Buggy® XTG

(MAPP 12951)

A foliar applied systemic herbicide for the control of annual and perennial grasses and broad-leaved weeds before sowing or planting various crops and stubbles of all crops and on set-aside. For use pre-harvest in winter and spring wheat, oats and barley and certain other crops, destruction of grassland and in orchards and forestry. For use on or near water.

SIPCAM

SIPCAM U.K.

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A water soluble granule containing 360 g/kg glyphosate (acid equivalent)

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IRRITANT

Risk of serious damage to eyes.

Safety Data Sheet available for the professional user on request. To avoid risks to man and the environment, comply with the instructions for use.

IMPORTANT INFORMATION
FOR USE ONLY AS AN AGRICULTURAL/HORTICULTURAL/INDUSTRIAL/FORESTRY/AQUATIC HERBICIDE

Crop/Situation	Maximum Individual Dose kg/ha	Maximum Number of Treatments	Latest Time of Application
Wheat, barley and oats	4.0	One per crop	7 days before harvest
Oilseed rape	4.0	One per crop	14 days before harvest
Mustard	4.0	One per crop	8 days before harvest
Field beans and combining peas	4.0	One per crop	7 days before harvest
Linseed	4.0	One per crop	14 days before harvest
All edible crops (stubble) All non-edible crops (stubble)	Either i) 4.0 or ii) 1.5	One per situation	5 days before drilling or planting of the following crop 2 days before drilling or planting of the following crop
Set-aside - Green cover on land not being used for crop production	5.0	One per situation	24 hours before cultivation
Grassland	6.0	One per year	5 days before harvest, grazing or drilling.
Natural surfaces not intended to bear vegetation, permeable surfaces overlying soil, hard surfaces.	6.0	–	–
Apple, pear	5.0	One per annum	After harvest but before green cluster stage
Cherry, damson, plum	5.0	One per annum	After harvest but before white bud stage
Forest: weed control stump application	 10.0 see 'Other specific restrictions'	 – –	 – –
Enclosed waters, land immediately adjacent to aquatic areas, open waters	6.0	–	–

Other Specific Restrictions:
- For stump application, the maximum concentration must not exceed 250 g of product/litre of water.
- For knapsack uses a minimum water volume of 100l/ha must be observed.

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

IMPORTANT The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

SIPCAM UK CONDITIONS OF SUPPLY

All goods supplied by us are of high grade, but as we cannot exercise control over their mixing or use, all conditions and warranties, statutory or otherwise, as to the quality or fitness of our goods for any purpose, are excluded and no responsibility will be accepted by us for any damage or injury whatsoever arising from their storage, handling, application or use.

BUGGY - 01/2011

Sipcam UK Limited, 3 The Barn, 27 Kneesworth Street, Royston, Herts SG8 5AB. Tel: 01763 212100. Fax: 01763 212101.

DIRECTIONS FOR USE: READ CAREFULLY

BUGGY XTG is water soluble granule formulation of glyphosate as the ammonium salt. Foliar applied, post weed emergence, *BUGGY XTG* is systemic and moves to the actively growing parts of the plant causing leaf and root die back.

Sowing or planting of all edible or non edible crops may be carried out at specified intervals after application of *BUGGY XTG*.

For Best Results:

1. Ensure weeds are actively growing. For perennial grass weeds, leaf emergence must be complete, with active, green and healthy leaf growth at application. Common couch becomes susceptible when tillering, when rhizome growth starts, usually when plants have 4-5 leaves each with 10-15 cm of new leaf. The majority of perennial broad-leaved weeds are most susceptible around flowering. Annual grasses should have at least 5 cm of leaf and broad-leaved weeds at least 2 expanded true leaves. Do not treat weeds subject to senescence, drought, high temperature, frost, flooding or a covering of dust.
2. Do not spray if rainfall is expected within 6 hours of proposed application time; a period of 24 rainfree hours after application is preferable.
3. Extreme care should be taken to avoid spray drift as this can severely damage or destroy neighbouring crops or plants.
4. Fertilisers or other pesticides should not be applied for at least 5 days before and after application.
5. A slight check to crop growth may occur where crop seed germination occurs in the presence of a mass of decomposing foliage, roots, rhizomes or stolons, especially when direct drilled. Decaying organic matter should be dispersed or buried by thorough cultivation. Having consolidated loose soils, ensure adequate fertilisation, disease and insect control in following crops, especially after grassland destruction.
6. 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.

