



(H) - Herbicide

Bayer Amenity



Improved performance



360 g/L glyphosate



Rainfast from 1 hour



Superior performance in challenging conditions

e 5 Litres

A1 GB - GB30465147a

This product must only be used in England, Scotland and Wales.

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

For the control of emerged weeds in grassland, orchards, industrial and amenity situations, in forestry and in aquatic areas.

Degraded by micro-organisms/ microbes in the soil. The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

This product contains a soluble concentrate containing 360 g/l glyphosate, present as 441 g/l (35% ww) of the potassium salt of glyphosate.

MAPP Number 21225

PROTECT FROM FROST

BAYER CROPSCIENCE LIMITED 230 Cambridge Science Park, Milton Road, Cambridge, CB4 0WB, UK. Telephone: 01223 226500; https://cropscience.bayer.co.uk/

GROUP 9 HERBICIDE

Crop specific information

CROPS OR SITUATIONS	MAXIMUM INDIVIDUAL DOSE (kg product per hectare)	MAXIMUM TOTAL DOSE (kg product / hectare / crop)	LATEST TIME OF APPLICATION
Permanent grassland (destruction), rotational grassland (destruction).	6	6	5 days before harvest, grazing or drilling
Apple and pear orchards.	5	5	After harvest (post leaf-fall) but before green cluster stage
Cherry, plum and damson orchards.	5	5	After harvest (post leaf-fall) but before white bud stage
All edible and non-edible crops (destruction before sowing/planting)	5	5	-
Natural surfaces not intended to bear vegetation, permeable surfaces overlaying soil, hard surfaces	5	-	-
Enclosed waters, open waters, land immediately adjacent to aquatic area.	6	-	-
Forestry: Weed control	10 litres/hectare	-	-
Stump application	200 ml/litre of water (20% solution of product in water)	-	-
Chemical thinning (by injection)	2 ml per 10 cm diameter (or less) of tree	-	-
Amenity vegetation	5 litres/hectare	-	-

OTHER SPECIFIC RESTRICTIONS:

Users must consult the appropriate water regulatory body (Environment Agency/Scottish Environmental Protection Agency/Natural Resources Wales) before using the product near water and must obtain their agreement before using this product to control aguatic Weed wiper Mini 1:2.25 dilution with water weeds. The maximum concentration of active substance Other Wipers 1:1.5 dilution with water in treated water should not exceed 0.2 ppm. When applying through rotary atomisers, the spray droplet spectra produced must be of a minimum Volume Median Diameter (VMD) of 200 microns.

Weed wipers may be used in any recommended crop where the wiper or chemical does not touch the growing When using weed wipers, the maximum concentrations used must not exceed the following: For stump application the maximum concentration must not exceed 200 ml product per 1.0 litre water.

AMENITY, INDUSTRIAL AND GENERAL WEED CONTROL

Exclusion Times

People, pets and wildlife need not be kept out of treated areas. It is best not to walk in areas where the spray is still wet as transfer to other vegetation may lead to unwanted damage to other foliage. Once the spray is dry this cannot occur.

Area of Use

Boundup ProActive is recommended for control of annual and perennial grasses

and broad-leaved weeds in non-crop areas, for cleaning up weedy ground prior to planting or sowing and for aguatic weed control. Roundup ProActive may also be used as a directed spray in ornamental plantings. orchards and for spot treating weeds in grassland. Boundup ProActive must be targeted only at weed growth on hard surfaces such as roadsides and paths. (see recommendation table for details).

Application Bate

1.5 to 6 litres/ha - refer to Recommendation Tables

DIRECTIONS FOR US

the Product Label. All instructions within this section crop drilling. must be read carefully in order to obtain safe and successful use of this product.

Warninge

EXTREME CARE SHOULD BE TAKEN TO AVOID SPRAY DRIFT AS THIS CAN SEVERELY DAMAGE NEIGHBOURING CROPS OR PLANTS.

DO NOT MIX, STORE OR APPLY BOUNDUP ProActive IN GALVANISED OR UNLINED STEEL CONTAINERS OR SPRAY TANKS.

DO NOT leave spray mixtures in tank for long periods and contain higher levels of toxins. Animals should and make sure tanks are WELL VENTED.

Restrictions

A period without rain of at least 6 hours and preferably 24 hours must follow application of Roundup ProActive.

Do not spray onto weeds which are naturally senescent, or where growth is impaired by drought. high temperatures, a covering of dust, flooding or frost at, or immediately after application, otherwise stage when treated, otherwise some re-growth may poor control may result.

Do not spray in windy conditions as drift onto desired crops or vegetation can severely damaged and broad-leaved weeds have emerged and they or destroy them.

Do not tank-mix Roundup ProActive with adjuvants. pesticides or fertilisers, except as specified in the Compatibility section.

After application, large concentrations of decaying foliage, stolons, roots or rhizomes should be IMPORTANT: This information is approved as part of dispersed or buried by thorough cultivation before

> Applications of lime, fertiliser, farmyard manure and pesticides should be delayed until 5 days after application of Roundup ProActive.

Keep stock out of treated areas for at least 5 days TREATED POISONOUS PLANT SPECIES MUST BE REMOVED BEFORE REGRAZING OR CONSERVING. Where Ragwort is present users should consult the Code of Practice on How to Prevent the Spread of Ragwort, Ragwort plants spraved with this herbicide are more palatable be excluded from treated areas until any Ragwort has completely recovered or died and there is no visible sign of the dead weed. Do not include treated Ragwort in hay or silage crops.

Weeds controlled

Boundup ProActive herbicide controls most emerged grasses and broad-leaved weeds. It is important that all weeds are at the correct growth occur and this will need re-treatment.

Apply Roundup ProActive herbicide once grasses 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 arowth)
- 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 set-aside, 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
- This product will not give an acceptable level of control of Horsetails (Equisetum arvense)-repeat treatment will be necessary.

