

Clinic Up

PEEL BACK FOR DIRECTIONS FOR USE LEAFLET

This product is an contains 360 g/l (30.9% w/w) glyphosate acid

A systemic herbicide as a soluble concentrate for the control of annual and perennial grasses and broad-leaved weeds in:

Barley	Non cropped areas
Durum Wheat	Oats
Field beans	Oilseed rape
Forest	Orchards: apple, pear, cherry, damson and plum
Forest Nursery	Peas (combining)
Grassland	Stubble of all edible and non-edible crops
Green cover on land not being used for crop production	Wheat
Linseed	

FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL/FORESTRY/INDUSTRIAL HERBICIDE
(Please see inside for Directions for use)

Crops/situations:	Maximum individual dose (L product/ hectare)	Maximum number of applications (at Maximum individual dose)	Latest time of application
Winter wheat, winter barley, winter oats, spring wheat, spring barley, spring oats, durum wheat, combining peas, field beans (pre-harvest)	4.0	One per crop	7 days before harvest
Oilseed rape and linseed (preharvest)	4.0	One per crop	14 days before harvest
Stubbles (edible crops and non-edible crops)	Either: 4.0 or: 1.5	One per situation One per situation	16 days before drilling or planting of the crop 2 days before drilling or planting of the following crop
Grassland	6.0	One per annum	5 days before harvest, grazing or drilling
Non cropped areas	6.0	Two per annum	-
Apple and pear orchards	5.0	One per annum	After leaf fall/ before green cluster stage
Cherry, damson and plum orchards	5.0	One per annum	After leaf fall/ before green cluster stage
Green cover on land not being used for production e.g. set aside	4.0	One per annum	-
Forestry: - Weed Control - Nursery	5.0	Two per annum	-

Safety information

Keep out of reach of children.
Avoid breathing spray.
Wear protective gloves/protective clothing/eye protection/face protection.
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
IF ON SKIN: Gently wash with plenty of soap and water.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for triple rinsed 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. PCS No. 05776

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).
Do not contaminate ponds, waterways or ditches with the chemical or used container
Wear suitable protective gloves when mixing the concentrate and during application by tractor mounted equipment and suitable protective clothing (coveralls) during application by hand-held equipment.

Authorisation Holder:

Nufarm UK Limited, Wyke Lane, Wyke, Bradford, West Yorkshire BD12 9EJ, UK.

Technical Helpline

telephone number: +44 (0)1274 694714

24-hour emergency

telephone number: +44 (0)1274 696603

20 Litres e

PROTECT FROM FROST
FOR PROFESSIONAL USE ONLY

B0783-001 0217



Nufarm

Grow a better tomorrow.

DIRECTIONS FOR USE

IMPORTANT: This information is approved as part of the Product Label. All instructions within this section must be read carefully in order to obtain safe and successful use of this product.

WEEDS CONTROLLED

CLINIC UP is a foliar acting herbicide which controls annual and perennial grasses and most broad-leaved weeds when used as directed. It is translocated from treated vegetative growth to underground roots, rhizomes or stolons. Leaf symptoms, being a reddening then yellowing of the foliage, are first seen on grass weeds but take longer to appear on broad leaved weeds.

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 COUCH OR SCUTCH REACHES THE SUSCEPTIBLE STAGE OF GROWTH WHEN TILLERING AND NEW RHIZOME GROWTH COMMENCE WHICH USUALLY OCCURS WHEN PLANTS HAVE 5-6 LEAVES EACH WITH 12-15CM OF NEW GROWTH.

THE MAJORITY OF PERENNIAL BROAD-LEAVED WEEDS ARE MOST SUSCEPTIBLE IF TREATED WHEN THEY ARE GROWING ACTIVELY AND AT, OR NEAR, FLOWERING STAGE.

ANNUAL WEEDS SHOULD BE GROWING ACTIVELY, WITH GRASSES HAVING AT LEAST 5 CM OF LEAF AND BROAD-LEAVED WEEDS AT LEAST 2 EXPANDED TRUE LEAVES WHEN SPRAYED.

