

PRECAUTIONS In case of emergency contact the Poisons Information Centre Tel: +353 1 8092566 or +353 1 8379964. If medical advice is needed, have product container or label at hand.

STORAGE AND DISPOSAL KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDING STUFFS. KEEP OUT OF REACH OF CHILDREN. KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place. WASH OUT CONTAINER THOROUGHLY, empty washings into spray tank, and dispose of safely.

DIRECTIONS FOR USE

The following table pertains to and forms part of the statutory conditions relating to use

FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL/INDUSTRIAL NON-SELECTIVE HERBICIDE FOR PROFESSIONAL USE ONLY				
Сгор	Maximum individual dose of product	Maximum number of applications	Maximum Total dose	Latest time of application
Post-planting & pre-crop emergence: Barley, bulb onion, combining pea, durum wheat, field bean, leek, linseed, mustard, oats, oilseed rape, sugar beet, swede, turnip, vining pea, wheat	1.06 L/ha		1.06 L/ha /crop	Pre-emergence of crop
* Pre-harvest - Wheat, barley, oats	3.2 L/ha	ſ	3.2 L/ha	7 days before harvest
* Pre-harvest - Oilseed rape, linseed	3.2.L/ha	1	3.2 L/ha	14 days before harvest
* Pre-harvest Peas (combining)	3.2 L/ha	1	3.2 L/ha	7 days before harvest
Stubbles (including destruction of cover crops)	3.2 L/ha	- X	3.2 L/ha/year	2-5 days pre- cultivation/drilling/planting
Green cover for land not being used for production (fallow)	3.2 L/ha	-	3.2 L/ha/year	2-5 days pre- cultivation/drilling/planting
Grassland destruction	3.2 L/ha	1 per year	3.2 L/ha	5 days before cutting/grazing
Apples, pears	4 L/ha	\wedge	4 L/ha/year	Post-harvest before green cluster stage
Cherries, plums	4 L/ha	-	4 L/ha/year	After leaf fall/before white-bud stage
Asparagus	4 L/ha	-	4 L/ha	Pre-emergence
Non-cropped areas (hard and permeable surfaces)	4 L/ha	-	4 L/ha/year	-
Forestry (Pre and post planting)	3.2 L/ha	-	3.2 L/ha	-
Other specific restrictions: * May only be applied when crop is> BBCH 87 and grain/seed moisture < 30 %				
Specific weeds controlled: Control of a range of annual and perennial grass and broad-leaved weeds				

Method of application:	Tractor mounted or powered hydraulic sprayer/knapsack
Particulars of direct or indirect adverse effects:	Extreme care must be taken to avoid spray drift onto non-crop plants outside of the target area
Directions for the safe disposal of the plant protection product and of the packaging.	Dispose of contents/container to a licenced hazardous waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of as non-hazardous waste.
Restriction on category of user	Professional use only
Specific uses:	See directions for use table

GENERAL INFORMATION

Glypho-Rapid is a foliar acting herbicide that controls annual and perennial grasses and most broad-leaved directed. It is translocated from treated vegetative growth to underground roots, thizomes or stolons. Leaf reddening then yellowing of the foliage, are first seen on grass weeds but take longer to appear on broad-leaved state longer to appear on broad-leaved st es and most broad-leaved w rhizomes or stolons. Leaf symptoms ed

It is particularly important that the weeds have sufficient leaf growth and are actively growing when treated.

Perennial grass weeds must have produced fresh leaves, which are green and vigorous. Common susceptible to Glypho-Rapid when it is tillering and when new rhizomes have begun to grow. This is about 5-6 leaves, each with approximately 12-15 cm (5-6") of new growth. grass is most mon couch/scutch sually when the plants have

The majority of perennial broad-leaved weeds are most susceptible if treated when they are actively growing and are at or near flowering stage.

Annual weeds should be actively growing with grasses having at least 5 cm (2") of leaf and broad-leaved weeds at least two expanded true leaves when sprayed.

expanded true leaves when sprayed. Couch/scutch grasses and other grass and broad leaved weeds are less susceptible to Glypho-Rapid when growth is restricted by drought, waterlogging, frost, very high temperatures or natural dieback. Efficacy will be reduced if such conditions occur at or immediately after spraying.

