# **SHRAPNEL**

## **MAPP 18234**

A selective herbicide for post-emergence use on listed annual broad-leaved weeds in sugar beet, fodder beet, red beet, mangels and strawberries.

A suspension concentrate formulation containing 320 g/l phenmedipham.

Also contains alcohol C13-iso, ethoxylated. Contains 1,2-benzisothiazolin-3-one. May cause an allergic reaction.







Scan for Safety Data Sheet or use weblink: https://bit.ly/363hhAk



## Danger

Causes serious eye damage. Very toxic to aquatic life with long lasting effects. Contains 1,2-benzisothiazolin-3-one. May cause an allergic reaction.

Keep out of reach of children.
Wear protective gloves/
eye protection/face protection.
IF IN EYES: Rinse cautiously
with water for several minutes.
Remove contact lenses, if present
and easy to do. Continue rinsing.
Immediately call a POISON
CENTRE or doctor/physician.

Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for empty, clean containers which can be disposed of as non-hazardous waste

To avoid risks to human health and the environment, comply with the instructions for use.

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## **SHRAPNEL®**

MAPP 18234
PROTECT FROM FROST
SHAKE WELL BEFORE USE
DIRECTIONS FOR USE:

full instructions in this leaflet. Batch No.: see packaging

#### Adama Agricultural Solutions UK Ltd

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For advice on medical emergencies, fires or major spills telephone the National Chemical Emergency Centre on 01865 407333

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

## **SAFETY PRECAUTIONS**

#### **Operator Protection**

Engineering control of operator exposure must be used where reasonably practicable in addition to the following personal protective equipment.

WEAR SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

WEAR SUITABLE PROTECTIVE GLOVES when applying by hand-held equipment.

However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection. WASH CONCENTRATE from skin or eyes immediately. WASH HANDS AND EXPOSED SKIN before eating, drinking or smoking, and after work.

#### **Environmental Protection**

Do not contaminate water with product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.

#### Storage and Disposal

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

WASH OUT CONTAINER THOROUGHLY empty washings into spray tank and dispose of safely. DO NOT RE-USE CONTAINER for any purpose.



### IMPORTANT INFORMATION

FOR PROFESSIONAL USE ONLY AS AN AGRICULTURAL/HORTICULTURAL HERBICIDE

Crops	Maximum individual dose (L product/ha)	Maximum total dose (L product/ha/year)	Latest time of application
Sugar beet, fodder beet, red beet and mangels	3.0	3.0	Before the beet leaves meet between the rows
Strawberries	3.0	3.0	Before flowering

READ THE LABEL BEFORE USE. USING THIS PRODUCT IN A MANNER THAT IS INCONSISTENT WITH THE LABEL MAY BE AN OFFENCE. FOLLOW THE CODE OF PRACTICE FOR USING PLANT PROTECTION PRODUCTS.

#### This leaflet is part of the approved label.

For advice on medical emergencies, fires or major spills telephone the National Chemical Emergency Centre on 01865 407333

SHRAPNEL is a selective herbicide for post-emergence use on listed annual broad-leaved weeds in sugar beet, fodder beet, red beet, mangels and strawberries.

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Very toxic to aquatic life with long lasting effects.

Contains 1,2-benzisothiazolin-3-one. May cause an allergic reaction.

Keep out of reach of children.

Wear protective gloves/eye protection/face protection.

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

Immediately call a POISON CENTRE or doctor/physician.

Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for empty, clean containers which can be disposed of as non-hazardous waste.

To avoid risks to human health and the environment, comply with the instructions for use.

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## SAFETY PRECAUTIONS

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WEAR SUITABLE PROTECTIVE GLOVES when applying by hand-held equipment. However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

WASH CONCENTRATE from skin or eyes immediately. WASH HANDS AND EXPOSED SKIN before eating, drinking or smoking, and after work. DO NOT BREATHE SPRAY.

#### **Environmental Protection**

Do not contaminate water with product or its container. Do not clean application equipment near surface water. Avoid contamination via drains from farmyards and roads.

#### Storage and Disposal

KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

WASH OUT CONTAINER THOROUGHLY empty washings into spray tank and dispose of safely. DO NOT RE-USE CONTAINER for any purpose.

#### DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

#### RESTRICTIONS

Do not apply to crops suffering from stress due to lime or trace element deficiency, or drought, frost or pest damage.

Do not apply to crops suffering from damage due to an earlier herbicide treatment.

Do not apply where rolling or harrowing has been or will be carried out within 7 days.

Do not apply when temperatures exceed 21°C or in strong sunlight. If treatment is essential, delay spraying until the temperature falls and light intensity reduces.

Do not apply when rain is imminent.

Consult processors before using on crops grown for processing.

Do not apply to strawberries grown under polythene tunnels or cloches.

Avoid overlaps.

Crops should not be re-entered until spray residues are dry.

#### **CROP SAFETY**

All varieties of sugar beet, fodder beet, red beet and mangels may be safely treated, so long as the crop is not suffering any stress.

See 'Crop Specific Information' section for further details.

#### RESISTANCE

This product contains phenmedipham, a Group 5 herbicide, based on the mode of action classification system of the Herbicide Resistance Action Committee. Repeated use of herbicides with the same mode of action can increase the risk of strains of weeds developing resistance to these compounds, leading to poor control. In order to minimise the risk, a strategy for preventing and managing such resistance should be adopted.