Roundup ProActive herbicide controls emerged and Correctly calibrate all sprayers under field or use floating aquatic weeds including Common Reed, Reed conditions prior to application. Sweet-grass, Reed Canary-grass and Water-lily.

Treat when the weeds are actively growing with full emergence of green leaf, at flowering and before dieback. Best results are obtained from applications in the periods from mid-July to mid-August on Waterlilies and mid-August to mid- September on Reeds.

Following crops

Upon soil adsorption the herbicidal properties of Roundup ProActive are lost permitting the drilling of crops 48 hours after application. See the 'Recommendation Tables' for specific restrictions.

Application Guidance

Use the following guidance when spraying at a rate of 5 L/ha.

For more details of suitable nozzles see 'Mixing and spraying' section.

	SPRAYING WITH 5 L/HA							
IYDRAULIC Sprayers	STANDARD Volume (200 L/HA)*	LOW VOLUME (100 L/HA)						
loom sprayer	5 litres in 200 litres water covers 1 ha	5 litres in 100 litres water covers 1 ha						
ínapsack / andheld prayer*	250 ml in 10 litres water covers 500 m ²	500 ml in 10 litres water covers 1000 m²						

* Walking speed of 1 m/second and 1 m swath

Roundup ProActive can also be applied using Spraving' section

Mixing and spraving

Roundup ProActive mixes readily with water and can

a) Tractor mounted and powered hydraulic sprayers

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

Medium Volume application (150-300 L/ha) Avoid high water volumes (>300 L/ha) which may lead to run-off from the treated vegetation, resulting in reduced control. Low drift nozzles such as air induction and pre-orifice types producing a medium or coarse spray (BCPC definition) should be used to minimise the risk of drift.

rotary atomisers and weed wipers. See 'Mixing and

be applied in spray volumes ranging from 10-400 L/ ha using tractor mounted, knapsack, rotary atomisers and hand-held sprayers. Specialised application equipment such as weed wipers, stem injection and spot gun applicators may be used where indicated.

These should be capable of applying accurately 80–400 L/ha within a pressure range of 1.5–2.5 bars (20–35 psi).

Low Volume Application (minimum 80 L/ha) Low volume application can be achieved by reducing pressure and the appropriate nozzle selection. Low drift nozzles which produce a medium spray quality (BCPC definition) should be used to minimise the risk of drift

b) Knapsack Spravers

Recommended delivery range is 80–250 L/ha. Half fill the spray tank with clean water add the correct amount of Roundup ProActive and top up with water.

When used at a walking speed of 1 metre/second to apply a swath of 1 metre width, most knapsack spravers fitted with a Hypro AN 1.2 or similar nozzle Hogweed. deliver approximately 200 L/ha spray volume (or 10 L per 500 m²). To apply 3.0 L/ha of Boundup ProActive. therefore, use a 1.5% solution, i.e. 150 ml Roundup ProActive made up to 10 litres, Similarly, knapsack sprayers fitted with low volume nozzles such as Hypro DT 1.5 typically deliver approximately 100 L/ha spray volume. To apply 3.0 L/ha Boundup ProActive in this case use 3.0% solution.

) Rotary Atomisers

Roundup ProActive may be applied neat through specialised ULV applicators which have drift reducing systems or at a spray volume of 10-40 L/ha through conventional rotary atomisers.

Hand-held machines can be used to apply a spray volume of 10-40 L/ha, e.g. Herbi and Herbaflex. Tractor-mounted rotary atomiser boom sprayers are suitable for use in forest situations to apply a spray volume of 10-40 L/ha.

When rotary atomisers are used to apply Roundup ProActive ensure that the droplet diameter falls within the range 200-300 microns for all uses.

Stir the correct amount of Roundup ProActive to control the particular target species into the spraver bottle half filled with clean water. Top up with water, close the top and shake gently to ensure good mixing.

d) Weed Wipers

For ropewick applicators use a concentration of 1 part Roundup ProActive to 2 parts of water and add a water-soluble dve if required. Care should be taken to avoid dripping onto wanted vegetation.

For new generation weed wipers, use 1part Roundup ProActive to 10 or 20 parts of water or as directed by manufacturer's instructions. A list of machines is included in the Company Advisory section at the end of this label.

e) Cut Stump Applicators

For out stump treatment an Enso attachment to rotary saws may be used. This technique is specific to scrub clearance in forestry. A suitable water soluble dve may hausad

f) Stem injection

Use a hatchet to cut one notch in trees up to 10cm diameter and two to three notches in trees above 10cm diameter Use 2 ml of undiluted Boundup ProActive per notch. Specialist stem injection equipment can be used to inject 2 mls Roundup ProActive into hollow stems such as Japanese Knotweed and Giant

g) Spot Gun Applicators

Spot oun applicators are for the treatment of individual weeds.

SPOT	AMOUNT OF ROUNDUP PROACTIVE (ML) PER 5 LITRES SPRAY SOLUTION:									
DIAMET (METRES	 3.0 L/HA	4.0 L/HA	5.0 L/HA	10.0 L/HA						
0.3	20	28	35	70						
0.6	85	110	140	280						

When used in paddocks keep livestock out of treated area until treated Bagwort or other poisonous weeds have either been removed or died down completely.

Boat mounted spravers

For use in aquatic situations. Prepare spraver as for knapsack sprayers (Section b above). Calibrate and sprav at the lowest speed possible.

Always apply against the direction of any current.

Compatibility

Roundup ProActive is physically compatible with some other pesticides. For up to date information on compatible products contact Bayer Crop Science.

Roundup ProActive is compatible with Mixture B NF (ADJ 0570). Where conventional hydraulic spravers are being used Mixture B NF may be added to the spray tank solution, at a rate of 2% of the final water volume, for all pre-plant and post-plant directed sprays only.

