

Seismic

Contains 70% w/w METAMITRON in a water dispersible granule.

A contact and residual herbicide for the control of a wide range of weeds pre-emergence or post-emergence in sugar beet, fodder beet, mangels and red beet.

Copyright © Barclay Chemicals (R&D) Limited, 2004

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

This product is approved under the Control of Pesticides Regulations 1986.

MAY CAUSE SENSITISATION
BY SKIN CONTACT

RISK OF SERIOUS DAMAGE
TO EYES

VERY TOXIC TO AQUATIC ORGANISMS, MAY CAUSE LONG TERM ADVERSE EFFECTS IN THE AQUATIC ENVIRONMENT

STATUTORY CONDITIONS RELATING TO USE
FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL HERBICIDE

Crops: sugar beet, fodder beet, mangels and red beet

Maximum individual dose: 5 kg product per ha

Maximum total dose: 15 kg product per ha per crop

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

see PRECAUTIONS marked*

However, engineering controls may replace personal protective equipment if a COSHH assessment shows that they provide an equal or higher standard of protection.

READ ALL PRECAUTIONS BEFORE USE

MAPP 11377

PRECAUTIONS

* WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS), SUITABLE PROTECTIVE GLOVES AND FACE PROTECTION (FACESHIELD) when handling the concentrate.

* WEAR SUITABLE FACE PROTECTION (FACESHIELD) when applying by hand-held sprayers.

WHEN USING DO NOT EAT, DRINK OR SMOKE.

WASH HANDS AND EXPOSED SKIN before meals and after work.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS.

KEEP OUT OF REACH OF CHILDREN.

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

DO NOT CONTAMINATE SURFACE WATERS OR DITCHES with chemical or used container.

EMPTY CONTAINER COMPLETELY and dispose of safely.

SAFETY DATA SHEET AVAILABLE FOR PROFESSIONAL USERS ON REQUEST.

TO AVOID RISKS TO MAN AND THE ENVIRONMENT,

comply with the instructions for use.

READ CAREFULLY THE RECOMMENDATIONS FOR USE PROVIDED WITH THIS CONTAINER

Barclay Chemicals (R&D) Ltd., Damastown Way,
Damastown Industrial Park, Mulhuddart, Dublin 15, Ireland
Tel: 353 1 8112900 Fax: 353 1 8224678
Website Address: www.barclay.ie



DIRECTIONS FOR USE ACTIVITY

Barclay Seismic has both direct foliar contact activity and residual soil activity against weeds; the latter resulting from root uptake of metamitron from the soil solution. The residual activity and overall efficacy of Barclay Seismic depends upon the cumulative dose applied, most particularly on mineral soils. Maximum residual activity is obtained only when the full sequence of recommended applications is made and there is adequate soil moisture.

SINGLE SPRAY TREATMENTS

Crops: sugar beet, fodder beet, mangels and red beet.

Soils: mineral soils with less than 10% organic matter.

CROP STAGE	WEED STAGE	DOSE	METHOD AND REMARKS
Before sowing	Before weed emergence.	5 kg in 200 l/ha water.	Incorporate into the top 2.5 cm (1") of soil.
Before crop emergence	Pre-emergence to the early cotyledon stage	5 kg in 200 l/ha water.	Apply as an overall spray or in a band in 240 litres water per ha of band.
Post-emergence not earlier than the first pair of true leaves each at least 10 mm long.	Ideally at the cotyledon stage, but effective up to 2 true leaves under good conditions.	5 kg in 200 l/ha water.	Apply as an overall spray or in a band in 240 litres water per ha of band. Efficacy on the advanced weeds or under dry conditions is improved by the addition of Barclay Actol at 5 l/ha.

REPEAT LOW-DOSE TREATMENTS (MINERAL SOILS)

Crops: sugar beet, fodder beet, mangels and red beet.

Soils: mineral soils with less than 10% organic matter.

Apply the base application and follow with up to three subsidiary applications, chosen from Options A, B or C as appropriate to the conditions, to effect optimum weed control. If the base application is not employed then up to five subsidiary applications may be made. The programme should be continued, within the Statutory Conditions, with a further application at 7-10 days after the last-to-date spray, to control any weeds surviving the last-to-date spray, even if no fresh weed emergence has occurred.

