

### SAFETY INFORMATION ROUNDUP BIACTIVE XE

#### UFI: KPF1-E0Y7-K009-RH2Q

Soluble concentrate containing 360 g/L glyphosate, present as 441g/L (35.3% w/w) of the potassium salt of glyphosate.

#### Warning

#### Causes serious eye irritation Toxic to aquatic life with long lasting effects

Wash hands thoroughly after handling.

Wear protective gloves/protective clothing/eye protection/face protection. Keep only in original container.

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.

Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for triple rinsed empty containers which can be disposed of non-hazardous waste. To avoid risks to human health and the environment, comply with the instructions for use.

PCS Number 07260

#### PROTECT FROM FROST Store in a cool dry place

READ CAREFULLY ALL RECOMMENDATIONS FOR USE GIVEN WITH THIS CONTAINER. All users must ensure that they have read the recommendations for use and follow its advice before using the product

Freephone Tel: 1800 818534 Website: www.bayercropscience.ie FOR 24-HOUR EMERGENCY INFORMATION CONTACT BAYER CROPSCIENCE LTD. TELEPHONE 00800 1020 3333

IE, 5L, F, 063E, MONXXXXXXX rA1



- Herbicide GROUP 9 HERBICIDE

This product is a soluble concentrate containing 360 g/L glyphosate, present as 441g/L (35.3% w/w) of the potassium salt of glyphosate.

A foliar applied translocated herbicide for the control of annual and perennial grass and broad-leaved weeds before sowing or planting all crops.

For use pre-emergence and pre-harvest in cereals and certain other crops, for destruction of grassland, and set-aside and for use in stubbles, orchards, forestry and non-crop areas.

Degraded by microorganisms/microbes in the soil.

For Professional Use only





DIRECTIONS FOR USE											
CROP	MAXIMUM Single Dose L/HA	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, potato, sugar beet, swede, turnip, vining pea, wheat	1.33	-	1.33 L/ha/crop	Pre-emergence of crop							
*Pre-harvest – wheat, barley, oats, triticale, rye, spelt	4.0	1	4.0 L/ha	7 days before harvest							
*Pre-harvest – oilseed rape and linseed	4.0	0	4.0 L/ha	14 days before harvest							
*Pre-harvest – Peas (combining)	4.0		4.0 L/ha/crop	7 days before harvest							
Stubbles (including destruction of cover crops)	4.0	-	4.0 L/ha/year	2-5 days pre-cultivation/drilling/planting							
Set-aside/fallow	4.0	-	4.0 L/ha/year	2-5 days pre-cultivation/drilling/planting							
Grassland destruction	4.0	1 per year	4.0 L/ha	5 days before cutting/grazing							
Apples, pears	5.0	N -	▶ 5.0 L/ha/year	Post-harvest before green cluster stage							
Cherries, plums	5.0	X	5.0 L/ha/year	After leaf fall/before white-bud stage							
Non-cropped areas (hard and permeable surfaces)	5.0	-	5.0 L/ha/year	-							
Forestry	4.0	-	4.0 L/ha	See recommendation table							
Specific weeds controlled: Control of a range of annual and Perennial grass and broadleaf weeds.	rennial *May only be applied when crop is > BBCH 87 and grain/seed moisture < 30%										

#### Authorisation holder:

Bayer CropScience Ltd. 230 Cambridge Science Park Milton Road, Cambridge, CB4 0WB, United Kingdom

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#### Marketing company:

Bayer CropScience Ltd, Bayer Ltd, 1st Floor, The Grange Offices The Grange, Brewery Road, Stillorgan, Co. Dublin A94 H2K7

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### SAFETY PRECAUTIONS

**Environmental Protection** 

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



# READ CAREFULLY ALL

### RECOMMENDATIONS FOR USE GIVEN WITH THIS CONTAINER.

All users must ensure that they have read the recommendations for use and follow its advice before using the product.