DO NOT APPLY WITH MIXTURE B NF TO EDIBLE CROPS, GRASSLAND OR AQUATIC WEEDS.

atomiser spravers.

N.B. Maintain continuous agitation when using Roundup ProActive in a tank-mixture. For knapsack sprayers: mix thoroughly and use

immediately when using Roundup ProActive in tank mixture Always consult manufacturers' recommendations

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COMPANY ADVISORY INFORMATION

This section is not part of the Product Label under the Plant Protection Products Regulations 1995 and provides additional advice on the product.

General Information

Roundup ProActive herbicide is an advanced formulation containing glyphosate. Roundup ProActive 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. Roundup ProActive is rapidly adsorbed onto particulate matter in soils and water and is quickly degraded by the micro-organisms present in soil and aquatic bottom sediments. Until degraded, the active ingredient in Roundup ProActive. glyphosate, is practically immobile in soils and is, therefore, unlikely to contaminate groundwater.

Roundup ProActive is a glyphosate formulation which. having no hazard classification, offers a high standard of operator safety. To maximise the intrinsic safety of Roundup ProActive to operator, consumer and environment, the label recommendations and the DEFRA/HSC/NAW publication "Code of Practice for Using Plant Protection Products" of January 2006, should be adhered to.

Symptoms on the weeds

Symptoms of treatment are generally first seen 7-14 days, or longer, if growth is slow after spraying. Leaf symptoms take the form of a reddening then vellowing of the foliage and are first seen on the grass weeds but take longer to appear on broad-leaved weeds. Reaction of nettle is slow.

IMPORTANT: To obtain optimum weed control, weeds must be left undisturbed with no further treatment or cultivation for 7 days after application. Allow 2-3 weeks for symptoms to develop then re-treat any unaffected plants using spot treatments.

Do not tank-mix Roundup ProActive when using rotary A covering of dew may reduce efficacy where run-off occurs

> For aquatic weed control, on reeds and grasses leaf symptoms usually appear within 14-21 days of spraving in the early autumn. Complete foliage desiccation usually occurs 30-40 days after spraving. At this stage the reeds can be cut and removed During cold conditions leaf symptoms may not appear before natural dieback but no growth will occur in the season following spraying.

Effects of weather

See Directions for Use (Restrictions)

Boundup ProActive will remain efficacious at low but not freezing temperatures however the onset of symptoms will be delayed.

A covering of dew may reduce efficacy where run-off occurs.

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.

Need resistance strategy

Glyphosate, the active ingredient in Roundup ProActive is a Group H herbicide based on the mode of action classification system of the Herbicide Resistance Action Committee.

Under Best Practice there is a low risk for the development of weed resistance to Roundup ProActive. There are no known cases of weed resistance to glyphosate in UK.

Strains of some annual weeds have developed resistance to glyphosate in some parts of the world leading to poor control. A strategy for preventing and managing such resistance should be adopted. This should include integrating herbicides with a programme of cultural control measures and /or active noredients with a different mode of action.

Jsers are encouraged to implement a weed resistance strategy based on (a) Good Agricultural Practices and (b) Good Plant Protection Practices by:

- Following label recommendations on rates and
- The adoption of Integrated Weed Management practices
- Minimising the risk of spreading weed infestations
- The implementation of good spraying practice to maintain effective weed control
- Using the correct nozzles to maximise coverage

 Application only under appropriate weather conditions

Monitoring performance and reporting any unexpected results to Baver Crop Science.

General Cautions

Take extreme care to avoid drift, particularly when using near or alongside hedgerows. The use of low drift nozzles such as 'air induction' and 'pre-orifice' nozzles are recommended.

New generation weedwipers

Logic Contact 2000, Carier Bollmaster, Allman Ecowipe, Rotowiper (UK) Ltd, C-Dax™ Eliminator WeedswinerTM

Disposal

Follow the guidance on the disposal of surplus spray solution, tank washings, concentrate and containers as given in Section 5 of the DEFRA/HSC NAW publication "Code of Practice for Using Plant Protection Products" January 2006

Spraver 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.

Trademark References

Roundup® is a Registered Trademark of the Baver group.

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

Material Safety Data Sheet

Following the instructions on this Product Label for the specified uses should ensure that the product is used safely and efficaciously for those uses A Material Safety Data Sheet is available on request Download from https://cropscience.baver.co.uk/our-products/amenity or Telephone: 01223 226500

This product must only be used in England Scotland and Wale

This product contains a soluble concentrate containing 360 g/L glyphosate, present as 441 a/L (35% ww) of the potassium salt of alvphosate

aver CropScience Ltd 30 Cambridge Science Park, Milton Boad Cambridge CB4 OWB LIK Jenhone: 01223 226500 Website: https://cronscience.bayer.co.uk

For 24-hour emergency information contact Bayer CronScience Ltd Tel· 0330 678 3382 (24 hr) National Poisons Information Centre UK: 0344 892 0111 (medical professionals only)

ROUNDUP PROACTIVE LIFL: EN12-7076-K000-0UV6 Contains 360 g/L glyphosate, present as 441 g/L (35% ww) of the potassium salt of glyphosate Toxic to aquatic life with long lasting effects Wear protective gloves/protective clothing/eve protection/face protection Collect spillage 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

IMPORTANT INFORMATION:

FOR PROFESSIONAL LISE ONLY AS AN AGRICULTURAL / HORTICULTURAL / INDUSTRIAL / FORESTRY / AQUATIC HERBICIDE Crops/situations: All edible and non-edible crops (destruction, before sowing/planting), Grassland, Apples, pears: plums, cherries, damsons, Natural surfaces not intended to bear vegetation; permeable surfaces overlaving soil; hard surfaces, Enclosed waters, open waters, land immediately adjacent to aquatic areas. Forest, forest nursery (weed control, stump application and chemical thinning). Amenity vegetation.