Weeds become less susceptible to CLINIC UP when their growth is restricted by natural senescence or by drought, waterlogging, frost, high temperature or covering of dust 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, stolons, rhizomes or roots. Thorough cultivations are necessary to disperse or bury the decaying organic matter. Consolidate loose soils and ensure crops are adequately fertilized and appropriate measures are taken to prevent insect and fungus damage to the following crop, especially where following grassland.

Do not apply lime, fertiliser, farmyard manure, pesticides or similar materials within 7 days of Clinic UP.

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. Do 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.

SPECIMEN 1225
Use by 30 Sept 2025

RECOMMENDATION TABLES

WEED CONTROL IN STANDING CEREAL CROPS (PRE-HARVEST)

Weeds Controlled: 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%.	Spray the crop and weeds overall. Use high clearance tractors with narrow wheels and crop dividers. Adjust boom height to maximise spray retention on the target weeds.	Annual weeds and grasses or low couch/ scutch grass infestations up to 25 shoots/m²: 2 l/ha Apply in 80-150 l/ha water for this dose rate Low-medium couch/scutch-grass infestations, up to 75 shoots/m²: 3 l/ha Medium-high couch/scutch-grass infestations, over 75 shoots/m²: 4 l/ha Perennial broad-leaved weeds; other perennial grasses: 4 l/ha Apply in 150-250 l/ha water.
Target weeds must be green, actively growing and accessible to the spray.	After spraying: Wait at least 7 days before harvesting. Treated straw must be chopped and incorporated or removed, after which normal cultivations may be resumed. Treated straw may be used for feed and litter, but must not be used for horticultural purposes.	

Note: to gain successful control of onion couch with CLINIC UP, 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: Couch/scutch grass (*Elymus repens*) Black bent (*Agrostis gigantea*)
 Creeping bent (*Agrostis stolonifera*) Perennial broad-leaved weeds

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.

Time	Method	Dose Rate
Weed control/crop desiccation: 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: 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: 3 l/ha Medium-high couch/scutch-grass infestations over 75 shoots/m²: 4 l/ha Perennial broad-leaved weeds; other perennial grasses: 4 l/ha Apply in 200-250 l/ha water.

WEED CONTROL IN FIELD BEANS AND PEAS (PRE-HARVEST)

Weeds Controlled: Couch/scutch grass (*Elymus repens*) Black bent (*Agrostis gigantea*)
 Creeping bent (*Agrostis stolonifera*) Perennial broad-leaved weeds

Crops:
 Field beans, winter or spring.
 Peas to be harvested dry
 DO NOT TREAT CROPS INTENDED FOR SEED.

Note: This treatment is intended for weed control and not for crop desiccation.

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%.	Spray the crop and weeds overall. Minimise crop damage by use of high clearance tractors with narrow wheels and crop dividers.	Low-medium couch/scutch-grass infestations up to 75 shoots/m²: 3 l/ha Medium-high couch/scutch-grass infestations over 75 shoots/m²: 4 l/ha Apply in 200-250 l/ha water.
Target weeds must be green, actively growing and accessible to the spray.	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.	

ORCHARDS

Weeds Controlled: Most annual and perennial weeds.

Crop	Time and Method	Dose Rate
Established (minimum 2 years) trees of: Apple Pear Cherry Damson Plum	Apply as a directed MEDIUM or COARSE quality 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 30cm (12") from the ground, or any branches. Spray must not contact any damaged bark.	5 l/ha Apply in 250 l/ha water.

FORESTRY/WOODLANDS

Use	Dose Rate	Remarks
Before planting: Most broad-leaved and grass weeds. Moderate control of many young woody weeds	5 l/ha 4 l/ha Hydraulic sprayers: apply in 80 - 250 l/ha water. Rotary atomisers: apply in total spray volume of 40 l/ha.	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 cultivations or before planting trees.

