

PORTMAN PROPACHLOR

Contains 480g/l Propachlor (42.3% w/w)

This product is approved under the control of Pesticide Regulations. The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

STATUTORY CONDITIONS RELATING TO USE FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL HERBICIDE.		
CROPS/SITUATIONS	MAXIMUM INDIVIDUAL DOSE (PRODUCT/HA)	MAXIMUM NUMBER OF TREATMENTS
Broccoli, Calabrese, Cauliflower, Brussels sprout, cabbage, fodder rape, kale, swede, turnip, spring oilseed rape, brown mustard, white mustard, sage, onion.	13.0 litres/hectare	2 per crop
Leek	13.0 litres/hectare	1 per crop
Ornamentals	13.0 litres/hectare	-

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.

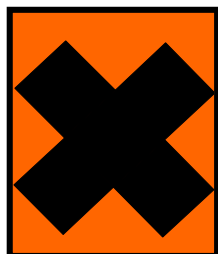
However, engineering controls may replace personal protective equipment if a COSHH assessment shows they provide an equal or higher standard of protection.

Other Specific Restrictions

DO NOT RE-USE CONTAINER for any purpose

When used on sage, this product must not be applied to plants between flowering and harvesting.

(MAFF08159) READ ALL PRECAUTIONS BEFORE USE



IRRITATING TO EYES AND SKIN

MAY CAUSE SENSITISATION BY SKIN CONTACT

HARMFUL IF SWALLOWED

5 Litres e

Portman Agrochemicals Limited

Maidenstone Heath, Blundell Lane, Bursledon, Southampton SO31 1AA
 Tel: 023 8040 6640 Fax: 023 8040 5005 Email: info@collag.com

PORTMAN PROPACHLOR

PRECAUTIONS

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

WASH ALL PROTECTIVE CLOTHING thoroughly after use, especially the insides of gloves.

TAKE OFF IMMEDIATELY all contaminated clothing.

WHEN USING DO NOT EAT DRINK OR SMOKE.

WASH CONCENTRATE from skin and eyes immediately.

AVOID ALL CONTACT BY MOUTH.

DO NOT BREATHE SPRAY

WASH HANDS AND EXPOSED SKIN before eating, drinking or smoking and after work.

IF YOU FEEL UNWELL, seek medical advice (show the label where possible)

KEEP AWAY FROM FOOD DRINK AND ANIMAL FEEDINGSTUFFS.

KEEP OUT OF REACH OF CHILDREN.

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

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

WASH OUT CONTAINER THOROUGHLY, empty washings into the spray tank and dispose of safely.

DO NOT REUSE CONTAINER for any purpose

GENERAL INFORMATION

Weeds Controlled

Portman Propachlor herbicide is a soil acting residual herbicide which is effective against annual broad-leaved weeds and annual grasses for 6-8 weeks after application; however, it is ineffective against emerged weeds.

Sting® CT herbicide may be used to control all emerged annual weeds before crop drilling or planting.

Where control of emerged weed seedling pre-emergence of recommended drilled roots is required, Portman Propachlor may be tank-mixed with Gramoxone 100, PDQ, Scythe or Parable herbicides, or for drilled crops of swede, turnip, onion and leek, Portman Propachlor may be tank mixed with Sting CT herbicide.

Crop Varieties

All varieties of recommended crops may be treated.

However, in poor growing conditions, there may be a check to crop growth but this is normally outgrown within 8 weeks without affecting yield or time of maturity.

Seedbed Preparation

Apply to a fine, firm, clod free seedbed just before emergence of weeds. Loose or puffy seedbeds must be consolidated before application. Portman Propachlor requires some moisture, in seedbeds and ridges, after application to be activated.

Established woody ornamentals

The following species are safe to treat using a directed spray to the soil surface:

All coniferous and deciduous trees

Roses

AVOID CONTACT with foliage, otherwise crop damage may result.

The soil should be free of weeds at the time of application. If weeds are present treat first with Portman Glyphosate.

PORTMAN PROPACHLOR

Soil Type

All Mineral soil may be treated at the standard dose. Soils with over 10% organic matter may be treated at the higher recommended dose where crops permit.