Occasionally a slight check to crop growth may occur, particularly after direct drilling when crop seeds germinate amongst a mass of decaying foliage, stolors, rhizomes or roots. Thorough cultivations are necessary to disperse or bury decaying organic matter. Consolidate loose soils and ensure crops are adequately fertilised and appropriate measures are taken to prevent insect and fungal damage to the following crop, especially where following grassland.

not apply lime, fertiliser, farmyard manure, pe or similar materials within 7 days of Glypho-Rapid. Dor esticides

Note: Glypho-Rapid does not give acceptable control of horsetail, Equisetum arvense

WEATHER CONDITIONS

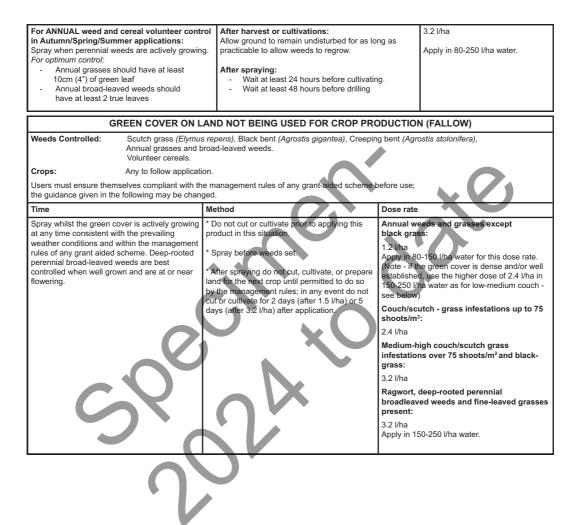
A period of at least 6 hours and preferably 24 hours free of rain must follow spraying. Do not spray onto weeds suffering from drought stress as reduced control may occur. Bo not spray in windy conditions as drift onto other crops or vegetation can cause severe injury or destruction. Do not spray during frosty weather that prevents active growth and can induce weed senescence

WEED CONTROL PRE-EMERGENCE OF DRILLED CROPS		
Weeds Controlled: Emerged annual, perennial and biennial weeds		
Seed must be drilled and drills firmly closed with a minimum 15 mm (½") of settled soil above the seed. Annual weeds must be small when treated following direct drilling. DO NOT ALLOW SPRAY TO CONTACT THE LEAVES OF ANY CROP CAUTION: Ensure that spraying precedes ANY crop emergence.		
Сгор	Time and Method Dose Rate	
Barley, bulb onion, combining pea, durum wheat, field bean, leek, linseed, mustard, oats, oilseed rape, sugar beet, swede, turnip, vining pea, wheat, asparagus	Spray whilst the crop is dormant before ALL new spear emergence. Spray must not contact the spears/foliage of the crop. At least 15 mm of firmly settled soil must be covering crowns and spears. Spray up to 48h after drilling	All crops: 1.06 l/ha A sp aragus: 4 l/ha Apply in 100-400 l/ha water
WEED CONTRO	OL IN STANDING CEREAL CROPS (F	PRE-HARVEST)
Weeds Controlled: Common Couch/scutch grass (Elymus repens) Black bent (Agrostis gigantea) Creeping bent (Agrostis stolonifera) Onion couch (Arrhenatherum elatius var. bulbosum) in winter barley only - see Note. Perennial broad-leaved weeds. Crops: Winter and spring wheat, including durum wheat, and winter and spring oats destined for milling or feed. Barley destined for malting or feed. (Consult purchasers of crops grown on contract and prospective purchasers of malting grade barley before treatment *) DO NOT TREAT CROPS INTENDED FOR SEED. DO NOT TREAT UNDERSOWN CROPS.		
Time	Method	Dose Rate
Spray when the moisture content of the grain measures less than 30%. Target weeds must be green, actively growing and accessible to the spray.	Spray the crop and weeds overall. Use hig clearance tractors with narrow wheels and crop dividers. Adjust boom height to maximise spray retention on the target weeds. After spraying: Wait at least 7 days before harvesting. Treated straw must be chopped and incorporated or removed, after which norm cultivations may be resumed. Treated straw may be used for feed and litter but must no be used for horticultural purposes.	couch/scutch-grass infestations, up to 75 shoots/m ² : 2.4 l/ha Apply in 80-250 l/ha water. Couch/scutch-grass infestations, over 75 shoots/m ² : 3.2 l/ha Perennial broad-leaved weeds; 3.2 l/ha
Note: to gain successful control of onion couch with Glypho-Rapid, the weed must be treated BEFORE the bulbous bases have matured. Application when the bulbous bases have matured will not prevent regeneration of the weed. Early ripening winter barley is the only crop likely to present an opportunity for pre-harvest control of onion couch.		