STUBBLE/CULTIVATED LAND - ANNUAL WEEDS/VOLUNTEERS

Weeds Controlled: Annual grasses and broad-leaved weeds

Volunteer cereals and potatoes

Crops: Any crop to follow application.

Time	Method	Dose Rate
Autumn/spring/summer applications: Spray when weeds are actively growing. For optimum control: • Annual grasses should have at least 10cm of green leaf. • Annual broad-leaved weeds should have at least 2 true leaves.	After harvest or cultivations: Allow ground to remain undisturbed for as long as practicable to allow weeds to regrow. After spraying: • Wait at least 24 hours before cultivating. • Wait at least 48 hours before drilling.	1.5 l/ha Apply in 80-250 l/ha water.

STUBBLE - ANNUAL AND PERENNIAL WEEDS, VOLUNTEERS

Weeds Controlled: Common couch/scutch grass (*Elymus repens*).
Creeping bent (*Agrostis stolonifera*).
Annual grasses and broad-leaved weeds.

Black bent (*Agrostis gigantea*).
Perennial broad-leaved weeds
Volunteer cereals and potatoes (autumn only).

Crops: Any crop to follow application on stubble.

Time	Method	Dose Rate
Autumn/winter applications: Spray when perennial weeds are actively growing, especially after mid- October. Common couch/scutch grass should have at least 6 new leaves approx. 12cm 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 or low couch/scutch grass infestations up to 25 shoots/m²: 2 l/ha Apply in 80-150 l/ha water for this dose rate. Low-medium couch/scutch grass infestations up to 75 shoots/m²: 3 l/ha Medium-high couch/scutch grass infestations over 75 shoots/m² and volunteer potatoes: 4 l/ha Apply in 150-250 l/ha water.
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. Retreatment may be necessary pre-harvest or in autumn as emergence in spring may be incomplete.	Note: the effect of 2 litres product/ha rate as the long-term control of couch/scutch grass is not known.

GRASSLAND

Weeds Controlled: Annual meadow-grass (*Poa annua*)
Perennial ryegrass (*Lolium perenne*)
Common nettle (*Urtica dioica*)
Crop Any crop to follow application

Italian ryegrass (*Lolium multiflorum*)
Broadleaf dock (*Rumex obtusifolius*)

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 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 of leaf or 5 fully expanded leaves. • Perennial broad-leaved weeds have substantial leaf area or are near flowering.	<ul style="list-style-type: none"> • 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. <p>Surface mats of old grassland must be thoroughly broken by cultivations before reseeding. Either 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.</p>	<p>1-2 years old, only annual weeds and grasses: 3 l/ha</p> <p>2-4 years old, with perennial grasses: 4 l/ha</p> <p>Long leys e.g. 4-7 years old with perennial broad-leaved weeds: 5 l/ha</p> <p>Permanent grassland with ragwort or predominantly fine-leaved grasses: 6 l/ha</p> <p>Apply the recommended dose in 200-250 l/ha water.</p>

LAND NOT INTENDED TO BEAR VEGETATION: General use around the farm and on amenity and industrial areas

Weeds Controlled: Most annual and perennial weeds.

Area of use	Time and Method	Dose Rate
<p>Around buildings.</p> <p>On industrial sites.</p> <p>Firebreaks.</p> <p>Pavements.</p> <p>Verges along public paths and roadways.</p> <p>Around traffic signs and advertising hoardings.</p> <p>Site preparation for landscaping projects; golf courses etc.</p>	<p>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.</p> <p>DO NOT USE UNDER GLASS OR POLYTHENE.</p> <p>DO NOT SPRAY HEDGE BOTTOMS.</p>	<p>General Use: 4 l/ha</p> <p>Perennial broad-leaved weeds present: 6 l/ha</p> <p>Hydraulic sprayers: apply in 80 - 250 l/ha water</p> <p>Knapsack sprayers: apply in 100 - 250 l/ha water</p> <p>Rotary atomisers: apply in total spray volume of 40 l/ha.</p>

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.

