application to small, actively growing weeds. Conditions conducive to maximum photosynthesis (moist, warm, bright sunshine) are ideal. SHARPEN also assists in the rapid desiccation and reduction in palatability to stock of poisonous weeds such as ragwort.

**Symptoms:** SHARPEN is rapidly absorbed through the roots and foliage of plants. Within a few hours following application, the foliage of susceptible weeds shows signs of desiccation, and in subsequent days necrosis and death of the plant. Extremes in environmental conditions e.g. temperature and moisture, soil conditions and cultural practices may affect the activity of SHARPEN. Under warm moist conditions, herbicide symptoms may be accelerated. Under very dry conditions, the expression of herbicidal symptoms is delayed, and weeds hardened off by drought are less susceptible to SHARPEN.

**Weeds controlled:** When used in tank mixture with glyphosate SHARPEN increases the speed of knockdown of grasses such as annual poa and ryegrass; and broadleaved weeds such as dandelion, docks, clover, mallows, plantains and tall willow herb. When used in tank mixture with a residual grass herbicide in maize and sweet corn crops SHARPEN will control fathen, black nightshade, broadleaf docks (seedling), willow weed and wireweed, and will suppress pink shamrock.

**Resistance Management:** SHARPEN contains a herbicide from the PPO (protoporphyrinogen-IX-oxidase) group, HRAC GROUP EHERBICIDE. Resistance to SHARPEN could develop from excessive use. To minimise this risk use strictly in accordance with label instructions. Frequency of application is to be strictly in accordance with the Directions for Use. SHARPEN should be used in a programme which incorporates effective herbicide products with alternate modes of action.

### **DIRECTIONS FOR USE**

Beware: Apply this product carefully. Spray drift may cause serious damage to other desirable plants.

# Restraints:

- Do NOT use on any crop not specified on the label.
- Except on planted maize and sweet corn crops, do NOT apply within one day of planting or if rain is expected immediately after planting.
- Cultivars of popcorn may be sensitive to SHARPEN. Check with your local supplier.

Crop	Rate	Remarks	
Apple and pear orchards	25 g/ha	Apply under trees that have mature (lignified) bark. Always apply SHARPEN in mixture with an approved glyphosate formulation at the manufacturer's recommended rates. Use no more than 3 times per season under trees, ensuring at least 21 days between applications. Follow precautions for drift on the glyphosate label. Avoid contact to foliage and other green plant tissue.  Do NOT use under any other perennial tree or vine crop.	
Pre-plant burn down in seed bed preparation and conservation tillage or pasture renovation	25 g/ha	Apply as a pre-plant burn down prior to sowing new crop or pasture. Always apply SHARPEN in mixture with an approved glyphosate formulation at the manufacturer's recommended rates. Use no more than 2 times prior to planting, ensuring at least 21 days between applications.  Refer to the Crop Plant Back & Rotational Recommendations table for crop specific recommendations.	

Crop	Rate	Remarks
General weed control in industrial and non-agricultural areas e.g. wasteland, yards and fence lines	25 g/ha	Always apply SHARPEN in mixture with an approved glyphosate formulation at the manufacturer's recommended rates.
Maize and sweet corn	150 g/ha	Apply once to maize and sweet corn crops as a pre-emergence treatment as soon as practical after planting and before the crop or weeds emerge. Always apply SHARPEN in mixture with acetochlor, S-metolachlor or FRONTIER®-P at the manufacturer's recommended rates.

Adjuvants: SHARPEN should be used with a suitable adjuvant such as an esterified canola oil (e.g. Hasten<sup>™</sup>) except when used pre-emergence in maize and sweet corn.

Compatibility: SHARPEN is compatible with most commonly used herbicides, adjuvants and insecticides. Follow the precautions and the directions for use on the partner product label.

## Mixing and Application

Half-fill the spray tank with clean water and start the agitation. Add the required amount of SHARPEN directly into the partly filled spray tank with agitation operating. Rinse any empty containers thoroughly and add rinsate to the spray tank. Add partner herbicides and adjuvant. Complete filling and maintain agitation until spraying is completed. SHARPEN can be applied through conventional spray equipment used for glyphosate application. Care must be taken to avoid drift. Ensure the water rate is sufficient for complete coverage of target weeds.

**Drift Management:** As SHARPEN is used with glyphosate, application should be undertaken with minimization of drift in mind. Avoid spray solution contacting any desirable plants. Do NOT apply when conditions favour drift e.g. high winds or incorrect pressure and nozzle setup.

Rainfall & Irrigation: SHARPEN is rainfast once dried on the treated weed growth. Do NOT apply if rainfall is expected within 1 hour of application, except when using pre-emergence in maize and sweet corn.

Tank Cleaning: To avoid injury to subsequent sprayed crops, thoroughly remove all traces of chemical from mixing and spraying equipment. Flush equipment thoroughly with water after use.

# Withholding Periods:

It is an offence for users of this product to cause residues exceeding the relevant MRL in the New Zealand (Maximum Residue Limits of Agricultural Compounds) Food Standards.

Maize and sweet corn

**Pasture** 

Apple & Pear Orchards Do NOT graze treated area within 28 days of application. Do NOT graze or cut for feed within 28 days of application.

> Grazing or cultivating should be delayed 2 days after treatment of annual weeds and 3 days if perennial weeds are present to allow sufficient uptake of glyphosate.

Do NOT allow stock to graze until 2 days after treatment.

A 14 day Slaughter Withholding Period must be observed for stock after being removed from SHARPEN treated pasture.

**Crop Plant Back & Rotational Recommendations:** 

SHARPEN, when used as directed, does not provide long term residual activity. Refer to the table below for the application-to-sow intervals. For crops not specified, such as tomato and fodder beet, a soil sample must be checked for suitability for planting by means of a germination test prior to full planting. If in doubt contact your spray representative. Check the label of any partner mixed with SHARPEN to determine any other plant back periods or restrictions on use.

Application situation	1 day	1 week	3 weeks	4 weeks
Bare soil, stale seedbed (existing canopy ground cover <80%)	Cereals, grasses, maize, sweet corn, peas, squash		Other legumes	Forage brassica, carrot, onion
Normal pasture canopy, pasture renewal (existing canopy ground cover >80%)		Forage brassica, carrot, onion, potato and other legumes		

<sup>™</sup> Trademark used under licence