WEED CONTROL IN STANDING OILSEED RAPE AND LINSEED (PRE-HARVEST)			
Weeds Controlled: Common Couch/scutch grass (Elymus repens) Creeping bent (Agrostis stolonifera) Black bent (Agrostis gigantea) Crops: Oilseed rape, winter, or spring. Linseed, winter or spring The treatment is suitable only for uniform, evenly maturing crops proceeding to harvest in prime condition. DO NOT TREAT CROPS INTENDED FOR SEED. Do NOT TREAT CROPS INTENDED FOR SEED.			
Time	Method	Dose Rate	
Weed control: Spray 2-3 weeks before harvest when the natural ripening of the seed is progressing and the moisture content of the seed measures less than 30%. Target weeds must be green, actively growing and accessible to the spray.	Spray the crop and weeds overall. Minimise crop damage by use of high clearance tractors with narrow wheels and crop dividers. After spraying: Wait at least 14 days before harvesting oilseed rape. Wait at least 14 days before harvesting linseed. Direct combine harvest the crop when fit. Treated straw must be chopped and incorporated or removed, after which normal cultivations may be resumed.	Low-medium couch/scutch grass infestations, up to 75 shoots/m ² : 2.4 //ha Medium-high couch/scutch grass infestations, over 75 shoots/m ² : 3.2 //ha Perennial broad-leaved weeds: 3.2 //ha Apply in 200 - 250 //ha water.	
WEED (CONTROL IN PEAS (PRE-HARVEST)		
Weeds Controlled: Common Couch (Elymus repens) Creeping bent (Agrostis stolonifera) Black bent (Agrostis gigantea) Perennial broad-leaved weeds. Crops: Peas (combining) to be harvested dny. DO NOT TREAT CROPS INTENDED FOR SEED. Note: This treatment is intended for weed control. Black bent (Agrostis gigantea)			
Time	Method	Dose Rate	
Spray when the natural ripening of the seed is progressing and the moisture content of the seed measures less than 30%. Target weeds must be green, actively growing and accessible to the spray.	Spray the crop and weeds overall. Minimise crop damage by use of high clearance tractors with narrow wheels and crop dividers. After spraying: Wait at least 7 days before harvesting. Direct combine harvest the crop when fit. Treated straw must be chopped and incorporated or removed, after which normal cultivations may be resumed.	Low-medium couch/scutch grass infestations, up to 75 shoots/m²: 2.4 l/ha Medium-high couch/scutch grass infestations, over 75 shoots/m²: 3.2 l/ha Apply in 200 - 250 l/ha water.	
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STUBBLE AND GROUND PREPARATION PRE-SOWING AND PRE-PLANTING (INCLUDING DESTRUCTION OF COVER CROPS) - ANNUAL AND PERENNIAL WEEDS, VOLUNTEERS Weeds Controlled: Common Couch/scutch grass (Elymus repens) Black bent (Agrostis gigantea)		
Creeping ben		nd broad-leaved weeds
Crops: Any crop to follow application	on on stubble.	
Time	Method	Dose Rate
For PERENNIAL weed control in Autumn/winter applications: Spray when perennial weeds are actively growing, especially after mid- October. Couch/scutch grass should have at least 6 new leaves approx. 12 cm long.	After harvest: • Do not cultivate. • Remove straw. • Allow weeds to regrow. • Spray during mild conditions. • Allow volunteer potatoes to make ample top growth and spray well before onset of frost or natural senescence. After spraying: • If before mid-November, wait at least 5 days before cultivating. • If after mid-November, wait for perennial grass leaves to turn red/yellow before cultivating.	Annual weeds and grasses couch/scutch-grass infestations, up to 75 shoots/m ² 2.4 l/ha Apply in 80-250 l/ha water for this dose rate. Couch/scutch grass infestations, over 75 shoots/m ² and volunteer potatoes: 3.2 l/ha
For PERENNIAL weed control in Spring applications: Spray when weeds are actively growing as for autumn applications. Roots chopped by cultivations must show new leaf growth to be killed.	After harvest: Cultivate as required. Leave for regrowth to appear - allow a minimum 21 days weed growth before spraying. After spraying: Wait at least 5 days before cultivating. Re-treatment may be necessary pre-harvest or in autumn as emergence in spring may be incomplete.	Apply in 150-250 l/ha water.