> Maximum individual dose: Maximum number of treatments: Latest time of application: Other specific restrictions:

Full details are given in the Statutory Area on the attached leafle (Crop Specific Information – marked #)

IMPORTANT: Note that goods treated under the terms of this Great Britain authorisation can only be legally marketed in Northern Ireland if they are in accordance with the statutory EU Maximum Residue Level (MRL) set under Regulation (EC) No 396/2005. This may also apply to residues in animal products where treated crops are fed to livestock. Growers are advised to draw this to the attention of distributors and retailers so that EU MRL breaches and any associated enforcement against goods marketed in Northern Ireland are avoided.

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.

SAFETY PRECAUTIONS

Operator protection

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

* WEAB SUITABLE PROTECTIVE GLOVES when handling the concentrate and when handling contaminated surfaces * WEAR SUITABLE PROTECTIVE CLOTHING (COVERALLS). SUITABLE the National Assembly for Wales Agriculture Department. PROTECTIVE GLOVES AND BUBBER BOOTS when using hand-held The Water Act, 1989. The Water Resources Act 1991, the Control of sprayers, hand-held rotary atomisers, weed wiper equipment, spot aun equipment or when making cut stump treatments OR WHEN the Control of Pollution and Local Government (Northern Ireland) Order USING STEM IN JECTION FOUIPMENT

equipment if a COSHH assessment shows they provide an equal or ditches, drains and ponds/lakes discharging into such water courses. higher standard of protection.

* WASH HANDS AND EXPOSED SKIN before eating and drinking and after work.

Environmental protection

Avoid contamination via drains from farmvards and roads.

Recommendations apply to the use of this herbicide for the control of weeds growing in or by water and must be read in conjunction with the Official Code of Practice entitled "Guidelines for the Use of Herbicides on Weeds in or near Watercourses and Lakes" obtainable from Department of Environment and Bural Affairs (DEERA publications 08459 556000) Scottish Executive, Environment and Rural Affairs Department. Department of Agriculture and Rural Development for Northern Ireland and 1978, may apply to the act of applying Roundup ProActive for the control of * However, engineering controls may replace personal protective weeds growing in or by reservoirs and water courses, e.g. rivers, streams,

Storage and disposal

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS KEEP OUT OF REACH OF CHILDREN KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place. Do not contaminate water with the product or its container except when RINSE CONTAINER THOROUGHLY by using an integrated pressure used as directed. Do not clean application equipment near surface water. rinsing device or manually rinse three times. Add washings to spraver at time of filling and dispose of safely. Triple rinsed containers may be disposed of as non-hazardous waste.

RECOMMENDATION TABLES

AREA OF USE	CROP/ Situation	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION RATE L/HA	WATER VOLUME	APPLICATION TIMING AND GUIDANCE
ALL EDIBLE AND NON-EDIBLE CROPS (DESTRUCTION, BEFORE SOWING/PLANTING)	Vegetation management	-	Annual weeds Perennial grasses Perennial broad-leaved weeds	1.5 4.0 5.0	80-250 L/ha* or hand-held equipment section	*Rotary atomisers may be used at a water volume of 10-40 L/ha. Ensure droplet diameter falls within the range 200-300 microns Do not use in or alongside hedgerows
GRASSLAND - DESTRUCTION	GRASS	Short rotation Ryegrass, longer leys and permanent pasture	Short rotation Ryegrass with annual weeds Leys 2-4 years old with perennial grass weeds Long leys 4-7 years old with perennial broad-leaved weeds Permanent pasture See Weed Table below	3.0 4.0 5.0 6.0	150-250 L/ha*	Treat EITHER before grazing/mowing in June-Oct, when growth is 30-60 cm, not dense and lacking mature seeds, OR regrowth after grazing/mowing. Select the application rate which controls/destroys the least susceptible weed and grass species present in the sward. Grass may be conserved or grazed by cattle, dairy cows or sheep 5+ days after spraying. REMOVE POISONOUS PLANTS BEFORE GRAZING/MOWING. If Ragwort is present, the guidance in the DIRECTIONS FOR USE must be followed. ONLY direct drill grass and clover EITHER into 1-2 year leys without mat, 5+ days after spraying, OR long leys with some mat, in the spring following autumn application.

APPLICATION RATE FOR GRASSLAND DESTRUCTION

	3 L/HA		4 L/HA		5 L/HA	6	6 L/HA		
Annual Meadow-grass Common Chickweed Common Mouse-ear Dock Seedlings Italian Rye-grass Mayweed species	Meadow Fescue Meadow Foxtail Rough Meadow-grass Speedwell species Timothy	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	Bracken** Common Sorrel Common Nettle Creeping Buttercup* Creeping Thistle Daisy Dwarf Thistle Perennial Sow-thistle	Red Clover Sedges Sheep's Sorrel Soft Rush Spear Thistle Tufted Hairgrass Yarrow	Common Ragwort Hard Rush Heath Rush Jointed Rush <i>Molinia</i> (Purple Moor-grass)	Nardus (Mat grass) Red Fescue White Clover* Yellow Rattle Sheep's Fescue		

* White clover is best cut in June and sprayed one month later ** At full frond expansion

