



mirius™
A Coventry Group Company

SAFETY DATA SHEET HORTICIDE

Commission Regulation (EU) No 2015/830 of 28 May 2015.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name HORTICIDE
Product number HORTICIDE
Container size 5L, 25L, 200L

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

Identified uses Disinfectant concentrate.

1.3. Details of the supplier of the safety data sheet

Supplier MIRIUS™
A Coventry Group Company
Woodhams Road, Siskin Drive,
Coventry, England, CV3 4FX
www.mirus.com
info@mirius.com
+442476639739

Contact person For content of safety data sheet., sds@coventrychemicals.com

1.4. Emergency telephone number

Emergency telephone +44 (0) 1865407333 (Strictly for emergencies only: incidents involving damage to human health and/or the environment)

National emergency telephone number In case of a medical emergency following exposure to a chemical call NHS Direct in England or Wales 0845 46 47 or NHS 24 in Scotland 08454 24 24 24

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Not Classified
Health hazards Acute Tox. 4 - H302 Acute Tox. 3 - H331 Skin Corr. 1B - H314 Eye Dam. 1 - H318 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 STOT SE 3 - H335
Environmental hazards Aquatic Acute 1 - H400 Aquatic Chronic 3 - H412

2.2. Label elements

Pictogram



Signal word

Danger

HORTICIDE

Hazard statements

H302 Harmful if swallowed.
H331 Toxic if inhaled.
H314 Causes severe skin burns and eye damage.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H317 May cause an allergic skin reaction.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P280 Wear protective clothing, gloves, eye and face protection.
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P312 IF SWALLOWED: Call a POISON CENTRE/doctor if you feel unwell.
P501 Dispose of contents/ container in accordance with local regulations.

Contains

GLUTARALDEHYDE, QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-18-ALKYLDIMETHYL, CHLORIDES

Detergent labelling

15 - < 30% disinfectants, < 5% perfumes

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

HORTICIDE

SECTION 3: Composition/information on ingredients

3.2. Mixtures

GLUTARALDEHYDE			10-30%
CAS number: 111-30-8	EC number: 203-856-5	REACH registration number: 01-2119455549-26-XXXX	
M factor (Acute) = 1			

Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 3 - H301	T;R23/25 C;R34 R42/43 N;R50
Acute Tox. 2 - H330	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Resp. Sens. 1 - H334	
Skin Sens. 1 - H317	
STOT SE 3 - H335	
Aquatic Acute 1 - H400	
Aquatic Chronic 2 - H411	

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-18-ALKYLDIMETHYL, CHLORIDES			5-10%
CAS number: 68391-01-5	EC number: 269-919-4		
M factor (Acute) = 10			

Classification	Classification (67/548/EEC or 1999/45/EC)
Acute Tox. 4 - H302	C;R34 Xn;R21/22 N;R50
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Aquatic Acute 1 - H400	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

Ingredient notes Additional information: See section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	For personal protection, see Section 8. Get medical attention immediately. Rinse immediately with plenty of water. First aid personnel should wear appropriate protective equipment during any rescue.
Inhalation	Remove affected person from source of contamination. Keep affected person warm and at rest. Get medical attention if symptoms are severe or persist. Show this Safety Data Sheet to the medical personnel.
Ingestion	Never give anything by mouth to an unconscious person. Do not induce vomiting. Remove person to fresh air and keep comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention immediately.
Skin contact	Remove affected person from source of contamination. Remove contaminated clothing. Wash skin thoroughly with soap and water. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

HORTICIDE

Eye contact Remove affected person from source of contamination. Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue.

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

General information The severity of the symptoms described will vary dependent on the concentration and the length of exposure. Chemical burns must be treated by a physician. Get medical attention immediately.

Inhalation The product contains a sensitising substance. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Severe irritation of nose and throat. Vapours may cause headache, fatigue, dizziness and nausea.

Ingestion This product is strongly corrosive. May be harmful if swallowed and enters airways. Small amounts may cause serious damage. Overexposure may cause the following adverse effects: Nausea, vomiting. Diarrhoea. Headache. Drowsiness, dizziness, disorientation, vertigo. Intoxication.