SPAR



GRASSLAND DESTRUCTION			
Weeds Controlled: Rough stalked meadow grass (Poa pratense), Scentless Mayweed (Matricaria inodorum), lvyleaf speedwell (Veronica hederifolia), Pathgrass (Poa annua), Common field speedwell (Veronica persica), Ryegrass (Lolium multiflorum), Couch grass (Agropyron repens), Perennial ryegrass (Lolium perenne), Broadleaf dock (Rumex obtusifoluis), Common nettle (Urtica dioca), Field sowthistle (Sonchus arvensis)			
Crops: Any crop to follow application Time	Method	Dose Rate	
Spray when grasses and weeds are actively growing at the following times and growth stages: Annual grasses and annual broad-leaved weeds: • Spring, summer or autumn. • Annual grasses have at least 10cm (4") of green leaf. • Annual broad-leaved weeds have at least 2 expanded true leaves. Perennial grasses and perennial broad- leaved weeds • Mid to late summer. • Perennial grasses have at least 12cm (5") of leaf or 5 fully expanded leaves. Perennial broad-leaved weeds have substantial leaf area or are near flowering.	 Lightly cut or graze and allow regrowth for about 4 weeks until the recommended growth stages are reached. Spray at the dose rate recommended for the weed or grass type. Wait at least 5 days, when the leaves become yellowed, before removing the growth for conservation or by grazing as required, prior to cultivating or drilling. Surface mats of old grassland must be thoroughly broken by outlivations before reseeding. Eithen defer seeding until the following spring to allow surface mats to decompose or apply 2.5 tonnes/ha (1 tonne/ac) of ground limestone to the surface mat not less than seven days after treatment followed by rotary cultivation to break the surface and incorporate the ground limestone into the soil. Seeding may be conducted as required thereafter provided that the seeds are in contact with mineral soil. 	1-2 years old, only annual weeds and grasses: 2.4 l/ha 2-4 years old, with perennial grasses: 3.2 l/ha Long leys e.g., 4-7 years old with perennial broad-leaved weeds: 3 l/ha Permanent grassland with ragwort or predominantly fine-leaved grasses: 3.2 l/ha Apply the recommended dose in 200-250 l/ha water	
	ORCHARDS		
Weeds Controlled: Most annual and p	erennial weeds. Method	Dose	
Established (minimum 2 years) trees of: Apple Pear Plum Cherry Damson	Apply as a directed MEDIUM or COARSE spray. Spray after leaf fall in autumn or before green cluster stage of apple and pear or white-bud stage of stone fruit. Avoid spraying or allowing drift to contact the trunk above 30 cm (12") from the ground, or any branches. Spray must not contact any damaged bark.	4 l/ha in 250 l/ha water.	

NATURAL SURFACES NOT INTENDED TO BEAR VEGETATION, PERMEABLE SURFACES OVERLYING SOIL, HARD SURFACES: General use on non-cropped areas around the farm and on amenity and industrial areas Weeds Controlled: Most annual and perennial weeds.			
Area of use	Dose	Time and Method	
Around buildings On industrial sites Firebreaks Pavements Verges along public paths and roadways Around traffic signs and advertising hoardings Site preparation for landscaping projects; golf courses etc. DO NOT SPRAY HEDGE BOTTOMS.	General use: 3.2 l/ha Perennial broad-leaved weeds present: 4.0 l/ha Mounted hydraulic sprayers: apply in 80- 250 l/ha water. Knapsack sprayers: apply in 100-250 l/ha water	Apply at any time of the year when weeds are showing green leaf and are actively growing. Weeds germinating after application will not be controlled. Avoid drift onto crops, lawns, amenity plants or any desirable species. DO NOT USE UNDER GLASS OR POLYTHENE. DO NOT SPRAY HEDGE BOTTOMS. See KNAPSACK RATE RECKONER tables.	
Important: If poisonous weeds, such as ragwort, had been present before treatment, then grazing animals, such as horses, should be kept clear of treated areas until such time that poisonous weeds have been removed.			
Use	Dose	Remarks	
Before planting: Most broad-leaved and grass weeds. After planting: Most annual and perennial grasses and broad-leaved weeds. Moderate control of Broad-leaved woody weeds: bracken, beech, brush, bramble, sycamore, oak, hazel, willow, ash.	 3.2 l/ha Apply in 80-250 l/ha water. Apply at the appropriate dose for the species to be treated as detailed below: 3.2 l/ha in 250 l/ha water 3.2 l/ha in 250 l/ha water 	If the ground has been disturbed by forestry operations, allow the weeds to recover. Apply when weeds are showing green leaf and are actively growing. Wait at least 7 days before any cultivation or before planting trees. Apply by knapsack sprayer around fully guarded trees. It is ESSENTIAL to use a TREE GUARD for all applications made in the growing season. Treat bracken after frond tips are unfurled but pre-senescence. Treat heather late-August to end-September. Treat all other woody weeds June to August before leaf senescence, but after new growth of crop has hardened. Important The time of hardening of leader growth in any year varies with species, location and weather amongst other factors; hardening might occur from end-July up to October or even later. Always direct the spray away from leaders to avoid damage to Lammas growth.	