Use Situations:

BUGGY XTG can be used for weed control in winter and spring wheat, oats and barley, oilseed rape, linseed, field beans and peas, stubbles of all crops, set-aside land temporarily removed from production, non crop areas, around the farm, in orchards and forestry, for the destruction of grassland and for the control of emergent and floating aquatic weeds. **DO NOT USE** in areas other than those specified on the label. **DO NOT USE IN CROPS GROWN FOR SEED**.

When used as directed, *BUGGY XTG* may be applied to all crops destined for feed and to wheat and oats destined for milling. Effects on brewing and bread-making have not been tested. Consult your grain merchant or processor before use.

PRE-HARVEST wheat, barley and oats

Weed	BUGGY XTG Rate	Water Volume
Common Couch	2.0 kg/ha (populations up to 25/m^2 3.0 kg/ha (populations 27-75/m^2 4.0 kg/ha (populations above 75/m^2	80-250 l/ha
Other Perennial Grasses and Perennial Broad-Leaved weeds	4.0 kg/ha	80-250 l/ha
Harvest Management: Annual Grasses, Cereal Stems and leaves	1.0* kg/ha	80-250 l/ha
Annual Broad-Leaved weeds	1.5 kg/ha	80-250 l/ha

* The 1 kg/ha rate is recommended only for pre-harvest clean-up to ease harvesting.

* For the lower rates (1.0, 1.5 and 2.0 kg/ha) it is recommended to use an authorised adjuvant for optimum results (see 'Compatibilities' section).

Application Timing:

Apply when grain moisture content is below 30% not less than 7 days before harvest.

When using the 1.0 kg/ha (Harvest Management) rate, apply up to 14 days before harvesting volunteer wheat and wheat crops; where dull weather follows spraying, delay harvesting until 14 days after application, particularly when controlling broad-leaved weeds.

N.B.

1. Use sprayers with high clearance, fitted with crop dividers and row-crop wheels.
2. After harvest, chop/incorporate or remove straw as required.
3. Treated straw should not be used as a horticultural mulch. Normal cultivations may be made after straw removal.
4. Volunteer potato, annual nettle, rosebay willow herb and *Polygonum* species will not be susceptible at the 1.5 kg/ha (Harvest Management) rate.

Number of Treatments:

A maximum of one application per crop is permitted.

PRE-HARVEST oilseed rape and mustards

Weed	BUGGY XTG Rate	Water Volume
Crop Desiccation and annual weeds	3.0 kg/ha	100-250 l/ha
Common Couch	3.0 kg/ha (populations up to 75/m^2 4.0 kg/ha (populations above 75/m^2	100-250 l/ha
Other Perennial Grasses and Perennial Broad-leaved weeds	4.0 kg/ha	100-250 l/ha

Application Timing:

Apply when seed moisture content is less than 30%. Apply only to standing crops at these harvest intervals:

Oilseed rape – 14 to 21 days.
Mustard – 8 to 10 days.

N.B.

1. Use sprayers with high clearance, fitted with crop dividers and row-crop wheels, and wide booms.
2. For effective combining, **DO NOT** treat crops having secondary regrowth at significant levels.
3. Do not treat late maturing areas of crops caused by pigeon damage, poor drainage etc.
4. Oilseed rape crops suffering from stress factors may not mature evenly.
5. After harvest, chop/incorporate or remove straw as required.
6. Normal cultivations may be made after straw removal.

Number of Treatments:

A maximum of one application per crop is permitted.