CAUTION

Do NOT spray in winds that could cause uneven distribution of the spray.

Do NOT use after products that de-wax the leaves of plants, especially in brassica crops.

Do NOT use under glass or polyethylene as crop damage may result.

Do NOT use under extremely wet, dry or other adverse growing conditions as crop damage and reduced weed control may result.

Do NOT use pre-emergence of drilled wallflower crops.

Portman Propachlor attacks mild steel but not lined steel, stainless steel or plastic.

Portman Propachlor may cause sensitisation by skin contact, sensitised persons should avoid further contact with the product.

PORTMAN PROPACHLOR MUST BE USED ONLY IN THE AREAS OF USE RECOMMENDED ON THIS LABEL AND APPLIED ACCORDING TO 'DIRECTIONS FOR USE'. ALL OTHER USES AND METHODS OF APPLICATION ARE EXCLUDED.

DIRECTIONS FOR USE

Recommended Uses

CROP	APPLICATION RATE (L/ha)	SOIL TYPE	WATER* VOLUME	APPLICATION GUIDANCE
BRASSICA CROPS GROWN ON THE FLAT Flowerhead: Broccoli Calabrese Cauliflower Leafy Brassicae: Brussels sprout Cabbage Fodder rape Kale Root Brassicae: Swede, Turnip Oilseed Brassicae: Spring Oilseed Rape, Brown Mustard, White Mustard	9.0 13.0	Mineral Organic	Overall 450 l/ha	Apply before crop emergence(from drilling up to the time of drop seed chitting) usually within 48 hours after drilling. Apply post-crop emergence after crops have 3-4 true leaved and before weed emergence. Apply after transplanting and hardening off to transplanted crops which should be irrigated after transplanting especially peat-block module transplants. DO NOT TANK-MIX WITH OTHER PRODUCTS WHEN APPLYING TO PEAT BLOCK MODULE TRANSPLANTS
BRASSICA CROPS DRILLED ON RIDGES Swede, Turnip	9.0 13.0	Mineral Organic	Overall 450 l/ha or band 225 l/ha	Overall or band applications may be used pre-emergence. Band application should be made at time of drilling with suitable band spraying equipment mounted on the seed drill. Drill into a moist fine tilth, seeds well covered, ridges clod free with rounded tops.
ONION AND LEEK	9.0 13.0	Mineral Organic	Overall 450 l/ha	Apply pre-crop emergence or post-crop emergence from post crook to young plant stage immediately prior to weed emergence. Delay application to "glass raised" transplants until they have hardened off, but before weed emergence. DO NOT APPLY TO MULTI-SEEDED CROPS.
SAGE	9.0 13.0	Mineral Organic	Overall 450 l/ha	Apply shortly after transplanting, but before weed emergence. In dry weather lightly irrigate after application. Apply at any time before flowering or after harvest to established crops, but before weed emergence. DO NOT APPLY PRE-EMERGENCE OF DRILLED CROPS.
ESTABLISHED WOODY ORNAMENTAL PLANT PRODUCTION Roses and Trees	9.0 13.0	Mineral Organic	Directed spray 450 l/ha	Apply as a directed spray to the soil surface before weeds have emerged. Avoid contact with foliage Activity will be reduced in dry weather.

*Use 450 l/ha for ALL uses of Portman Propachlor SC alone or in tank mixtures, in overall application. Apply at pressure up to 3 Bars (40 p.s.i.)

PORTMAN PROPACHLOR

1. BRASSICA CROPS GROWN ON THE FLAT

TANK- MIXTURES:

A) STING CT:

Portman Propachlor may be tank-mixed with Sting CT herbicide and applied post-drilling, PRE-EMERGENCE of Swede and Turnip crops. This is useful where the stale seedbed technique has been used to retain moisture for the germinating crop allowing a flush of weeds including some species (e.g. Charlock) which are resistant to many soil acting herbicides. The tank-mixture provides a clean-up of emerged annual weeds and a foliar kill of perennials, together with residual activity on many annuals.