GREEN COVER ON LAND NOT BEING USED FOR CROP PRODUCTION (SET-ASIDE)

Weeds Controlled: Annual meadow grass (*Poa annua*)
Perennial ryegrass (*Lolium perenne*)
Common nettle (*Urtica dioica*)
Crop: Any crop to follow application

Italian ryegrass (*Lolium multiflorum*)
Broadleaf dock (*Rumex obtusifolius*)

Users must ensure themselves compliant with the management rules of any grant-aided scheme before use; the guidance given in the following may be changed in future years.

Time	Method	Dose Rate
Spray whilst the green cover is actively growing at any time consistent with the prevailing weather conditions and within the management rules of any grant aided scheme. Deep-rooted perennial broad-leaved weeds are best controlled when well grown and are at or near flowering.	<ul style="list-style-type: none"> • Do not cut or cultivate prior to applying this product in this situation. • Spray before weeds set seed • After spraying do not cut, cultivate or prepare land for the next crop until permitted to do so by the management rules; in any event do not cut or cultivate for 1 day (after 1.5 l/ha) or 5 days (after 3-6 l/ha) after application. 	<p>Annual weeds and grasses: 1.5 l/ha</p> <p>Apply in 80-150 l/ha water for this dose rate (note - if the green cover is dense and/or well established, use the higher dose of 3 l/ha in 150-250 l/ha water - see below).</p> <p>Dense and/or well established green cover: 3 l/ha</p> <p>Perennial grasses and broad-leaved weeds: 4 l/ha</p> <p>Apply in 150-250 l/ha water.</p>

WICK/WIPER APPLICATORS (E.G. WEEDWIPER MINI)

Certain weeds, particularly those with an erect growth habit and having a spatial separation from desirable species, can be effectively controlled by wiping a concentrated solution of CLINIC UP onto the leaves or stems. Weeds must be actively growing at application. 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.

CLINIC UP dilution

The maximum concentration used must not exceed the following:

Weedwiper mini: 1 volumes of product : 2 volumes of water
Other wipers: 1 volumes of product : 1 volumes of water for normal conditions;
Under warm, dry conditions use 1 : 2 dilution with water.

Weedwipers may be used in any crop where the wiper does not touch the growing crop.

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.

MIXING

Tractor mounted sprayers

Pour the recommended quantity of CLINIC UP into the spray tank already half-filled with clean water and under agitation. Top up the spray 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 CLINIC UP 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. Top up the tank with more clean water to the required level and agitate thoroughly before use. Spray out on the day of mixing.

DO NOT MIX, APPLY OR STORE CLINIC UP 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

Knapsack sprayers

Prepared spray solution should be applied as a MEDIUM of COURSE quality spray (BCPC definition) at nozzle pressures not exceeding 2.5 bar (35 psi).

CLINIC UP is a systemic weedkiller and is active at low doses.

Always take care to avoid spray drift. DO NOT SPRAY in windy weather or near to desirable species or amenity plants.

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

CLINIC UP 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 CLINIC UP.

COMPATIBILITY

DO NOT mix with any herbicide, insecticide or fungicide.

FUTURE PLANTING

CLINIC UP 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 damage crops sprayed later.

KNAPSACK RATE CALCULATOR	
MEDIUM VOLUME APPLICATION	
Product Recommendation (Litres of product in l/ha of water)	Amount of CLINIC UP per 10 litres to treat 400 m ²
3L in 250L per hectare	120 ml
4L in 250L per hectare	160 ml
5L in 250L per hectare	200 ml
6L in 250L per hectare	240 ml
LOW VOLUME APPLICATION	
Product Recommendation (Litres of product in l/ha of water)	Amount of CLINIC UP per 10 litres to treat 1000 m ²
3L in 100L per hectare	300 ml
4L in 100L per hectare	400 ml
5L in 100L per hectare	500 ml
6L in 100L per hectare	600 ml

COMPANY ADVISORY INFORMATION

Symptoms on the weeds

Symptoms of treatment are generally first seen 7-10 days, or longer (if growth is slow), after spraying. These take the form of leaf reddening followed by yellowing and are usually quicker to appear on grasses than on broad-leaved weeds. Reaction of nettles is slow.