PRE-HARVEST field beans and peas for combine harvesting

Weed	BUGGY XTG Rate	Water Volume
Common Couch	3.0 kg/ha (population up to 75/m^2 4.0 kg/ha (population above 75/m^2	80-250 l/ha
Other Perennial Grass and Perennial Broad-leaved weeds	4.0 kg/ha	80-250 l/ha

Application Timing:

Apply when crop seed moisture content is less than 30%, at least 7 days before harvest.

N.B.

1. This treatment cannot be used as a crop desiccant.
2. Use sprayers with high clearance, fitted with crop dividers and row-crop wheels, and wide booms.
3. Do not treat crops grown for seed.

Number of Treatments:

A maximum of one application per crop is permitted.

PRE-HARVEST linseed

Weed	BUGGY XTG Rate	Water Volume
Crop Desiccation and prior to direct combine harvesting and annual weeds	3.0 kg/ha	80-250 l/ha
Common Couch	3.0 kg/ha (population up to 75/m^2 4.0 kg/ha (population above 75/m^2	80-250 l/ha
Other Perennial Grass and Perennial Broad-leaved weeds	4.0 kg/ha	80-250 l/ha

Application Timing:

Apply when crop seeds have less than 30% moisture content. Accurate measurements of moisture content must be made. Apply 14 days or more before harvest. A delay of up to 28 days after spraying may be necessary prior to combine harvesting. Where application takes place late in the autumn it must be checked that weeds are still susceptible (see earlier section 'For Best Results')

N.B.

1. Use sprayers with high clearance, fitted with crop dividers and row-crop wheels, and wide booms.
2. After harvest, chop/incorporate or remove straw as required.
3. Normal cultivations may be made after straw removal.

Number of Treatments:

A maximum of one application per crop is permitted.

ALL EDIBLE AND NON EDIBLE CROPS (STUBBLE) – AUTUMN or SPRING

Weed	BUGGY XTG Rate	Water Volume
Common Couch	3.0 kg/ha (population up to 75/m^2 4.0 kg/ha (population above 75/m^2	80-250 l/ha
Other Perennial Grass	4.0 kg/ha	80-250 l/ha
Volunteer Potato (autumn only)	4.0 kg/ha	80-250 l/ha

Application Timing:

Apply not less than 5 days before drilling or cultivating. Volunteer potatoes should have produced ample haulm growth before spraying. Weeds should have grown actively for at least 21 days before spring applications.

N.B. Do not cultivate before spraying.

Number of Treatments:

A maximum of one application per use situation is permitted.

ALL EDIBLE AND NON EDIBLE CROPS (STUBBLE) or PRE-CULTIVATED - AUTUMN or SPRING

Weed	BUGGY XTG Rate	Water Volume
Volunteer Winter and spring wheat, oats and barley	1.5 kg/ha*	80-250 l/ha
Annual Grasses	1.5 kg/ha*	80-250 l/ha
Annual Broad-Leaved weeds	1.5 kg/ha*	80-250 l/ha

* For best results an authorised surfactant should be tank-mixed, as specified under "Compatibilities".

Application Timing:

Apply not less than 2 days before direct drilling and not less than 24 hours before cultivation.

Number of Treatments:

A maximum of one application per use situation is permitted.

SET ASIDE – GREEN COVER ON LAND NOT BEING USED FOR CROP PRODUCTION

Weed	BUGGY XTG Rate	Water Volume
Before and during set-aside:		
Annual weeds (autumn/spring of first year)	1.5 kg/ha	80 -250 l/ha
Annual weeds (summer of first year and applications)	3.0 kg/ha	80 -250 l/ha
Common Couch	3.0 kg/ha (populations up to 75/m^2) 4.0 kg/ha (populations above 75/m^2)	80 -250 l/ha 80 -250 l/ha
Perennial broad-leaved weeds and other perennial grasses	4.0 kg/ha	80 -250 l/ha
At the end of set-aside:		
Green cover with annual species only	3.0 kg/ha.	150 - 250 l/ha
Green cover with perennial grasses	4.0 kg/ha.	150 - 250 l/ha
Green cover with perennial broad-leaved weeds	5.0 kg/ha.	150 - 250 l/ha

Application Timing:

Weeds should have grown actively for at least 21 days before spring applications.
Perennial weeds – apply not less than 5 days before drilling or cultivating.
Annual weeds – apply not less than 24 hours before cultivation.