### WARNINGS

EXTREME CARE MUST BE TAKEN TO AVOI SPRAY DRIFT ONTO NON-CROP PLANTS OUTSIDE OF THE TARGET AREA. DO NOT MIX. STORE OR APPLY ROUNDUP BIACTIVE XE IN GALVANISED OR UNLINED STEEL CONTAINERS OR SPRAY TANKS

DO NOT leave sprav mixtures in tank for long periods and make sure tanks are WELL VENTED.

# **GENERAL PROPERTIES**

ROUNDUP BIACTIVE XE herbicide is an aqueous solution containing 360 g/l glyphosate. It is a foliar-acting herbicide with broad-spectrum activity. It is taken up by foliage and translocated to underground roots, rhizomes and stolons, providing control of both annual and perennial grasses and broad-leaved weeds.

# EFFECTS OF WEATHER

A period without rain of at least 6 hours, and preferably 24 hours, must follow application of ROUNDUP BIACTIVE XE herbicide.

Do not spray in windy conditions as drift onto desired plants or crops could severely damage or destroy them.

Do not spray on to weeds suffering from drought, water-logging, heat or frost, otherwise poor control may result.

# WEED SUSCEPTIBILITY

ROUNDUP BIACTIVE XE herbicide controls most emerged grasses and broad-leaved weeds. It is important that all weeds are at the correct growth stage when treated, otherwise some re-growth may occur and this will need re-treatment.

Apply ROUNDUP BIACTIVE XE herbicide once grasses and broad-leaved weeds have emerged and they have ACTIVELY GROWING green leaves.

- PERENNIAL GRASSES must have full emergence of healthy, green leaf. (Common Couch, for example, becomes susceptible at the onset of tillering and new rhizome growth, which usually occurs when plants have 4-5 leaves, each with 10-15 cm of new growth).
- PERENNIAL BROAD-LEAVED WEEDS are most susceptible around the flowering stage.
- ANNUAL GRASSES AND BROAD-LEAVED WEEDS should have at least 5 cm of leaf, or 2 expanded true leaves, respectively. In setaside, annual grasses are best treated at full ear emergence, or before stem elongation. Application during the stem extension phase of annual grasses e.g. Black-grass and Brome species on set-aside between the end of April and end of May, may result in poor control and require re-treatment.
- BRACKEN should be treated after frond tips are unfurled, but pre-senescence.
- OTHER SPECIES recommendations for specific Areas of Use are given in the Recommendation Tables pages 2-7.
- This product will not give an acceptable level of control of Horsetails (Equisetum arvense)-repeat treatment will be necessary.

### WEED RESISTANCE STRATEGY

There is risk for the development of weed resistance to ROUNDUP BIACTIVE XE.

A strategy for preventing and managing weed resistance should be adopted. This should include integrating herbicides with a programme of cultural control measures. Growers are encouraged to implement a weed resistance strategy based on (a) good agricultural practices and (b) good plant protection practices by:

- Following label recommendations
- The adoption of complimentary weed control practices
- Minimising the risk of spreading weed infestations
- The implementation of good spraying practice to maintain effective weed contro
- Using the correct nozzles to maximise coverage
- Application only under appropriate weather conditions
- Monitoring performance and reporting any unexpected results to your distributor.

### TANK-MIXTURES

Do not tank-mix ROUNDUP BIACTIVE XE with adjuvants, pesticides or fertilisers. except as advised by manufacturer.

### APPLICATION

### **Conventional Hydraulic Sprayers**

Knapsack sprayers and tractor mounted or powered sprayers may be used. These should be capable of applying accurately 100 – 400 L/ha within a pressure range of 1.5 - 2.5 bars (20 - 35 psi).

### Medium Volume Application

Avoid high water volumes which may lead to run-off from the treated vegetation, resulting in reduced control. Nozzles producing a medium or coarse spray (BCPC definition) should be used to minimise the risk of drift.

### Low Volume Application

Nozzles which produce a medium spray (BCPC definition) should be used to minimise the risk of drift.