Note: for ease of identification of treated trees a suitable commercially available water soluble violet dye may be added to the prepared solution at 1 ml dye per 10 litres of prepared spray solution

Note: for ease of identification of treated weeds, a suitable commercially available water-soluble dye may be added to the prepared

solution at 1ml dye per 10 litres of prepared spray solution. Do not apply when rain is expected within 6 hours as, apart from unsatisfactory weed control, herbicide might be transferred to desirable species by rain splash or foliar contact.

MIXING

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Tractor mounted sprayers Pour the recommended quantity of Glypho-Rapid into the spray tank already half-filled with clean water and under agitation. Top up

the tank with more clean water to the required level, whilst maintaining agitation. Spray out on the day of mixing. Knapsack sprayers

Add the recommended quantity of Glypho-Rapid to the knapsack spray tank approximately one-third filled with clean water. Agitate thoroughly with a clean rod or by shaking after replacing the lid until thoroughly mixed. Add the required quantity of authorised surfactant and agitate again in the same manner until thoroughly mixed. Top up the tank with more clean water to the required level and agitate to be one. Server out to a the day of mixed. level and agitate thoroughly before use. Spray out on the day of mixing.

RINSE CONTAINER THOROUGHLY by using an integrated pressure rinsing device or manually rinsing three times. Add was to sprayer at time of filling and dispose of safely.

DO NOT MIX, APPLY OR STORE GLYPHO-RAPID IN GALVANISED OR UNLINED MILD STEEL CONTAINERS OR TANKS. KEEP TANKS WELL VENTED AND CLEAR OF ALL SOURCES OF IGNITION.

APPLICATION & SPRAY QUALITY Conventional hydraulic sprayers

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Conventional nydraulic sprayers Knapsack sprayers Prepared spray solution should be applied as a MEDIUM or COARSE spray (BCPC definition) through conventional hydraulic sprayers (tractor-mounted/drawn or knapsack) at nozzle pressures not exceeding 2.5 bar (35 psi). Glypho-Rapid is a systemic weedkiller and is active at low doses. Always take extreme care to avoid spray drift. DO NOT SPRAY in windy weather or near to desirable species or amenity plants as drift onto other crops or vegetation can cause potentiation of desirable species.

cause severe plant injury or destruction.

SUITABLE NOZZLES FOR HYDRAULIC SPRAYERS

Sprayer type	Low Volume Application	Medium Volume Application
Tractor mounted or drawn	Hardi 4110-14 or equivalent nozzles	Hardi 4110-20: 4110-30; Lumark 04-F110; 08-F110 Teejet 11004; 11008 or equivalent nozzles
Knapsack	Cooper Pegler VLV Orange VLV Blue	Hardi 4110-16 Lumark 03-F110 Polyjet green; blue: red

SOILS

Glypho-Rapid may be used to control weeds on all mineral or organic soils or surfaces, including ash and gravel. Only weeds showing green leaf at the time of application can be killed. There is no residual activity with Glypho-Rapid.

COMPATIBILITY

DO NOT mix with any herbicide, insecticide or fungicide.

FUTURE PLANTING

Glypho-Rapid has no long-lasting herbicidal activity in soils after application. Agricultural and horticultural quality soils may be planted up with trees after not less than 7 days after application, unless directed otherwise. Other amenity plants may be planted after the treated vegetation has died back or after cultivation. Under normal weather conditions, cultivations may be conducted 7 days after treatment. Under poor growing conditions wait for the characteristic red/yellow leaf symptoms to appear before cultivating.

CARE OF EQUIPMENT Wash equipment thoroughly after use with water and cleaning agent to remove traces of herbicide. Traces of herbicide left in the equipment may seriously damage or destroy crops sprayed with the same equipment at a later date.

STORAGE

s above 0°c but not exceeding 30°c

Keep temperatures above 0°c but not exceeding 30°c.		
KNAPSACK RA	TE RECKONER	
METRIC-Medium Volume Application		
PRODUCT RECOMMENDATION (litres of product in l/ha of water)	Amount Glypho-Rapid per 10 litres to treat 400 m ²	
2.4 litres in 250 l/ha 3.2 litres in 250 l/ha 4.0 litres in 250 l/ha	96 ml 128 ml 160 ml	
METRIC-Low Vol	lume Application	
PRODUCT RECOMMENDATION (litres of product in l/ha of water)	Amount Glypho-Rapid per 10 litres to treat 1000 m ²	
2.4 litres in 100 l/ha 3.2 litres in 100 l/ha 4 litres in 100 l/ha	240 ml 320 ml 400 ml	
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