APPLICATION

PORTMAN PROPACHLOR	RATE L/HA
Mineral Soils	9.0
Organic Soils	13.0
Sting CT	
Annual Grass Weeds	2.5
Annual Broad-leaved Weeds	4.0

B) DACTHAL W-75

Crops and Timing

To increase the spectrum and period of weed control, Portman Propachlor may be tank-mixed with Dacthal W-75 and applied before weed germination in the same range of brassica crops as for this product alone

APPLICATION (Mineral Soils Only):

PRODUCT	RATE HA
Portman Propachlor	9.0 l
+ Dacthal W-75	6.0kg

C) COMODOR 600

Crops and Timing

This tank-mixture may be used pre-emergence in drilled crops of Swede, Turnip and Kale, at the same timing as for this product alone.

Weed Control

This tank-mixture extends susceptible weeds to include: Fat-hen, Field Forget-me-not, Common Poppy, Knotgrass, Field Pansy, Scarlet Pimpernel. Improved control of other weeds will result, especially Black-bindweed, Annual Mercury and Wild-oat.

APPLICATION (Mineral Soils Only):

PRODUCT	RATE HA
Portman Propachlor	9.0
+ Comodor 600	4.0

PORTMAN PROPACHLOR

ADDITIONAL INFORMATION:

Transplanted Crops:

Young plants, particularly Cabbage, Cauliflowers and Brussels Sprout, raised under glass, must be hardened off carefully before spraying. After transplanting, crops should be irrigated, or herbicide application delayed until after rain has fallen, to allow plants to become established.

Peat-block Module Transplants:

It is essential to plant firmly and to harden off the plants thoroughly before spraying. Continuous irrigation after transplanting may be necessary to ensure that the peat blocks do not dry out and result in plants suffering from drought stress. Delay application until plants are showing active leaf growth.

Sequential Treatments:

A) Portman Propachlor:

Brassicas may be re-treated with Portman Propachlor 6-8 weeks after the initial treatment provided no weeds have emerged and the brassicas have at least 3-4 true leaves and are not suffering from drought stress.

B) Portman Trifluralin:

Portman Propachlor may be used on brassica crops that have been treated with Portman Trifluralin. This sequence broadens the weed species controlled to include: Black-bindweed, Fat-hen, Knotgrass and Redshank.

CAUTION:

DO NOT apply the tank-mixture of Portman Propachlor + Sting CT to emerged crops.

DO NOT apply the tank-mixtures of either Portman Propachlor + Dacthal W-75 or Comodor to soils with over 10% organic matter content.

DO NOT apply to plants (however transplanted) suffering from stress from drought or cold and especially when frosts are occurring.

DO NOT exceed the stated recommended rate when applying sequential treatments of Portman Propachlor.

2. BRASSICA CROPS (SWEDE AND TURNIP) DRILLED ON RIDGES

APPLICATION:

The application rate on the area of land band sprayed should be as for overall treatments. The actual area sprayed would be a quarter of the total where spraying an 18 cm (7 ins) band on 70 cm (28 ins) ridges.

TANK-MIXTURES;

A) STING CT:

Portman Propachlor may be tank-mixed with Sting CT and applied overall post-drilling PRE-EMERGENCE of Swede and Turnips. This is useful where the stale seedbed technique has been used. To maximise the benefits of the stale seedbed system on ridges it is important to prepare the ridges at least one month prior to the intended drilling date. Follow application details specified for 'Brassica Crops Grown on the Flat' on this label.

B) DACTHAL W-75 OR COMODOR 600:

To increase the spectrum of weed control, Portman Propachlor may be tank-mixed with either Dacthal W-75 or Comodor and applied in a band or overall to Swede and turnip crops drilled on ridges. Follow application details specified for 'Brassica Crops Grown on the Flat' on this label.

PORTMAN PROPACHLOR

ADDITIONAL INFORMATION:

Ridge Formation and Drilling:

Drill into a moist, fine tilth to encourage rapid germination of the crop seeds which must be well covered and drilled to an even depth. Fields should be prepared by winter ploughing and spring cultivations to form a ridge free of clods with a fine firm surface tilth and with a rounded top and good shoulder. Deep cultivations should be kept to the minimum necessary for the production of a good ridge and to retain maximum soil moisture.