### Filling the Sprayer

Knapsack: Ensure the knapsack applicator is correctly calibrated using an appropriate nozzle for the intended job. Part fill the knapsack spraver with water. Add the required volume of ROUNDUP BIACTIVE XE concentrate and ensure thorough mixing of product through gentle agitation with the lid on the sprav tank. If necessary, triple rinse the measuring vessel / empty pesticide container with clean water and add the rinse water to the spray tank. Fill the sprayer with further clean water to the necessary level. Never mix up more product than is required for the job.

Once application is complete, thoroughly rinse the spraver / clean the filters with clean water and apply in an unsprayed area intended for treatment. If unsure, consult best practice guidance.

Tractor Mounted: To avoid foaming do not use top tank agitation. Half fill the spray tank with clean water, start gentle agitation. then add the correct amount of ROUNDUP BIACTIVE XE. Top up the tank with water to the required level. Use of a defoamer may be necessary.

### CALIBRATION

All sprayers should always be calibrated before use. This is essential when nozzles are changed or if a different dose of product is to be applied.

### SPRAYER MAINTENANCE

Ensure the sprayer is in good working order and replace damaged, worn or malfunctioning parts before use. Carry out maintenance according to the instructions of the spraver manufacturer.

## SPRAYER HYGIENE

It is essential to thoroughly clean-out spray tanks, pumps and pipelines and nozzle or disc assemblies, with a recommended detergent cleaner, between applying this product and other pesticides to avoid contamination from pesticide residues.

### CAUTION

- I. Always wash out the sprayer thoroughly before and after use.
- Do not mix or apply in galvanised or mild steel containers, such as old steel drums or galvanised watering cans.

## HAND-HELD EQUIPMENT:

- Knapsack Sprayer Applicators
- Use in Orchard and Non-Crop • When used at a walking speed of 1 m/ sec to apply a swath of 1 m width, most knapsack sprayers deliver 200 L/ha spray volume (or 10 litres per 500 m<sup>2</sup>).
- To apply 4.0 L/ha of ROUNDUP BIACTIVE XE, therefore, use a 2 % solution (e.g. 200 mI ROUNDUP BIACTIVE XE made up to 10 litres).

application.

 When used as above, knapsack sprayers fitted with low volume nozzles typically deliver 100 L/ha spray volume (or 10 litres per 1000 m<sup>2</sup>).

• To apply 4 L/ha ROUNDUP BIACTIVE XE in this case, use a 4 % solution.

### GENERAL CAUTIONS

Applications of lime, fertiliser, farmyard manure and pesticides should be delayed until 5 days after application of ROUNDUP BIACTIVE XE.

Reduced control is likely where weed growth is impaired by natural senescence, drought, high temperature, a covering of dust, flooding or severe/prolonged frost at, or immediately after application.

Take extreme care to avoid drift, particularly when using near or alongside hedgerows. A rain-free period of at least 6 hours and preferably 24 hours should follow

After application, large concentrations decaying foliage, stolons, roots or rhizome should be dispersed or buried by thorough cultivation before crop drilling.

Decaying vegetation following application of ROUNDUP BIACTIVE XE may temporarily delay the emergence and early growth of crops direct drilled within 48 hours of spraying of annual weeds or within 24 hours after cultivation following spraying of annual

METRIC CONVERSION TABLES FOR **ROUNDUP BIACTIVE XE FOR 20 LITRE** PACK

ĸ			UK IN
	Area treated	by the pack	Eye co
late L/ha	Hectares	Acres	1
1.0	20	49	1
2.0	10	24	1
3.2	6.25	15.6	
4.0	5	12.3	Skin c
9.5			Inhala
			Advice doctor