Japanese Knotweed cont Japanese Knotweed is an invasive a propagating from tiny fragments of	alien species reducing						AREA OF USE	CROP/SITUATION	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION RATE L/HA	WATER VOLUME	APPLICATION TIMING AND GUIDANCE	AREA OF USE	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION RATE L/HA.	WATER VOLUME	APPLICATION GUIDANCE				
and Countryside Act 1981 and all pa Protection Act 1990. Roundup ProA integrated programme in conjunctio	Active can be used alo	one as part of an erac	dication programme or a	is part of an			ORCHARDS			5	200-400 L/ha	Spray AFTER autumn leaf-fall and BEFORE: Apples, pears - green cluster stage	Forestry: - Post-planting (overall dormant season in certain conifers – conifer release)	Grass weeds - Lowland areas	Black Bent, Cock's-foot, Common Couch, Creeping Soft-grass, False Oat-grass, Fescues, Meadow-	1.5	Hydraulic sprayers: 200-250 L/ha	Species safe to spray when fully dormant and leader growth has hardened: Corsican, Lodgepole and Scots Pines, Norway Spruce, Sitka Spruce, Lawson Cypress. Western Red Cedar.					
Roundup ProActive, but may be stin for use near water. Sites must be mo	mulated to grow by so	oil disturbance and th	hen sprayed. It is particul eated as necessary.		APPLICATION TIMING AND GUIDANCE				Root suckers	-	5		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.		- Upland areas	grasses, Other Bent species, Purple Moor-grass, Sweet Vernal-grass, Tufted Hair-grass, Wavy Hair-grass, Wood Small-reed (Bush grass)	2.0	Hand-held equipment - see 'Mixing and Spraying section	Douglas Fir and Noble Fir – safe to spray when fully dormant and leader growth has hardened but NOT in spring. 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				
Amenity vegetation; Forestry; Ja Natural surfaces not intended	lapanese Knotweed	Foliar application		R VOLUME		sually August/September) but before dieback. Use specialist extending essential; spray the underside as well as the upper surface of the leaves.	AREA OF USE	CROP/SITUATION	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION RATE L/HA	WATER VOLUME	APPLICATION TIMING AND GUIDANCE		Bracken Beech & Birch Brambles	All levels of all species All levels of all species All levels of all species	2.0 2.0 3.0		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.				
to bear vegetation, permeable surfaces overlying soil, hard surfaces; Enclosed waters, open waters.	-		80-25 or hand-hele	50 L/ha Id equipment	growth reaches 1-1.5m again later in same season of	en stems are 1-1.5m high (Usually at end of May) and repeat once re- or the following year. (More re-growth will occur from this timing.)	GRASSLAND, PLANT FREE AREAS, ORNAMENTAL PLANTINGS, AMENITY VEGETATION	-	Individual weeds	All levels		r for wick-type weed wipe OR ater in hot, drv conditions.	rs Weeds must be 10+ cm taller, and wiper 5+ cm higher, than desired vegetation. Contact Bayer or your distributor for specific recommended weed						<u>Caution</u> : 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.				
land immediately adjacent to aquatic area		Stem filling technique	e 10 ml of 20% so	olution per stem	See National Trust Methodology for full details*. Cut stems approx. 200 mm above base of cane & 40 Rupture the central stem tissue with a screwdriver a insert Roundup ProVantage into the hollow stem wit	ind use a spot gun to desirable plants.	VEGETATION				For 'new generat	tion' wipers consult the irer for guidance.	Wiper applicators. Treated POISONOUS WEEDS must be removed or allowed to completely degenerate before grazing or conserving. If Ragwort is present, the guidance in the 'DIRECTIONS FOR USE' must be followed.	Forestry: - Stump application for chemical thinning	Deciduous trees Coniferous trees			10% solution of in water Apply the solution to saturate the rim of the newly cut surface adapted clearing saw, spot gun or paintbrush. Treat as soon felling, in the period November to March/April. Do not apply active sap flow in the spring/early summer. Do not cut trenc					
	-	Stem injection technic		plution per stem	Using specialist stem injection equipment, inject direction	ectly into individual stems. Stems must be >8 mm diameter	Forestry weed contro	-	and for weed control in planted	out trees.									and fill with the solution or use undiluted product. Note: for ease of identification of treated areas a suitable, commercially available, water-soluble dye may be added to the prepared spray solution.				
Natural surfaces not inter	ndad ta baar yar				treatment following foliar spraying.		AREA OF USE	TARGET WEEDS/USA	GE WEED INFESTATION	APPLICATION RATE L/HA.	WATER VOLUM			Forestry: - Chemical thinning by injection of tree stem	Coniferous and deciduous species	-		cut per 10 cm diameter or less) tree	Use a hatchet to cut one notch in trees up to 10 cm diameter and apply 2 ml of the solution to each cut. Use two or three notches in trees over 10 cm diameter. Do not treat in the period of active sap flow in the spring/early summer.				
overlying soil, hard surfac		<u> </u>					Forestry: - Pre-planting	Arable land, planting, replanting, & grassland areas	d Arable weeds Grassland weeds	4.0 5.0	Hydraulic sprayers: 80- or rotary atomisers: 10-4	*Where rota	cies may be planted 7 days or more after treatment ary atomisers are used their droplet diameter must fall within the range 1.	ENCLOSED WATERS, LAND IMMEDIATELY ADJACENT TO AQUATIC AREAS, OPEN	Emerged weeds: reeds, rushes,	Dense infestations only		5.0 L/ha prayers 200-400 L/ha	Users must consult the appropriate Environment Agency Regional Office or Scottish Environmental Protection Agency before applying Roundup				
AREA OF USE	TARGET WEEDS/U		Annual weeds	APPLICATION RATE L/HA	Hydraulic spravers	APPLICATION TIMING AND GUIDANCE Do not use under polythene or glass.	Forestry: - Post-planting (directed) in	Clean-up around trees knapsack applications	with Annual/perennial grasses and broad-leaves	s 4.0		bly as a concentration of 1 part to 49 parts water (2%) It is ESSENTIAL to use a TREE GUARD for all applications made in the growing season.		WATERS	Sedges, grasses and Watercress		(optimum 250 litres) or hand-held equipment See 'Mixing and Spraying.	es) or hand-held equipment	ProActive herbicide in reservoirs, water courses and waterways. Roundup ProActive herbicide may be used for the control of aquatic weeds in the presence of fish if used in strict accordance with the recommendations in this section				
TO BEAR VEGETATION, PERMEABLE SURFACES OVERLYING SOIL, RAILWAY BALLAST	-including roadside	es, paths, Peren	nnial grass weeds I broad-leaved weeds	4.0 5.0	80-250 L/ha* or hand-held equipment.	bo not use under polyarene of grass.	conifers & broad-leaved trees		Woody weeds: 3.0 Bracken/Beech Brush/Brambles		or Weed wiper min 1 part to 2 parts w	i: Treat heather All other wo	en after frond tips are unfurled but before senescence. er late August to end September. ody weeds are treated June-August, before leaf senescence (but after of crop has hardened).		Floating weeds: Dense infestations only -White Water-Iily -Yellow Water-Iily		Fecommendations in this section 6.0 L/ha On Water-lilies it is preferable to use a tractor or boat-mounted sprayer. During Hydraulic sprayer 100-200 L/ha mounted sprayer, do not exceed a pressure of 2.0 Bars (30 p.s.i.). When using a tractor mounted sprayer, do not exceed 8 koh (5 mph). With a boat-mounted sprayer.						
HARD SURFACES (EXCLUDING RAILWAY BALLAST)	Vegetation manage hard surfaces -inclu roadsides, paths, c	luding Peren	Annual weeds nnial grass weeds I broad-leaved weeds	1.5 4.0	Hydraulic sprayers 80-250 L/ha* or hand-held equipment.	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 30cm swath			Sycamore/Oak Hazel/Willow/Ash Heather (peat soils)	4.0	_								TOROW WARDINg			I-held equipment king and Spraying.	use a slow forward speed to cause minimum disturbance to the floating leaves of the weeds. The use of a boat may result in some leaves being disturbed before Roundup Pro Bio herbicide can be absorbed. Applications made in flowing water should be spraved against the directions of the flow. When
AMENITY VEGETATION	and alongside walls		Annual weeds	1.5	Hydraulic sprayers (boom and knapsack)	covering the kerb edge and road gulley – do not overspray drains Where rotary atomisers are used their droplet diameter must fall			Heather (mineral soils)	6.0 10.0 or 4% solution	0501 /bc	Cuthester	d treat regrowth when at least 1 metre in height throughout the entire		a land immedia				disturbed by wash, WATER-LILIES may require re-treatment.				
	Ornamental areas		nnial grasses and ad-leaved weeds	5.0	at water volumes 80-400 L/ha* See Mixing & Spraying section.	within the range 200-300µm. Do not use under polythene or glass					250 L/ha	coppice.	to treat regrow on when at least 1 metre in neight throughout the entire		s, land immed	ately adjacent to aquatic areas	AREA TREATED		WATER VOLUME				