SEGMENT OF PROGRAMME	CROP STAGE	WEED STAGE	DOSE	METHOD AND REMARKS
Base application: Barclay Seismic	Pre-sowing or pre-emergence.	Before weed emergence.	3 kg in 200 l/ha water.	Incorporate pre-sowing to 2.5 cm depth or spray pre-emergence.
Subsidiary application Option A: Barclay Seismic alone.	Use at any stage.	Early cotyledon stage.	1.7 kg in 80-100 l/ha water . Add Barclay Actol at 1.7 l/ha.	Time each spray to strike each new flush of weeds.
Subsidiary application Option B: Barclay Seismic with phenmedipham MAFF 07248	Use from the fully expanded cotyledon stage.	Early cotyledon stage to not later than the fully expanded cotyledon stage the programme.	Barclay Seismic at 1.5 kg/ha plus phenmedipham MAFF 07248 at 2.5 l/ha in 80-100 l/ha water.	Gives improved control of black-bindweed. Normally needed just once within
Subsidiary application Option C: Barclay Seismic with ethofumesate MAFF 07266.	Use not earlier than the first pair of true leaves each at least 10 mm long.	Fully expanded cotyledon to the one true-leaf stage.	Barclay Seismic at 1.5kg plus ethofumesate MAFF 07266 at 1.7 l/ha in 80-100 l/hawater	Gives improved control of annual meadow-grass and cleavers. Normally needed just once within the programme.

REPEAT LOW-DOSE TREATMENTS (ORGANIC SOILS)

Crops: sugar beet, fodder beet, mangels and red beet.

Soils: soils with 10% or more organic matter

Apply up to six low-dose applications, chosen from Options 1,2,3, or 4 as appropriate to the conditions, to effect optimum weed control. The programme should be continued, within the Statutory Conditions, with a further application at 7-10 days after the last-to-date spray, to control any weeds surviving the last-to-date spray, even if no fresh weed emergence has occurred.

OPTION	CROP STAGE	WEED STAGE	DOSE	METHOD AND REMARKS
Option 1: Barclay Seismic alone.	Use at any stage.	Early cotyledon stage.	1.7 kg in 80-100 l/ha water. Add Barclay Actol at 1.7 l/ha	Time each to strike each new flush of weeds.
Option 2: Seismic alone. rate to control more advanced weeds	Use not earlier than the first pair of true leaves each least 10 mm long.	Weeds with up to one true leaf.	2.5 kg in 80-100 l/ha water Add Barclay Actol at 2.5 l/ha	Normally used Barclay not more than Higher once in a programme.
Option 3: Barclay Seismic with phenmedipham MAFF 07248.	Use from the fully expanded cotyledon stage.	Early cotyledon stage to not later than the fully expanded cotyledon stage.	Barclay Seismic at 1.5 kg/ha plus phenmedipham MAFF 07248 at 2.5 l/ha in 80-100 l/ha water.	Gives improved control of black- bindweed. Normally needed just once within the programme.
Option 4: Barclay Seismic with ethofumesate MAFF 07266	Use not earlier than the first pair of true leaves each at least 10mm long.	Fully expanded cotyledon to the one true-leaf stage.	Barclay Seismic at 1.5 kg plus ethofumesate MAFF 07266 at 1.7 l/ha in 80-100 l/ha water.	Gives improved control of annual meadow -grass and cleavers Normally needed just once within the programme.

WILD OAT CONTROL

On mineral soils Barclay Seismic may follow applications of triallate, made before drilling, after the beet have reached the two true-leaf stage. An approved formulation of diclofop-methyl may be used post-emergence of crop and weeds.

SOIL AND WEATHER CONDITIONS

Best results are obtained where seedbeds are fine, firm and moist. Weather extremes following treatment, particularly frost, may cause loss of crop vigour from which the crop may not fully recover.

SOIL TEXTURES

All soil textural groups except SANDS (ADAS Soil Texture, [85 System]) may be treated with Barclay Seismic.