## FIRST AID INFORMATION IN THE EVENT OF ACCIDENTAL EXPOSURE OR INGESTION

#### Rinse immediately with plenty ontact of water, also under the eyelids, for at least 15 minutes. Remove contact lenses if present, after the first 5 minutes, then contin-ue rinsing eye. Get medical attention if irritation de-velops and persists. contact Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Get medical attention if irritation de-velops and persists. Move to fresh air. Keep patient warm and at rest. Call a physician or poison control center immediately. Call a physician or poison control center immediately. Rinse out mouth and give water in small sips to drink. DO NOT induce vomiting unless directed to do so by a physician or poison control center Never give anything by mouth to an unconscious person. Do not leave victim unattended. This product is not an inhibitor of e to cholinesterase. For 24-hour emergency information contact: 00800 1020 3333. or For information or to report a poisoning incident contact The National Poisons Information Centre, Beaumont Hospital, Dublin (01-8092166), retain the label for reference Treatment with atropine and oximes is not indicated.

# MATERIAL SAFETY DATA SHEET

A material safety data sheet for this product is available on request: www.bayercropscience.ie or call 1800 818534.

### TRADEMARK REFERENCES

ROUNDUP BIACTIVE ® is a Registered Trademark of Bayer.

All other brand names referred to are trademarks of other manufacturers in which proprietary rights may exist.

DIRECTIONS FOR USE										
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Post-planting & pre-crop emergence: Barley, bulb onion, combining pea, durum wheat, field bean, leek, linseed, mustard, oats, oilsed rape, potato, sugar beet, swede, turnip, vining pea, wheat	1.33	-	1.33 L/ha/crop							
*Pre-harvest – wheat, barley, oats, triticale, rye, spelt	4.0	1	4.0 L/ha	7 days before harvest						
*Pre-harvest – oilseed rape and linseed	4.0	1	4.0 L/ha	14 days before harvest						
*Pre-harvest – Peas (combining)	4.0	1	4.0 L/ha/crop	7 days before harvest						
Stubbles (including destruction of cover crops)	4.0	-	4.0 L/ha/year	2-5 days pre-cultivation/drilling planting						
Set-aside/fallow	4.0	-	4.0 L/ha/year	2-5 days pre-cultivation/drilling planting						
Grassland destruction	4.0	1 per year	4.0 L/ha	5 days before cutting/grazing						
Apples, pears	5.0	-	5.0 L/ha/year	Post-harvest before green clust stage						
Cherries, plums	5.0	-	5.0 L/ha/year	After leaf fall/before white-bud stage						
Non-cropped areas (hard and permeable surfaces)	5.0	-	5.0 L/ha/year	-						
Forestry	4.0	-	4.0 L/ha	See recommendation table						
Specific weeds controlled: Control of a range of annual and Perennial grass and broadleaf weeds.	Other Specific r *May only be app		BBCH 87 and grain,	/seed moisture < 30%						