N.B.

1. Ensure that all management rules are followed prior to use on land taken out of production as part of a grant aided scheme.
2. Do not top or cultivate before spraying.
3. Do not direct drill after set-aside.

Number of Treatments:

A maximum of one application per use situation is permitted.

NATURAL SURFACES NOT INTENDED TO BEAR VEGETATION, PERMEABLE SURFACES OVERLYING SOIL AND HARD SURFACES

Weed	BUGGY XTG Rate	Water Volume
Annual weeds	1.5 kg/ha	80-250 l/ha
Perennial grasses	4.0 kg/ha	80-250 l/ha
Perennial broad-leaved weeds	6.0 kg/ha	80-250 l/ha

Application Timing:

Apply as and when required, for example, to clear land prior to sowing; to control weeds along fences, around buildings, stackyards, storage yards, along roads, paths and ditch edges; to control regrowth in areas of root crop storage.

N.B. DO NOT USE IN OR ALONGSIDE HEDGEROWS OR BENEATH POLYTHENE OR GLASS.

GRASSLAND – SWARD DESTRUCTION AND CONTROL OF ASSOCIATED WEEDS

Use Situation	BUGGY XTG Rate	Water Volume	Weeds Controlled
Ryegrass in short-term ley with annual weeds	3.0 kg/ha	150-250 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
2-4 year old leys with perennial grass weeds	4.0 kg/ha	150-250 l/ha	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
4-7 year old leys with perennial broad-leaved weeds	5.0 kg/ha	150-250 l/ha	Bracken* • Common Nettle • Common Sorrel Creeping Buttercup** • Creeping Thistle • Daisy Dwarf Thistle • Perennial Sow-Thistle • Red Clover Sedges • Sheep's Sorrel • Soft Rush • Spear Thistle Tufted Hairgrass • Yarrow
Permanent pasture	6.0 kg/ha	150-250 l/ha	Common Ragwort • Hard Rush • Heath Rush jointed Rush • Molinia (Purple Moor-grass) Nardus (Mat-grass) • Red Fescue • White Clover**

* Apply when fronds have fully expanded. ** Important to treat at correct growth stage.

Application Timing:

Do not top-dress grass with lime or fertiliser prior to *BUGGY XTG* application.

Apply *BUGGY XTG* between June and October, before grazing or cutting, when crops are 30-60 cm tall and not dense, before maturation of any seeds.

Spray regrowth after grazing or mowing.

N.B.

1. Grass may be used 5 days after treatment.
2. Livestock may graze or be fed treated forage.
3. Poisonous plants must be removed before grazing or mowing.
4. Once cleared of grass crops, the field may be cultivated for the next crop.
5. Direct drill grass and clover after application in the following situations **ONLY**:
   i) In leys of 1-2 years, lacking mat, 5 days after application; remove all surface trash before drilling.

or ii) In long leys with some mat, after autumn application; delay drilling until the following spring.

Number of Treatments:

A maximum of one application per year is permitted.

ORCHARDS – weed control in apple, pear, plum, cherry or damson

Weed	BUGGY XTG Rate	Water Volume
Pre-planting		
Perennial Grasses and Broad-leaved weeds		
After arable stubbles	4.0 kg/ha	200-250 l/ha
After pastures	5.0 kg/ha	200-250 l/ha
Within Orchards		
Perennial Grasses and Broad-leaved weeds	5.0 kg/ha	200-400 l/ha
Root Suckers	5.0 kg/ha	200-400 l/ha

Application Timing:

For Pre-plant application spray when weeds are actively growing (see For Best Results section) Allow 7 days after application before planting.