Skin contact May be harmful in contact with skin. May cause serious chemical burns to the skin.

Eye contact A single exposure may cause the following adverse effects: Severe irritation, burning, tearing and blurred vision. Chemical burns. Corneal damage.

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

Notes for the doctor When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Use fire-extinguishing media suitable for the surrounding fire. Extinguish with foam, carbon dioxide, dry powder or water fog.

5.2. Special hazards arising from the substance or mixture

Specific hazards None known. Thermal decomposition or combustion products may include the following substances: Toxic gases or vapours.

Hazardous combustion products Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Control run-off water by containing and keeping it out of sewers and watercourses.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure procedures and training for emergency decontamination and disposal are in place. No action shall be taken without appropriate training or involving any personal risk. Wear protective clothing as described in Section 8 of this safety data sheet. Keep unnecessary and unprotected personnel away from the spillage. If leakage cannot be stopped, evacuate area. Provide adequate ventilation.

6.2. Environmental precautions

HORTICIDE

Environmental precautions Avoid or minimise the creation of any environmental contamination. Avoid the spillage or runoff entering drains, sewers or watercourses. Contain spillage with sand, earth or other suitable non-combustible material.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Do not touch or walk into spilled material. Stop leak if safe to do so. Absorb in vermiculite, dry sand or earth and place into containers. Flush contaminated area with plenty of water.

6.4. Reference to other sections

Reference to other sections See Section 1 for emergency contact information. For personal protection, see Section 8. See Section 11 for additional information on health hazards. For waste disposal, see Section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Provide adequate ventilation. Avoid inhalation of vapours. Use approved respirator if air contamination is above an acceptable level. Avoid spilling. Avoid contact with skin and eyes. Wear appropriate clothing to prevent any possibility of skin contact. Wear protective clothing as described in Section 8 of this safety data sheet.

Advice on general occupational hygiene Good personal hygiene procedures should be implemented. Do not eat, drink or smoke when using this product. Wash promptly with soap and water if skin becomes contaminated. Take off immediately all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep away from food and drink.

Storage class Corrosive storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

GLUTARALDEHYDE

Long-term exposure limit (8-hour TWA): WEL 0.05 ppm 0.2 mg/m³

Short-term exposure limit (15-minute): WEL 0.05 ppm 0.2 mg/m³

Sen

WEL = Workplace Exposure Limit

Sen = Capable of causing occupational asthma.

GLUTARALDEHYDE (CAS: 111-30-8)

DNEL

Workers - Inhalation; Long term local effects: 0.21 mg/m³

Workers - Inhalation; Short term local effects: 0.42 mg/m³

Workers - Dermal; Long term systemic effects: 6.25 mg/kg/day

HORTICIDE

PNEC	<ul style="list-style-type: none"> - Fresh water; 0.003 mg/l - marine water; 0.00025 mg/l - Intermittent release; 0.006 mg/l - STP; 0.8 mg/l - Sediment (Freshwater); 0.091 mg/kg - Sediment (Marinewater); 0.009 mg/kg - Soil; 0.18 mg/kg
-------------	---

4-TERT-BUTYLCYCLOHEXANOL (CAS: 98-52-2)

DNEL	<p>Workers - Inhalation; Long term systemic effects: 1.76 mg/m³</p> <p>Workers - Dermal; Long term systemic effects: 0.5 mg/kg/day</p>
PNEC	<ul style="list-style-type: none"> - Fresh water; 0.007 mg/l - marine water; 0.001 mg/l - STP; 10 mg/l - Sediment (Freshwater); 0.138 mg/kg - Sediment (Marinewater); 0.014 mg/kg - Soil; 0.024 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation. Observe any occupational exposure limits for the product or ingredients.

Personal protection

All PPE must be kept in good condition. Polluted or damaged equipment must be replaced immediately.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield. Personal protective equipment for eye and face protection should comply with European Standard EN166.

Hand protection

Wear protective gloves. To protect hands from chemicals, gloves should comply with European Standard EN374. It is recommended that gloves are made of the following material: Nitrile rubber. It should be noted that liquid may penetrate the gloves. Frequent changes are recommended. The most suitable glove should be chosen in consultation with the glove supplier/manufacture, who can provide information about the breakthrough time of the glove material.