COMPATIBILITY

Barclay Seismic is compatible in tank-mix with the Barclay range of trace elements and the undermentioned products. When using tank-mixes follow the recommendations of the partner product together with the directions of this label. Mix Barclay Seismic in the tank before adding the partner product.

Barclay Actol	MAFF 05578
Clopyralid	MAFF 10988
Ethofumesate	MAFF 07266
Phenmedipham	MAFF 07248

MIXING

Half fill the spray tank with water. With the re-circulation system in action, slowly pour the required quantity of product granules into the tank. Top up the tank with water. Maintain re-circulation during spraying and temporary stoppages and until the tank is sprayed out.

APPLICATION (BCPC definitions)

Do not use filters finer than 80 mesh. Do not exceed 8 kph (5 mph) whilst spraying.

SINGLE SPRAY APPLICATION: Apply as a MEDIUM spray in 200 l/ha.

LOW-DOSE APPLICATIONS: Apply as a FINE spray in 80-100 l/ha at 3-5 bar.

BAND APPLICATION

(Practicable for single spray treatments only)

Row spacing (cm)	46	50	54	60
Hectares covered by 240 litres in 18 cm band	2.6	2.8	3.0	3.3

Check the bandwidth for accuracy at regular intervals otherwise incorrect application will result.

STRESS FACTORS

When a crop is suffering from any stress, such as may be induced by other pre-emergence or post-emergence herbicides, nutritional disorder, soil acidity, high light intensity, high temperatures, frost, moisture stress or excess, wind, pest or disease attack, or any other factor, application of Barclay Seismic, more particularly with adjuvant oil, may cause marginal leaf scorch and/or a check to growth possibly leading to some loss of yield. This condition is likely to be accentuated by the use of other herbicides within the same programme.

WEED CONTROL

SUSCEPTIBLE	MODERATELY SUSCEPTIBLE	MODERATELY RESISTANT	RESISTANT
Chickweed, common	Charlock	Black-bindweed	Cleavers
Fat-hen*	Fumitory, common	Nightshade, black* (+)	Wild-oat
Field-speedwell, common	Redshank	Pimpernel, scarlet (+)	
Groundsel*		Radish, wild* (+)	
Knotgrass*			
Marigold, corn			
Mayweed, scentless			
Meadow-grass, annual*			
Nettle, small			
Penny-cress, field			
Poppy, common			
Shepherd's-purse			
Spurrey, corn			

*Moderately Susceptible when applied post-emergence.

(+) Resistant in Low-Dose programmes.

For weed sizes controlled see WEED STAGE in the tables.

SUCCEEDING CROPS

In the event of crop failure for any reason or early harvest, no crop other than sugar beet, fodder beet, mangels or red beet may be sown or planted within 4 months of treatment with Barclay Seismic. Plough at least 15cm (6") deep and thoroughly cultivate to disperse herbicide residues before sowing or planting to a succeeding crop. Winter cereals may then be sown 4 months after treatment or any crop in the following spring. Check also the corresponding label statement of any product used in a tank-mix.

SOIL CATEGORIES ADAS Soil Texture (85 system)

SANDS	VERY LIGHT & LIGHT SOILS	MEDIUM SOILS	HEAVY SOILS
Coarse Sand	sand Loamy sand	Sandy clay loam	Sandy clay, Clay
Fine sand	Loamy fine sand	Clay loam	Silty clay
Loamy coarse sand	Coarse sandy loam	Silty clay loam	
	Sandy loam, Fine sandy loam		
	Sandy silt loam, Silt loam (85)		

Conditions of Supply

All goods supplied by us are of high grade and we believe them to be suitable but as we cannot exercise control over their storage handling mixing or use or of the weather conditions before during and after application which may affect the performance of the goods all conditions and warranties statutory or otherwise as to the quality or fitness for any purpose of our goods are excluded and no responsibility will be accepted by us or resellers for any failure in performance damage or injury whatsoever arising from their storage handling application or use; these conditions cannot be varied by our staff or agents whether or not they supervise or assist in the use of such goods.

Barclay Chemicals (R & D) Ltd.,

Damastown Way, Damastown Industrial Park, Mulhuddart, Dublin 15, Ireland.

Tel : 00 353 1 811 2900

Fax: 00 353 1 822 4678

www.barclay.ie