TERMS AND CONDITIONS OF SUPPLY, SALE OR USE

All goods supplied by us are high grade and we believe them to be suitable for the purpose for which we expressly supply them: but as we cannot exercise any control over their mixing, use or application which may affect the performance of the goods all conditions and warranties statutory or otherwise as to the quality or fitness for any purpose of our goods are excluded and no responsibility will be accepted by us or our Associate. Companies for any damage or injury whatsoever arising from their storage, handling, re-application or use. These conditions cannot be varied by our staff, our agents or the re-sellers of the product whether or not they supervise or assist in the use of such goods.

Acknowledgements

®CLINIC is the registered trademark of Nufarm UK Limited

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name: Clinic UP

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use: Herbicide

1.3. Details of the supplier of the safety data sheet

Nufarm UK Limited, Wyke Lane, Wyke, Bradford, West Yorkshire BD12 9EJ
United Kingdom

Telephone: +44 (0)1274 691234 Telefax: +44 (0)1274 691176

E-mail address: infouk@uk.nufarm.com

1.4. Emergency telephone number: +44 (0)1274 696603

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

EG_1272/08 : - The product is not subject to classification according to GHS criteria.

2.2. Label elements

REGULATION (EC) No 1272/2008

Pictogram:

EUH401	-	To avoid risks to human health and the environment, comply with the instructions for use.
P102	-	Keep out of reach of children.
P261	-	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P270	-	Do not eat, drink or smoke when using this product.
P280	-	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P310	-	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P302+P350	-	IF ON SKIN: Gently wash with plenty of soap and water.
P305+P351+P338	-	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3. Other hazards

This mixture contains no substance considered to be persistent bioaccumulating nor toxic (PBT).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Aqueous solution of the isopropylammonium salt contains 360g/L Glyphosate.

Components:

Glyphosate IPA salt

CAS-No.: 38641-94-0

EINECS-No. / ELINCS No.: 254-056-8

REACH No.:

Concentration: 30% - 60% (w/w)

Classification:

EG_1272/08 : AquaticChronic2 H411 - Toxic to aquatic life with long lasting effects.

4. FIRST AID MEASURES

4.1. Description of first aid measures

Eye contact:

Rinse immediately with plenty of water, also under the eyelids.

Remove contact lenses.

Skin contact:

Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. Wash contaminated clothing before re-use.

Inhalation:

Move affected person(s) into fresh air.

Ingestion:

Clean mouth with water and drink afterwards plenty of water.

Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice. If symptoms persist, call a physician or Poison Control Centre immediately.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms: None known.

4.3. Indication of any immediate medical attention and special treatment needed

Treatment: No information available. Treat symptomatically.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media: Water, Foam, Dry chemical, Carbon dioxide (CO2)

Extinguishing media

which shall not be used for safety reasons:

No information available.

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting: Product is compatible with standard fire-fighting agents. In the event of fire (NOx, COx, P2O5) may be formed.

5.3. Advice for firefighters

Special protective equipment for fire-fighters: Self-contained breathing apparatus (EN 133)

Further Information: Do not allow run-off from fire fighting to enter drains or water courses.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. (see Chapter 8)

6.2. Environmental precautions

Try to prevent the material from entering drains or water courses. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3. Methods and materials for containment and cleaning up

Methods for cleaning up: Contain larger liquid volumes if possible. Absorb the spillage using suitable non-combustible liquid binding material and collect in rigid containers. If spill area is on ground near valuable plants or trees, remove 5 cm of top soil after initial clean-up.

Additional advice: Dispose of promptly.