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AREA OF USE	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION Rate L/HA	WATER VOLUME	APPLICATION TIMING AND GUIDANCE
NATURAL SURFACES NOT INTENDED TO BEAR VEGETATION, PERMEABLE SURFACES OVERLYING SOIL, RAILWAY BALLAST	Vegetation management -including roadsides, paths, and along fences	Annual weeds 1.5 Perennial grass weeds 4.0 Perennial broad-leaved weeds 5.0		Hydraulic sprayers 80-250 L/ha* or hand-held equipment.	Do not use under polythene or glass.
HARD SURFACES (EXCLUDING RAILWAY BALLAST)	Vegetation management on hard surfaces -including roadsides, paths, concrete and alongside walls			Hydraulic sprayers 80-250 L/ha* or hand-held equipment.	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 30cm swath covering the kerb edge and road gulley – do not overspray drains
AMENITY VEGETATION	Vegetation management Ornamental areas	Annual weeds Perennial grasses and broad-leaved weeds	1.5 5.0	Hydraulic sprayers (boom and knapsack) at water volumes 80-400 L/ha* See Mixing & Spraying section.	Where rotary atomisers are used their droplet diameter must fall within the range 200-300µm. Do not use under polythene or glass

*Rotary atomisers may be used at a water volume of 1–40 L/ha. Ensure droplet diameter falls within the range 200-300 microns