Post-crop Emergence Cultivation:

When scarifying the ridge, disturb the minimum quantity of soil next to the crop seedlings, otherwise weed control will be reduced and crop damage may occur. If the crop is hand thinned, the disturbance of soil may encourage weed growth.

Sequential Treatments:

A) Portman Propachlor:

Swede and Turnip crops may be retreated after they have 3-4 true leaves provided no weeds have emerged.

B) Portman Trifluralin:

Portman Propachlor may be applied in a band or overall to Swede and Turnip crops drilled on ridges which have been treated with Portman Trifluralin.

CAUTION:

DO NOT apply the tank-mixture of Portman Propachlor + Sting CT to emerged crops.

DO NOT apply the tank-mixtures of ether Portman Propachlor + Dacthal W-75 or Comodor to soils with over 10% organic matter content.

DO NOT exceed the stated recommended rate when applying sequential treatments of Portman Propachlor.

3. ONION AND LEEK

TANK-MIXTURES:

A) STING CT:

Portman Propachlor may be tank-mixed with Sting CT and applied post-drilling, PRE-EMERGENCE of Onion and Leek. This is useful where the stale seedbed technique has been used. Follow application details specified for 'Brassica Crops Grown on the Flat' on this label.

B) Dacthal W-75:

To increase the spectrum and period of weed control, Portman Propachlor may be tank-mixed with Dacthal W-75 and applied pre or post-crop emergence of onion or leek. Follow application details specified for 'Brassica Crops Grown on the Flat' on this label.

APPLICATION (Mineral Soils Only):

Crop	Portman Propachlor L/ha		Dacthal W-75 Kg/ha
Spring sown Onions	9.0	+	6.0
Spring sown Leeks	9.0		6.0
Autumn sown Onions	9.0		9.0

PORTMAN PROPACHLOR

C) CHLORPROPHAM:

The addition of approved formulations of chlorpropham (MAFF 03049, MAFF 05895 and MAFF 01403) will extend the weed control spectrum. Select the rate of each product according to the soil type. If heavy rain occurs soon after applying this mixture, crop damage can result, especially on very light and light soils and where high doses of chlorpropham have been used.

ADDITIONAL INFORMATION:

Sequential Treatment:

A second application of Portman Propachlor may be made to Onions 6-8 weeks after the first application, provided no weeds have emerged and onions have developed to the "post-crook" stage.

CAUTION:

DO NOT apply the tank-mixture of Portman Propachlor + Sting CT to emerged crops.

DO NOT apply the tank-mixture of Portman Propachlor + Dacthal W-75 to soils with over 10% organic matter content.

DO NOT exceed the stated recommended rate when applying sequential treatments of Portman Propachlor.

4. SAGE

TANK-MIXTURE:

DACTHAL W-75:

This mixture may be applied over newly transplanted or established crops of sage at the same timings and under the same conditions as for Portman Propachlor applied alone

APPLICATION (Mineral Soils Only):

PRODUCT	RATE HA
Portman Propachlor	9.0 l
+ Dacthal W-75	9.0kg

CAUTION:

Do not apply the tank-mixture of Portman Propachlor + Dacthal W-75 to soils with over 10% organic matter content.

PORTMAN PROPACHLOR

APPLICATION DETAILS

Water Volumes and Pressure:

- Overall:

Use 450 l/ha for all uses of Portman Propachlor alone or in mixtures. Apply as a MEDIUM or COARSE quality spray (B.C.P.C. definition) at a pressure up to 3.0 bars (40p.s.i.).

- Band:

Apply Portman Propachlor alone or in recommended tank-mixtures as a MEDIUM or COARSE quality spray in at least 110 l/ha (10 gal/ac) of water where the band spray area width is a quarter of the overall spray area.

Band Application:

A suitable band-spray boom can be made up with 4-6 nozzles fitted at a width equivalent to the distance between the centres of rows to be sprayed, using 225 l/ha (20 gal/ac) 80° jets and mounted on a tractor.