6.4. Reference to other sections

see Chapter 13

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Safe handling advice: Wash thoroughly after handling. Use only clean and dry utensils.

Advice on protection against fire and explosion: Normal measures for preventive fire protection.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: Minimum shelf life: 2 years. Store at storages for pesticides in a closed original package.

Advice on common storage: Keep out of reach of children. Keep away from food, drink and animal feeding stuffs.

7.3. Specific end use(s)

none

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Components with workplace control parameters (according to S.I. No. 619 of 2001)

Components	CAS-No.	National occupational exposure limits	Note
Glyphosate IPA salt	38641-94-0		no classification available

8.2. Exposure controls

Personal protective equipment

Respiratory protection: No special precautions when handling properly.

Hand protection: Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.

Eye protection: Chemical resistant goggles must be worn.

Skin and body protection: Wear suitable protective equipment.

Hygiene measures: Wash contaminated clothing before re-use. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance

Physical state: liquid
Form: Soluble concentrate
Colour: yellow-orange
Odour: slight
Flash point: no data available
Ignition temperature: no data available
Vapour pressure: not applicable
Density: 1.171 g/cm³
at 20 °C

Water solubility: completely miscible
pH: 5

Partition coefficient: n-octanol/water
log POW = -3.2
at 25 °C

Viscosity, dynamic: 32.4 mPa.s
at 20 °C

9.2. Other information

none

10. STABILITY AND REACTIVITY

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

no data available

10.3. Possibility of hazardous reactions

Gives off hydrogen by reaction with metals.

10.4. Conditions to avoid

Temperatures below freezing point, high temperatures.

10.5. Incompatible materials to avoid

Reacts with galvanised steel or unlined mild steel to produce hydrogen.

10.6. Hazardous decomposition products

Carbon monoxide, Oxides of phosphorus, nitrogen oxides (NOx)

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Acute oral toxicity :

LD50 Oral rat
Dose: >2,000 mg/kg

Acute dermal toxicity :

LD50 Dermal
Dose: > 4,000 mg/kg

Skin irritation :

Result: No skin irritation

Eye irritation :

Result: slight irritation

Sensitisation :

Result: Did not cause sensitization.

12. ECOLOGICAL INFORMATION

12.1. Toxicity

Toxicity to fish :

LC50 Toxicity to fish
Dose: > 100 mg/l
Testing period: 96 h

Toxicity to daphnia :

EC50 Daphnia
Dose: > 100 mg/l
Testing period: 48 h

Toxicity to algae :

EC50 Toxicity to algae
Dose: > 100 mg/l
Exposure time: 72 h

Toxicity to bacteria :

no data available

12.2. Persistence and degradability

Biodegradability :

Biodegradable

Biochemical Oxygen

Demand (BOD) :

Remarks: no data available

Additional advice :

no data available

12.3. Potential bioaccumulation

Bioaccumulation :

no data available

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

no data available

12.6. Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

According to European Directive 2000/532/EC as amended :

Waste Code: 02 01 08 (agrochemical waste containing dangerous substances)

13.1. Waste treatment methods

Product: In accordance with local and national regulations.

Contaminated packaging: Dispose empty and triple rinsed container within a local disposing system Dispose of in accordance with local regulations. Do not re-use empty containers.

14. TRANSPORT INFORMATION

14.1. UN number

14.2. Proper shipping name

not applicable

14.3. Transport hazard class(es)

ADR/RID:

Not classified as dangerous for conveyance in the meaning of the regulations for the transport of dangerous goods by road and rail.

IATA-DGR:

Not a dangerous substance as defined in the above regulations.

IMDG:

Not a dangerous substance as defined in the above regulations.

14.4. Packaging group

not applicable

14.5. Environmental hazards

not applicable

14.6. Special precautions for user

none

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.2. Chemical Safety Assessment

none

16. OTHER INFORMATION

Print Date: 2016/12/21

The date format YYYY/MM/DD is used according to ISO 8601.

(Alterations are indicated in the left hand margin by: ||)

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