Growers are advised to apply products containing herbicides with different modes of actionin sequence or tank-mix where two or more components are active against the target weeds.

Use the recommended rate of SHRAPNEL® and the correct application timing for the hardest to control weed species present in the field.

The above should be used in conjunction with effective cropping rotation and cultivation techniques e.g. stale seedbed, cultivation and use of non-selective herbicide prior to drilling.

Further guidance on weed resistance management is available from the Herbicide Resistance Action Committee (HRAC) and Weed Resistance Action Group (WRAG). Follow WRAG Guidelines.

#### WEED CONTROL

SHRAPNEL is a contact herbicide absorbed by the leaves of weeds. An even application that wets all weeds with a MEDIUM spray under the right weather conditions and at the correct stage of weed growth is necessary to give good control of susceptible weeds.

As SHRAPNEL is only recommended post-emergence it is advised to use SHRAPNEL as part of a weed control programme following a pre-emergence herbicide. Weeds should be actively growing at the time of application. Susceptible weeds will show leaf discoloration and die within 3 to 5 days if growing conditions are good. Less susceptible weeds will take longer to die.

SHRAPNEL should be applied before susceptible weeds are beyond their recommended timing of control.

	Stage of Development		
	Cotyledons	2 true leaves	4 true leaves
Black-bindweed	R	R	R
Chickweed, Common	S	S	S
Fat-hen	S	S	MS
Groundsel	MS	MS	-
Orache, Common	MR	MR	-
Pansy, Field	MR	MR	MR
Poppy, Common	MR	MR	-

SHRAPNEL will not control perennial broad-leaved weeds, or grass weeds.

- S = Susceptible, complete or near complete kill.
- MS = Moderately susceptible, effective suppression, with or without mortality.
- MR = Moderately resistant, temporary suppression, the duration and degree depending on the vigour of the crop and weather.
- R = Resistant, no useful effect.

#### Tank-mix

For improved control of less susceptible weeds it is advised to apply SHRAPNEL in mixture with authorised adjuvant Phase II at 1.0 L/ha.

#### **CROP SPECIFIC INFORMATION**

Sugar beet, fodder beet, red beet and mangels

All varieties of sugar beet, fodder beet, red beet and mangels may be treated.

SHRAPNEL can be applied alone post-emergence of the crop and weed, as a conventional overall application. Apply once the crop has fully expanded cotyledons. Avoid overlapping spray swaths.

#### Strawberries

All varieties of strawberries may be treated.

Only apply as a conventional overall application to strawberries (not as a band application). Apply at any time except from the beginning of flowering to picking. Some slight chlorosis may appear on the leaves which will be quickly outgrown with no effect on fruit.

#### OVERALL AND BAND APPLICATION

#### Rate of use: 3.0 L/ha of SHRAPNEL

The following doses apply to OVERALL AND BAND APPLICATION. For band application, the doses relate to the area of the sprayed band. The area of field treated by these doses depends on the row spacing and the width of the band.

#### APPLICATION

Volume: 200 – 240 litres water/hectare

## Spray Quality – Overall Application

SHRAPNEL should be applied as a MEDIUM quality spray (BCPC definition). Do NOT use a coarse quality spray such as produced by low pressure of 'reduced-drift' nozzles, as this may give poor weed control.

#### Spray Quality - Band Application

Flat fan nozzles, including Evenspray nozzles, with a fan angle of 80° and having an output of 0.4 litres per minute at 3 bar pressure are particularly suitable for application to an 18 cm band at 240 litres/hectare.

Apply the recommended rate and volume of SHRAPNEL per actual hectare band sprayed, NOT per hectare of crop.

#### LOW DOSE PROGRAMME-strawberries only

SHRAPNEL can be used in a repeat low dose programme of sprays starting when the weeds reach the cotyledon stage.

Rate of use: 1.5 L/ha

Volume: 200-300 litres water per hectare

## **Timing**

Apply as soon as the largest weeds have reached the two leaf stage. Apply at intervals of 5-7 days.

#### Succeeding crops

Beet crops may be sown at any time following the use of SHRAPNEL. Three months must elapse before any other crop is sown, and mould-board ploughing to a depth of 15 cm must be carried out first.

#### MIXING AND APPLICATION

Half-fill the spray tank with clean water. Add the required amount of SHRAPNEL and begin agitation. Add the remaining volume of water. Continue agitation during spraying.

Ensure that all spraying equipment is thoroughly washed out immediately after use with water and a recognized tank cleaner. Traces of SHRAPNEL left in the sprayer can cause harm to susceptible crops sprayed later.

#### DISCLAIMER/CONDITIONS OF SUPPLY

The specified properties of our products and the mode of application stated on this label have been established on the basis of research and experience. Products conform to specification at the time of delivery but, as we exercise no control over their subsequent storage. handling, mixing or use or the weather conditions before, during and after application, all of which may affect the performance of the products, no responsibility or liability will be accepted by us or our re-sellers for any failure in performance, damage or injury to person or property whatsoever arising from the storage, handling, application or use of the products. These conditions cannot be varied by our staff or agents whether or not they supervise or assist in or make recommendations concerning the use of such products. We recommend you contact your dealer to request advice on the suitability of this product for any new and/or unusual growing methods or for new varieties not listed on this label.

#### Marketed by

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