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# **RECOMMENDATION TABLES**

AREA OF USE	CROP	TARGET WEEDS / USAGE	MAXIMUM NUMBER OF APPLICATIONS	WEED INFESTATION	APPLICATION RATE L/ha	WATER VOLUME	APPLICATION TIMING AND GUIDANCE	AREA OF USE	CROP	TARGET WEEDS/USAGE	MAXIMUM Number of Treatments	WEED INFESTATION	APPLICATION RATE L/ha	WATER VOLUME	APPLICATION TIMING AND GUIDANCE	AREA OF USE	CROP	TARGET WEEDS/ USAGE	MAXIMUM NUMBER OF TREATMENTS	WEED INFESTATION	APPLICATION RATE L/ha	WATER VOLUME	
ARABLE TR CROPS*	WHEAT, BARLEY, OATS, TRITICALE, RYE, SPELT	Common Couch, Black Bent, Creeping Bent	1	1-25 shoots/m <sup>2</sup> Up to 75 shoots/m <sup>2</sup> Over 75 shoots/m <sup>2</sup>	2.0 3.0 4.0	30% Harvest intervals: 100-250 L/ha# CEREALS, PEAS, OILSEED RAPE	< 30%	SET ASIDE / Fallow	BEFORE or DURING REMOVAL FROM PRODUCTION	Common Couch	-	Up to 75 shoots/m² Over 75 shoots/m²		100-250 L/ha	Where topping is not practised, spray before seed set.       (Top fruit         Before using on land taken out of production as part of a grant aided scheme, ensure compliance with the management rules of that scheme. Do not 'top' or cultivate immediately before application.       (Top fruit         For PERENNIAL weed control, allow:       NON-CR	ORCHARDS (Top fruit)	APPLE, PEAR, PLUM, CHERRY,	Perennial grasses, broad-leaved weeds	-	All levels of most species	5.0	200-400 L/ha	Spray apple stone
	OILSEED RAPE, LINSEED	1	1	Up to 75 shoots/m² Over 75 shoots/m²	3.0 4.0					Perennial broad-leaved weeds and other perennial	-	-						Root suckers	-	-	5.0	-	Treat Trees Avoid
	COMBINING PEAS		1	Up to 75 shoots/m <sup>2</sup> Over 75 shoots/m <sup>2</sup>	3.0 4.0	100-250 L/ha	Use high clearance, narrow wheeled tractors, wide booms and crop dividers.			grasses Annual weeds:	-	· · · · · · · · · · · · · · · · · · ·	15			NON-CROPPED AREAS	Including industrial sites, roadsides, paths,	VEGETATION	-	Annual weeds	1.50	100-250 L/ha	50 L/ha Do no
	WHEAT, BARLEY, OATS, TRITICALE, RYE, SPELT Weeds and Other	1	All levels/species	4.0	100-250 L/ha	250 L/ha DO NOT TREAT CROPS GROWN FOR SEED. Consult grain merchant before treating crops grown on contract or intended			<ul> <li>autumn/spring of year</li> <li>1 only</li> <li>summer of year 1 and</li> </ul>			3.0	Ø	-21+ days growth before spraying in spring     AREAS       -5 days before cultivating or drilling.     (HARD AND       For ANNUAL weed control, allow:     PERMEABLE	hard surfaces and along fences and walls and field	ng		Perennial grasses	5.0	Ur Hand-held equipment	Apply weed confi		
	OILSEED RAPE, LINSEED	Perennial Grasses 1	1	All levels/species	4.0	100-250 L/ha#	0 L/ha#     for malt for distilling.       10 L/ha#     Treated straw must not be used as a horticultural mulch.       0 L/ha#     # Use higher volumes for dense canopies.			thereafter			3.0	150-250 L/ha	– 48 hours before cultivating. SURFACES) Do not direct drill after set-aside.	SURFACES)	edges		-	Perennial Broad- leaved weeds Arable Weeds 4.		equipment	cove
	COMBINING PEAS		1	All levels/species	4.0	100-250 L/ha			AFTER SHORT ROTATION or LONG TERM REMOVA	ROTATION Annual weeds only REMOVAL and some Perennial weeds	-					FORESTRY –		Arable land. Planting.			4.0	Hydraulic sprayers	s All tr
	OILSEED RAPE, LINSEED	Annual weeds, prior to direct combining	1	All levels/species	3.0	100-250 L/ha#		FROM PRODUCTION							PRE-PLANTING		Replanting & Grassland areas			1	100-250 L/ha	7.11.0.1	
STUBBLES B	COMBINING PEAS BEFORE ALL CROPS EXCEPT ORCHARDS	Common Couch, Black Bent, Creeping Bent	-	All levels/species Up to 75 shoots/m <sup>2</sup> Over 75 shoots/m <sup>2</sup>	3.0 3.0 4.0	100-250 L/ha 100-250 L/ha		GRASSLAND GRASS -DESTRUCTION	See Table 1	At these rates control may vary, depending on conditions at the	4.0	150-250 L/ha	Pre-cut, silage ground: treat 5 days before 2nd or 3rd cut. Consume in normal manner. Post-cut, silage ground and permanent pasture: allow adequate re-growth of grasses and especially broad-leaved weeds prior to application. Grass may be conserved or grazed by cattle, dairy cows or sheep	ALL SPECIES	Annual/perennial grasses and broad-	-	-	4.0	Knapsack sprayers:	It is E grow			
		Annual grasses; volunteer potatoes (autumn only)	-	All levels/species	4.0					C				time of application.			leaved weeds Woody weeds, including Bracken,	-	-	3.0	200-250 L/ha	Treat Treat Treat	
		Volunteer cereals and annual weeds	-	All levels/species	1.5										5+ days after spraying. REMOVE POISONOUS PLANTS BEFORE GRAZING/MOWING.			Beech, brush, Brambles, Sycamore, Oak, Hazel, Willow					but a Treat While
		Perennial broad-leaved weeds	-	-	4.0	_	Allow 7 days before planting trees	APPLICATION RATE FOR GRASSLAND DESTRUCTION			<u></u>						and Ash Heather (peat soils)	-	-	4.0	-	sum only	
	BEFORE ORCHARD PLANTING	Pre-plant clean-up	-	-	4.0					3.0 L/ha					4.0 L/ha	FORESTRY		Grass weeds	-	-	2.0	Hydraulic sprayers	
POST- PLANTING & PRE-CROP EMERGENCE	BARLEY, BULB ONION, COMBINING PEAR, DURUM WHEAT, FIELD BEAN, LEEK, LINSEED, MUTARD, OATS, OILSEED RAPE, POTATO, SUGAR BEET, SWEDE, TURNIF VINING PEA, WHEAT	Volunteer cereals and annual weeds	-	-	1.33	100-250 L/ha	CAUTION – Ensure that spraying precedes ANY crop emergence.		Annual Meadow-grass Common Chickweed Common Mouse-ear Dock seedlings Italian Rye-grass Meadow Fescue		Meadow Fo Rough Meado Speedwell s Timoth Mayweed sj	w-grass pecies y		Black-bent Broad-leaved Dock Cock's-foot Common Bent Common Couch Creeping Bent	Creeping Soft-grass Curled Dock Perennial Rye-grass Plantains Soft Brome Yorkshire Fog	- POST- PLANTING (OVERALL DORMANT SEASON IN CERTAIN CONIFERS)		Bracken, Beech & Birch Brambles (Only moderate control can be expected in this situation)			3.0	200-250 L/ha Or Hand-held equipment	PURP If ove contri to tes applid These Inade The ti locati
																							July grow