Other skin and body protection

Wear appropriate clothing to prevent any possibility of skin contact. For the greatest protection, clothing should include anti-static overalls, boots and gloves.

Hygiene measures

Provide eyewash station and safety shower. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Wash promptly with soap and water if skin becomes contaminated. Use appropriate skin cream to prevent drying of skin.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Wear a full facepiece respirator fitted with the following cartridge: Gas filter, type A2.

HORTICIDE

Environmental exposure controls Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Amber.
Odour	Aromatic. Fruity.
Odour threshold	<1 ppb Literature data: Glutaraldehyde.
pH	pH (concentrated solution): 5.0
Relative density	~ 1.03 @ 20°C
Solubility(ies)	Soluble in water.
Viscosity	Not determined.
Explosive properties	There are no chemical groups present in the product that are associated with explosive properties.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	The mixture itself has not been tested but none of the ingredient substances meet the criteria for classification as oxidising.
Comments	Information given is applicable to the product as supplied.

9.2. Other information

Other information None.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Under normal conditions of storage and use, no hazardous reactions will occur.

10.2. Chemical stability

Stability Stable at normal ambient temperatures.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions The following materials may react with the product: Amines.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Does not decompose when used and stored as recommended.

10.5. Incompatible materials

Materials to avoid Avoid contact with the following materials: Amines. Ammonia solution. Strong acids. Strong alkalis. Strong oxidising agents. Aluminium. Carbon steel. Copper. Iron. Mild steel.

10.6. Hazardous decomposition products

HORTICIDE

Hazardous decomposition products Thermal decomposition or combustion products may include the following substances: Carbon monoxide (CO). Carbon dioxide (CO₂). Nitrous gases (NO_x).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological effects Information given is based on data of the components and of similar products.

Acute toxicity - oral

Notes (oral LD₅₀) Harmful if swallowed. Calculation method.

ATE oral (mg/kg) 485.83

Acute toxicity - dermal

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

ATE dermal (mg/kg) 11,340.21

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Toxic if inhaled. Calculation method.

ATE inhalation (dusts/mists mg/l) 0.75

Skin corrosion/irritation

Skin corrosion/irritation Causes severe skin burns and eye damage.

Serious eye damage/irritation

Serious eye damage/irritation Corrosivity to eyes is assumed.

Respiratory sensitisation

Respiratory sensitisation May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Skin sensitisation

Skin sensitisation May cause sensitisation by skin contact. May cause an allergic skin reaction.

Germ cell mutagenicity

Genotoxicity - in vitro This substance has no evidence of mutagenic properties.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Reproductive toxicity - fertility Based on available data the classification criteria are not met. Does not contain any substances known to be toxic to reproduction.

Specific target organ toxicity - single exposure

STOT - single exposure May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Inhalation

Vapours may irritate throat/respiratory system. A single exposure may cause the following adverse effects: Coughing. Difficulty in breathing. May cause damage to mucous membranes in nose, throat, lungs and bronchial system. May cause sensitisation by inhalation.

Ingestion

Harmful if swallowed. May cause nausea, headache, dizziness and intoxication. May cause burns in mucous membranes, throat, oesophagus and stomach.

HORTICIDE

Skin contact	Causes burns. Harmful in contact with skin. May be absorbed through the skin. May cause sensitisation by skin contact.
Eye contact	Causes burns. Vapour or spray in the eyes may cause irritation and smarting. A single exposure may cause the following adverse effects: Severe irritation, burning, tearing and blurred vision. Corneal damage.
Acute and chronic health hazards	May cause respiratory system irritation.
Target organs	No specific target organs known.

Toxicological information on ingredients.