AREA OF USE	CROP/SITUATION	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION RATE L/HA	WATER VOLUME	APPLICATION TIMING AND GUIDANCE	AREA OF USE	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION RATE L/HA.	WATER VOLUME	APPLICATION GUIDANCE
ORCHARDS	APPLE, PEAR, PLUM, CHERRY, DAMSON	Perennial grasses, broad- leaved weeds	All levels of most species	5	200-400 L/ha	Spray AFTER autumn leaf-fall and BEFORE: Apples, pears - green cluster stage	Forestry: - Post-planting (overall dormant season in certain conifers – conifer release)	Grass weeds - Lowland areas	Black Bent, Cock's-foot, Common Couch, Creeping Soft-grass, False Oat-grass, Fescues, Meadow-	1.5	Hydraulic sprayers: 200-250 L/ha	Species safe to spray when fully dormant and leader growth has hardened: Corsican, Lodgepole and Scots Pines, Norway Spruce, Sitka Spruce, Lawson Cypress, Western Red Cedar.
		Root suckers	-	5		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.		- Upland areas Bracken	grasses, Other Bent species, Purple Moor grass, Sweet Vernal-grass, Tufted Hair-grass, Wavy Hair-grass, Wood Small-reed (Bush grass) All levels of all species	2.0	or Hand-held equipment - see 'Mixing and Spraying' section	Douglas Fir and Noble Fir – safe to spray when fully dormant and leader growth has hardened but NOT in spring. 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
AREA OF USE	CROP/SITUATION	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION RATE L/HA	WATER VOLUME	APPLICATION TIMING AND GUIDANCE		Beech & Birch Brambles	ch All levels of all species All levels of all species	2.0 3.0		in subsequent years. These recommended application rates refer to forestry usage only. Inadequate control may result if used in other areas.
GRASSLAND, PLANT FREE AREAS, ORNAMENTAL PLANTINGS, AMENITY VEGETATION	-	Individual weeds All levels 1:3 dilution with water for wick-type weed wipers OR Weeds must be 10+ cm taller, and wiper 5+ cm higher, than desired vegetation. Individual weeds 0R Contact Bayer or your distributor for specific recommended weed wiper applicators.							<u>Caution</u> : 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 Lamma growth, sprays should be directed away from leaders.			
Forestry weed control		id for weed control in planted ou	out trees.		ion' wipers consult the rer for guidance.	Treated PIOISONOUS WEEDS must be removed or allowed to completely degenerate before grazing or conserving. If Ragwort is present, the guidance in the 'DIRECTIONS FOR USE' must be followed.	Forestry: - Stump application for chemical thinning	Deciduous trees Coniferous trees	All species All species	10% solution of in water 20% solution of in water		Apply the solution to saturate the rim of the newly cut surface, with a suitable adapted clearing saw, spot gun or paintbrush. Treat as soon as possible after felling, in the period November to March/April. Do not apply in the period of active sap flow in the spring/early summer. Do not cut trenches or drill holes and fill with the solution or use undiluted product. Note: for ease of identification of treated areas a suitable, commercially available, water-soluble dye may be added to the prepared spray solution.
AREA OF USE	TARGET WEEDS/USAG	E WEED INFESTATION	APPLICATION RATE L/HA.	WATER VOLUME	APPLICATIO		Forestry: - Chemical thinning by injection of tree stems	Coniferous and deciduous species	-	2 ml neat per cut per 10 cm diameter (or less) tree		Use a hatchet to cut one notch in trees up to 10 cm diameter and apply 2 ml of the solution to each cut. Use two or three notches in trees over 10 cm diameter Do not treat in the period of active sap flow in the spring/early summer.
Forestry: - Pre-planting Forestry: - Post-planting (directed) in conifora & broad leaved trace	Arable land, planting, replanting, & grassland areas Clean-up around trees v knapsack applications.	Arable weeds Grassland weeds //ith Annual/perennial grasses and broad-leaves	4.0 5.0 4.0	Hydraulic sprayers: 80-25(or rotary atomisers: 10-40 L Apply as a concentration of to 49 parts water (2%	/ha* *Where rotar 200-300μm. 1 part It is ESSENTI season.	es may be planted 7 days or more after treatment y atomisers are used their droplet diameter must fall within the range AL to use a TREE GUARD for all applications made in the growing after frond tips are unfurled but before senescence.	ENCLOSED WATERS, LAND IMMEDIATELY ADJACENT TO AQUATIC AREAS, OPEN WATERS	Emerged weeds: reeds, rushes, Sedges, grasses and Watercress	Dense infestations only	5.0 L/ha Hydraulic sprayers 200-400 L/ha (optimum 250 litres) or hand-held equipment See 'Mixing and Spraying.		Users must consult the appropriate Environment Agency Regional Office or Scottish Environmental Protection Agency before applying Roundup ProActive herbicide in reservoirs, water courses and waterways. Roundup ProActive herbicide may be used for the control of aquatic weeds in the presence of fish if used in strict accordance with the recommendations in this section
nifers & broad-leaved trees	Woody weeds: Bracken/Beech Brush/Brambles Sycamore/Oak Hazel/Willow/Ash	3.0	or Weed wiper mini: 1 part to 2 parts wate	er mini: Treat heather la All other woody	late August to end September. dy weeds are treated June-August, before leaf senescence (but after f crop has hardened).		Floating weeds: -White Water-lily -Yellow Water-lily	Dense infestations only	6.0 L/ha Hydraulic sprayer 100-200 L/ha or hand-held equipment See 'Mixing and Spraying.		On Water-lilies it is preferable to use a tractor or boat-mounted sprayer. During spraying, do not exceed a pressure of 2.0 Bars (30 p.s.i.). When using a tractor mounted sprayer, do not exceed 8 kph (5 mph). With a boat-mounted sprayer, use a slow forward speed to cause minimum disturbance to the floating leaves of the weeds. The use of a boat may result in some leaves being disturbed	
	Heather (peat soils) Heather (mineral soils)	4.0 6.0									before Roundup Pro Bio herbicide can be absorbed. Applications made in flowing water should be sprayed against the directions of the flow. When disturbed by wash, WATER-LILIES may require re-treatment.	
		Rhododendron (*)	10.0 or 4% solution	250 L/ha	Cut back and	treat regrowth when at least 1 metre in height throughout the entire	Enclosed waters open waters	land immedi	ately adjacent to aquatic areas			