### APPLICATION TIMING AND GUIDANCE

- Spray AFTER autumn leaf-fall and BEFORE:
- apples, pears: green cluster stage
- stone fruit: white bud stage
- Treat root suckers in late spring only.
- Trees must have been established 2+ years.
- Avoid contact with tree 30+ cm above ground.
- Do not use under polythene or glass.
- Apply this product carefully. Ensure spraying takes place only when weeds are actively growing (normally March to October) and is confined only to visible weeds including those in the 30 cm swath covering the kerb edge and road gulley – do not overspray drains.

All tree species may be planted 7 days or more after treatment.

It is ESSENTIAL to use a TREE GUARD for all applications made in the growing season.

- Treat BRACKEN after frond tips are unfurled but before senescence.
- Treat HEATHER from late August to end September.
- Treat WOODY WEEDS from June to August, before leaf senescence, but after new crop growth has hardened.
- Treat HEATHER from late August
- While moderate control in the current season will be observed on summer treated woody weeds, benefits of autumn treated weeds will only be achieved in the following season.

DO NOT OVERALL SPRAY trees being grown for ORNAMENTAL PURPOSES, including CHRISTMAS TREES.

- If overall application takes place after the optimum timing weed control may be reduced. It is advisable to spray a limited area of forest to test crop safety under local conditions before widespread overall application in subsequent years.
- These recommended application rates refer to Forestry usage only. Inadequate control may result if used in other areas.
- The timing of hardening of leader growth varies considerably between locations and between seasons. It may occur as early as the end of July or be delayed to October or later. To avoid damage to Lammas growth, sprays should be directed away from leaders.