Spray after trees have lost all their leaves in autumn and before green cluster in apples and pears or before white bud stage in plum, cherry and damson.

For Root Suckers, spray in later spring only.

N.B.

1. Trees must have been established 2 years before spraying.
2. Avoid contact with tree branches and trunks above 30 cm from the ground.

Number of Treatments:

A maximum of one application per crop is permitted.

FOREST

Weed	BUGGY XTG Rate	Water Volume
Pre-planting		
Arable weeds Grassland weeds	4.0 kg/ha 5.0 kg/ha	80-250 l/ha
Post planting (directed)		
Annual and perennial grasses, Heather (peat soils)	4.0 kg/ha	80-100 l/ha
Broad-leaved and woody weeds (not Rhododendron)	3.0 kg/ha	80-100 l/ha
Heather (mineral soils)	6.0 kg/ha	80-100 l/ha
Rhododendron	10.0 kg/ha	80-100 l/ha
Application to stumps for chemical thinning		
Deciduous trees	10% Solution of *BUGGY XTG* in water	
Coniferous trees	20% Solution of *BUGGY XTG* in water	

Application Timing:

1. PRE-PLANTING – Apply at least 7 days before planting.
2. POST PLANTING (Directed) – Bracken should be treated after frond tips have unfurled but before senescence.
   Heather should be treated late August to the end of September.
   All other woody weeds should be treated June to August before leaf senescence but after new growth of the crop has hardened.
3. APPLICATION TO STUMPS FOR CHEMICAL THINNING – Apply to the surface as soon as possible but not later than 1 week after felling from November to March but not in the spring/summer.

N.B. The following methods of application are permitted: clearing saw fitted with Enso attachments; knapsack sprayer operated at low pressure; spot gun fitted with solid stream nozzle; paintbrush.

When using knapsack sprayers it is essential to use a tree guard for all applications made in the growing season.

ENCLOSED WATERS, LAND IMMEDIATELY ADJACENT TO AQUATIC AREAS AND OPEN WATERS

Use Situation	BUGGY XTG Rate	Water Volume	Weeds Controlled
Emergent weeds	5.0 kg/ha	200-400 l/ha (Opt. 250 l/ha)	Common Reed • Soft Rush • Reed Canary Grass Bulrush • Reed Sweet-Grass • Sedges • Water Cress Whorl-grass • Creeping Bent
Floating weeds	6.0 kg/ha	100-200 l/ha (Opt. 100 l/ha)	White Water-Lily • Yellow Water-Lily

Application Timing:

Apply by tractor or boat-mounted sprayer. Observe special **PRECAUTIONS** for all aquatic uses.

In flowing water apply **AGAINST** the direction of flow.

Tractor sprayers: Do not exceed 8 Kph.

Boat-mounted sprayers: Use as slow a forward speed as practicable.

It may be necessary to re-treat floating Lilies that are disturbed by a boat-mounted sprayer.

HOW TO USE

Conventional Hydraulic sprayers are recommended either tractor-mounted/drawn or for small areas Knapsacks may be used.

A 'medium' or 'coarse' quality spray is recommended with a spray pressure between 1.5 and 2.5 bars. Ensure spray equipment is in good order and spray nozzles have been calibrated.

Half fill the spray tank with water and under agitation add the required amount of *BUGGY XTG*, complete adding the water to the recommended volume. Do not leave spray mixtures in the tank for long periods, and make sure tanks are well vented.

N.B. Do not mix or apply *BUGGY XTG* in galvanised or unlined mild steel containers or spray tanks.

INDUCTION HOPPER

When using a chemical induction bowl or hopper, open the flushing/rinsing system, followed by opening the valve for emptying the main bowl into the tank. Add *Buggy XTG* with system set as described, and continue until the required amount has been put in.

COMPATIBILITIES

BUGGY XTG is compatible with a range of adjuvants consult your distributor for details. Do not tank-mix with any other products.

N.B.