NH/L F (4): F(1): F	AREA OF USE	CROP/SITUATION	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION N RATE L/HA	VATER VOLUME	APPLICATION TIMING AND GUIDANCE	AREA OF USE	TARGET WEEDS/USAGE	WEED INFESTATION	APPLICATION RATE L/HA.	WATER VOLUME	APPLICATION GUIDANCE
Image: Signed scales Image: Signed scales Source Si				All levels of most species	5	200-400 L/ha		- Post-planting (overall dormant season in			1.5		Species safe to spray when fully dormant and leader growth has har Corsican, Lodgepole and Scots Pines, Norway Spruce, Sitka Spru Lawson Cypress. Western Red Cedar.
AREA OF USE ChOP SITUATION TARGET WEEDS/USAGE WEED NFESTATION APPLICATION WATER VOLUME APPLI			Root suckers	-	5		Treat root suckers in late spring only. Trees must have been established 2+ years.	Certain conners – conner release)		grasses, Other Bent species, Purple Moor-grass, Sweet Vernal-grass, Tufted Hair-grass, Wavy Hair-grass, Wood Small-reed (Bush grass)		see 'Mixing and Spraying'	Douglas Fir and Noble Fir – safe to spray when fully dormant an growth has hardened but NOT in spring. If overall application takes place after the optimum timing weed may be reduced. It is advisable to spray a limited area of forest crop safety under local conditions before widespread overall ap
Bit REAS, DRIVENTIAL TARTINGS, AMENITY GERE VITIONS Image Resp. Standard Contract Standard Processing Standard Proces Standard Processing Standard Proces Standa	REA OF USE	CROP/SITUATION	TARGET WEEDS/USAGE	WEED INFESTATION		WATER VOLUME	APPLICATION TIMING AND GUIDANCE		Beech & Birch	All levels of all species	2.0		in subsequent years. These recommended application rates refer to forestry usage or Inadequate control may result if used in other areas.
Image:	AREAS, ORNÁMENTAL PLANTINGS, AMENITY	-	Individual weeds	All levels	OR		vegetation. Contact Bayer or your distributor for specific recommended weed						<u>Caution</u> : The timing of hardening of leader growth varies conside between locations and between seasons. It may occur as early a end of July or be delayed to October or later. To avoid damage to growth, sprays should be directed away from leaders.
During ProActive can be used rotation and rotatio rotation and rotation and rotation and rotation and ro							Treated POISONOUS WEEDS must be removed or allowed to completely degenerate before grazing or conserving. If Ragwort is present, the						Apply the solution to saturate the rim of the newly cut surface, with a s adapted clearing saw, spot gun or paintbrush. Treat as soon as possib felling, in the period November to March/April. Do not apply in the peri active sap flow in the spring/early summer. Do not cut trenches or drill and fill with the solution or use undiluted product.
XREA OF USE TARGET WEEDS/USAGE WEED INFESTATION APPLICATION RATE L/HA. WATER VOLUME APPLICATION GUIDANCE Common and participanting, arguing and argas Chain and participanting, arguing and argas Apple Laction RATE L/HA. WATER VOLUME APPLICATION GUIDANCE Apple sacconcentration of participanting, arguing and base devices Chain and participanting (directed) in confires & broad-leaves Chain and participanting, arguing and broad-leaves Annual Jone and participanting (directed) in confires & broad-leaves Apple sacconcentration of 1 part to 2 parts water (2%) or the same device are treated une-Aquest, before lead same device are treated une-A			nd for weed control in planted ou	it trees.				Forestru:	Coniferous and	-	2 ml nest per ci	it per 10 cm diameter	Note: for ease of identification of treated areas a suitable, comm available, water-soluble dye may be added to the prepared spray Use a hatchet to cut one notch in trees up to 10 cm diameter and ap
Pre-planting, & grassland areas Grassland weeds 5.0 Anual/or and models Anual/or a								,					the solution to each cut. Use two or three notches in trees over 10 cm Do not treat in the period of active sap flow in the spring/early summe
Post-planting (directed) in onifers & broad-leaved trees and broad-leaves and broad-leaves to 49 parts water (2%) or season.	Pre-planting	replanting, & grassland areas	Grassland weeds	5.0	or rotary atomisers: 10-40 L/ha	*Where rotary 200-300µm.	atomisers are used their droplet diameter must fall within the range	ADJACENT TO AQUATIC AREAS, OPEN	reeds, rushes, Sedges, grasses	Dense infestations only	Hydraulic sprayers 200-400 L/ha (optimum 250 litres) or hand-held equipment		Users must consult the appropriate Environment Agency Regional Offic or Scottish Environmental Protection Agency before applying Roundup ProActive herbicide in reservoirs, water courses and waterways. Roundup ProActive herbicide may be used for the control of aquatic weeds in the presence of fish if used in strict accordance with the recommendations in this section
Woody weeds: 3.0 3.0 0	Post-planting (directed) in			4.0		season.			and watercress				
	i oot planting (an ootod) in	Bracken/Beech Brush/Brambles Sycamore/Oak	3.0		Treat heather All other wood	late August to end September. I weeds are treated June-August, before leaf senescence (but after		-White Water-lily	Dense infestations only	Hydraulic spr or hand-h	ayer 100-200 L/ha neld equipment	On Water-lilies it is preferable to use a tractor or boat-mounted spray spraying, do not exceed a pressure of 2.0 Bars (30 p.s.i.). When using mounted sprayer, do not exceed 8 kph (5 mph). With a boat-mounted use a slow forward speed to cause minimum disturbance to the float of the weeds. The use of a boat may result in some leaves being dist before Roundup Pro Bio herbicide can be absorbed. Apolications ma	
													flowing water should be sprayed against the directions of the flow. disturbed by wash, WATER-LILIES may require re-treatment.
Rhododendron (*) 10.0 or 4% solution 250 L/ha Cut back and treat regrowth when at least 1 metre in height throughout the entire coppice.			Rhododendron (*)	10.0 or 4% solution	250 L/ha		reat regrowth when at least 1 metre in height throughout the entire	Enclosed waters, open water	s, land immedi	ately adjacent to aquatic areas			

(*) For improved control of Rhododendron add Mixture BNF (ADJ AO570) at a concentration of 2% final water volume to 8.0 L/ha of Roundup ProActive. Application using the weed wiper is not suitable.

TARGET WEEDS	HYDRAULIC SPRAYERS	AMOUNT OF ROUNDUP PROACTIVE	AREA TREATED	WATER VOLUME		
	Boom sprayer	5.0 litres	1 ha	200-400 litres (Optimum 250 litres)		
	Knapsack sprayer	50 ml	100 m²	2.0 to 4.0 litres		
Floating weeds e.g. water-lilies	Boom Sprayer	6.0 litres	1 ha	100-200 litres		
	Knapsack Sprayer 8	60 ml	100 m²	4.0 litres		