Select a suitable tractor mounting position at the front, the rear or underslung which is likely to be the most suitable because at this point any movement of the tractor will be least exaggerated. Mount the spray boom rigidly in the chosen position. At least three supports will be required. The height should be adjusted such that the jets are 10-12 cm (4-5 ins) above the surface to be sprayed. Account for the furrow depth if the crop is grown on ridges. At this height the jets will spray an 18cm (7 ins) band.

If it is necessary to mount the sprayer boom any higher, the jets must be twisted in the holders so that the band width remains at 18 cm (7 ins). If the sprayer pressure reading is given on a gauge connected to the standard boom, insert a 'T' piece in the band spray bar feed and fit the gauge at this point.

Operation in the field:

1. Adjust pressure to 3 bars (40 p.s.i.).
2. Check that band width is 18 cm (7ins) when band spraying.
3. Operate at 8 kph (5mph).
4. Calibrate all sprayers accurately before use.
5. Use only sprayers fitted with efficient agitation and recirculation devices.
6. Use markers to avoid over or under-lapping.
7. Half fill sprayer tank with water. Invert and shake the can well and add the required amount of Portman Propachlor through a 50 mesh (300 µm) screen in the filter basket. Then add any product to be tank-mixed and fill the sprayer tank, ensuring that the agitation or recirculatory system is working continuously during filling and spraying.

Trademark Acknowledgments

®Roundup and ®Sting are Registered Trade Marks of Monsanto.

Comodor is a Registered Trade Mark of Dr R Maag AG.

Dacthal W-75 is a Registered Trade Mark of Fermenta ASC Corporation.

Farmon is a Trade Mark of Farm Protection Limited.

Gramoxone and Parable are Trade Marks of Zeneca plc.

Scythe is a Registered Trade Mark of the American Cyanamid Company.

For further information contact your local Portman distributor.

PORTMAN PROPACHLOR

WEED CONTROL TABLE

WEED SPECIES	PORTMAN PROPACHLOR	TANK-MIXTURES WITH			SEQUENCE WITH PORTMAN TRIFLURALIN
		CHLORPROPHAM (MAFF03049, 05895,01403)	COMODOR 600	DACTHAL W-75	
Annual Meadow-grass	S	S	S	S	S
Annual Mercury	-	-	MS	MS	-
Black-bindweed	R	S	MS	MS	S
Black-grass	S	S	S	S	S
Black-nightshade	MS	MS	MS	S	MS
Charlock	R	MR	R	MR	R
Cleavers	S	S	S	S	S
Common Chickweed	S	S	S	S	S
Common Field-speedwell	S	S	S	S	S
Common Fumitory	R	MS	R	R	MS
Common Hemp-nettle	S	S	S	S	S
Common Orache	MR	MR	-	MS	MS
Common Poppy	-	S	S	S	MS
Corn Marigold	S	S	S	S	S
Corn Spurrey	S	S	S	S	S
Fat-hen	MR	MS	S	S	S
Field Pansy	R	R	S	S	-
Field Penny-cress	R	MS	R	R	R
Gallant Soldier	S	S	S	S	S
Groundsel	S	S	S	S	S
Henbit Dead-nettle	MS	-	-	MS	S
Knotgrass	R	S	S	S	S
Pale Persicaria	-	-	-	-	S
Pineappleweed	S	S	S	S	S
Red Dead-nettle	S	S	S	S	S
Redshank	R	S	MR	MS	S
Scarlet Pimpernel	-	S	S	S	-
Scented Mayweed	S	S	S	S	S
Scentless Mayweed	S	S	S	S	S
Sheep's Sorrel	-	-	-	S	-
Shepherd's-purse	S	S	S	S	S
Small Nettle	S	S	S	S	S
Smooth Sow-thistle	MS	MS	S	MS	MS
Sun Spurge	R	R	R	R	R
Wild-oat	R	R	MS	-	MS
Wild Radish	R	R	R	R	R

S - Susceptible
R - Resistant

MS - Moderately Susceptible
MR - Moderately Resistant