1. To avoid the possibility of reduced levels of weed control, do not tank-mix with pesticides or fertilisers.
2. The use of adjuvants is restricted to arable application only.

SPRAYER HYGIENE

Between the application of *BUGGY XTG* and other pesticides, it is essential to thoroughly clean out the entire sprayer system, including the spray tank, pump(s), pipelines and nozzle or disc assemblies, using a recommended detergent cleaner.

Any traces of herbicide left in the equipment may seriously damage or destroy crops sprayed later.

WEED RESISTANCE STRATEGY

There is a low risk for the development of weed resistance to *'BUGGY XTG'*.

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 control
- Using the correct nozzles to maximise coverage
- Application only under appropriate weather conditions
- Monitoring performance and reporting any unexpected results to Sipcam UK Limited.'

Strains of some annual weeds (e.g. black-grass, wild-oats, and Italian rye-grass) have developed resistance to herbicides which may lead 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. Guidelines have been produced by the Weed Resistance Action Group and copies are available from the HGCA, CPA, your distributor, crop adviser or product manufacturer.

SAFETY PRECAUTIONS:

Operator Protection

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

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

WEAR SUITABLE PROTECTIVE GLOVES when handling contaminated surfaces.

WEAR SUITABLE PROTECTIVE CLOTHING (IMPERMEABLE COVERALLS), SUITABLE PROTECTIVE GLOVES AND RUBBER BOOTS when applying by hand-held equipment, spot gun equipment or when making cut stump treatments.

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

Wear eye protection.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

Environmental Protection

The maximum concentration of active ingredient in treated water must not exceed 0.2ppm or such lower concentration as the appropriate regulatory body may require.

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).

Use appropriate containment to avoid environmental contamination.

Storage and Disposal

KEEP IN ORIGINAL CONTAINER tightly closed in a safe place.

KEEP OUT OF REACH OF CHILDREN.

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

EMPTY CONTAINER COMPLETELY and dispose of safely.

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF SUBSTANCE, PREPARATION AND COMPANY

Product name – Buggy XTG

MAPP – 12951

Use – Herbicide

Formulation type – Water dispersible granule

Supplier – Sipcam UK Limited, 3 The Barn, 27 Kneesworth Street, Royston, Herts SG8 5AB

Emergency phone no – Office 01763 212100

2. COMPOSITION/INFORMATION ON INGREDIENTS

Common name – Glyphosate (ammonium salt)

CAS/EC no – 38641-94-0, 2540568

Hazard Symbol – Not classified

R phrases –

Conc^n – 42%

3. HAZARDS IDENTIFICATION

Critical Hazard to man – Irritating, Risk of serious damage to eyes.

Critical Hazard to environment – Harmful to aquatic organisms.

4. FIRST AID MEASURES

General advice – Remove from source of exposure.
Remove all contaminated clothing and wash affected area.

Inhalation – Remove the individual from exposure to this product and keep well ventilated with fresh air. Keep at rest. If necessary and if breathing stops, give artificial respiration. Seek medical attention.

Skin contact – Remove contaminated clothing immediately.
Wash affected area thoroughly with soap and water.
Rinse with water. Seek medical attention.

Eye contact – Rinse immediately with plenty of water for at least 15 minutes and then seek medical attention.

Ingestion – If swallowed, seek medical attention immediately.

Treatment – Treat Symptomatically.

Consult a Poisons Centre such as;
0171 635 9191 (National Poisons Information Service - London)
(AUTHORISED MEDICAL PRACTITIONERS ONLY)

5. FIRE FIGHTING MEASURES

Suitable extinguishing media – Fight fire with CO_2, dry chemical powder, foam or water spray (in preference to water jet).

Specific hazards – Combustion may generate toxic fumes containing HF, HC_3, HCN and $N0_3$.

Protective equipment – Wear self-contained breathing apparatus (SCBA).

Specific Methods – Remove undamaged containers from source of combustion.

6. ACCIDENTAL RELEASE MEASURES

Personal Protective Equipment – Wear protective coveralls, neoprene gloves, rubber boots and faceshield or goggles, covering as much of the body as possible (see section 8).

Environmental Protection – Inform local water plc immediately if spillage enters drains and the National Rivers Authority (England and Wales) or River Purification Boards (Scotland), if it enters surface or ground waters.

Clean up Methods – Contain spillage. Sweep up carefully and shovel sweepings into marked bags or drums. Dispose of through a reputable local waste disposal contractor.

7. HANDLING AND STORAGE

Handling – Use Personal Protective Clothing as specified in Section 8. Avoid fumes – work in a well ventilated area.

Storage – KEEP IN ORIGINAL CONTAINER, tightly closed, in a safe place.

Other – WHEN USING, DO NOT EAT, DRINK OR SMOKE.

WASH SPLASHES from skin or eyes immediately.

AVOID ALL CONTACT BY MOUTH, WITH SKIN AND EYES.

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

KEEP AWAY FROM FOOD, DRINK AND ANIMAL FEEDINGSTUFFS.

KEEP OUT OF REACH OF CHILDREN.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering measures – If possible use a cab fitted with a forced air filtration unit and pesticide filter when spraying.

Personal Protective Equipment – WEAR SUITABLE PROTECTIVE GLOVES* AND FACE PROTECTION (FACESHIELD) when handling the concentrate. (* neoprene or nitrile at least 0.5mm thick).

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

Where PPE cannot be cleaned, dispose of as contaminated waste.

9. PHYSICAL AND CHEMICAL PROPERTIES

State – Solid granule

Density – 0.75

Colour – White

Odour – Negligible

pH (1% in water) – 4.4-4.9

Solubility – Soluble

10. REACTIVITY AND STABILITY

Stability – Stable under normal ambient conditions.

Conditions to avoid –

11. TOXICOLOGICAL INFORMATION

Acute oral LD_{50} (rat) – >5,000 mg/kg (formulation)

Acute dermal LD_{50} (rabbit) – >5,000 mg/kg (formulation)

Acute inhalation toxicity LC_{50} (4h, rat) – >3.66 mg/l (active ingredient)

Irritation to Skin – Not irritating

Irritation to Eye – Irritating to eye

Sensitization – Not known to be a sensitizer

12. ECOLOGICAL INFORMATION

Mobility – Strongly absorbed to soil and practically immobile.

Ecotoxicity

(ai) Rainbow Trout	LC_{50}	86 mg/l	(96hr)
(ai) Daphnia magna	EC_{50}	>780 mg/l	(48hr)
(ai) Bees	LD_{50}	>0.1 mg/bee	
(ai) Bobwhite quail		3850 mg/kg	

13. DISPOSAL

Contact Local Authority (Environmental Health Department) or a reputable waste disposal company for collection and disposal of unwanted product or containers.

For further guidance on the disposal of containers, surplus spray solution, tank washings and concentrate, refer to Part 5 (Disposal of Pesticide Waste) of the MAFF/HSE booklet "Pesticides: Code of Practice for the Safe Use of Pesticides on Farms and Holdings".

14. TRANSPORT

UN Number –

Packaging Group –

Marine Pollutant –

ADR/RID Classification – Not classified

IMDG/IMO Classification – Not classified

Proper shipping name –

15. REGULATORY INFORMATION

Hazard Symbol	–	Xi	Irritant.
Risk Phrases (R)	–	R41	Risk of serious damage to eyes.
Safety Phrases (S)	–	S13	Keep away from food, drink and animal feedingstuffs.
		S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
		S35	This material and its container should be disposed of in a safe way.
		S36/37/39	Wear suitable protective clothing, gloves and eye protection.

16. OTHER INFORMATION

The (COSHH) Control of Substances Hazardous to Health Regulations may apply to the use of this product at work.

Packaging

Container – 10 kg Polyethylene bag

Occupational Exposure Limits – There are no OELs for this product

Approval number – M12951