GLUTARALDEHYDE

Acute toxicity - oral

Acute toxicity oral (LD₅₀) 77.0
mg/kg)

Species Rat

ATE oral (mg/kg) 77.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀) 2,001.0
mg/kg)

Species Rabbit

ATE dermal (mg/kg) 2,001.0

Acute toxicity - inhalation

Acute toxicity inhalation 0.11
(LC₅₀ dust/mist mg/l)

Species Rat

ATE inhalation 0.11
(dusts/mists mg/l)

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-18-ALKYLDIMETHYL, CHLORIDES

Acute toxicity - oral

Acute toxicity oral (LD₅₀) 375.0
mg/kg)

Species Rat

Notes (oral LD₅₀) Supplier's information. Harmful if swallowed.

ATE oral (mg/kg) 375.0

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀) 3,412.0
mg/kg)

Species Rat

Notes (dermal LD₅₀) Based on available data the classification criteria are not met.

HORTICIDE

ATE dermal (mg/kg)	3,412.0
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Causes severe skin burns and eye damage.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Causes serious eye damage.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	Based on available data the classification criteria are not met.
.	
Ingestion	This product is corrosive. Harmful if swallowed. May cause burns in mucous membranes, throat, oesophagus and stomach.
Eye contact	This product is corrosive. May cause chemical eye burns.

SECTION 12: Ecological information

Ecotoxicity There are no data on the ecotoxicity of this product. The product contains a substance which may have hazardous effects on the environment.

12.1. Toxicity

Toxicity The product contains a substance which is harmful to aquatic organisms.

Ecological information on ingredients.

GLUTARALDEHYDE

Acute aquatic toxicity

LE(C)₅₀ 0.1 < L(E)C₅₀ ≤ 1

M factor (Acute) 1

Acute toxicity - fish LC₅₀, 96 hours: 10 mg/l, Oncorhynchus mykiss (Rainbow trout)
REACH dossier information.

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 14.87 mg/l, Daphnia magna
REACH dossier information.

Chronic aquatic toxicity

Chronic toxicity - fish early life stage NOEC, 97 days: 1.6 mg/l, Oncorhynchus mykiss (Rainbow trout)

Chronic toxicity - aquatic invertebrates NOEC, 21 days: 5 mg/l, Daphnia magna
REACH dossier information.

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-18-ALKYLDIMETHYL, CHLORIDES

Acute aquatic toxicity

LE(C)₅₀ 0.01 < L(E)C₅₀ ≤ 0.1

M factor (Acute) 10

HORTICIDE

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 0.016 mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability The product is readily biodegradable. The surfactant(s) contained in this product complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them at their direct request, or at the request of a detergent manufacturer.

Ecological information on ingredients.

GLUTARALDEHYDE

Persistence and degradability The substance is readily biodegradable.

QUATERNARY AMMONIUM COMPOUNDS, BENZYL-C12-18-ALKYLDIMETHYL, CHLORIDES

Persistence and degradability The substance is readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation. The product does not contain any substances expected to be bioaccumulating.

Ecological information on ingredients.

GLUTARALDEHYDE

Bioaccumulative potential REACH dossier information. The product is not bioaccumulating.

Partition coefficient REACH dossier information. log Pow: -0.36

12.4. Mobility in soil

Mobility The product is water-soluble and may spread in water systems.

Ecological information on ingredients.

GLUTARALDEHYDE

Henry's law constant REACH dossier information. 0.011 Pa m³/mol @ 25°C

Surface tension REACH dossier information. ~ 68 mN/m @ 20°C

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

Ecological information on ingredients.

GLUTARALDEHYDE

Results of PBT and vPvB assessment This substance is not classified as PBT or vPvB according to current EU criteria.

12.6. Other adverse effects

Other adverse effects Not known.

HORTICIDE

Ecological information on ingredients.

GLUTARALDEHYDE

Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Do not discharge into drains or watercourses or onto the ground.
Disposal methods	This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues and hence be potentially hazardous. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.
Waste class	EWC Code: 06 10 02

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID)	1760
UN No. (IMDG)	1760
UN No. (ICAO)	1760
UN No. (ADN)	1760

14.2. UN proper shipping name

Proper shipping name (ADR/RID)	CORROSIVE LIQUID, N.O.S. (CONTAINS GLUTARALDEHYDE, QUATERNARY AMMONIUM COMPOUNDS)
Proper shipping name (IMDG)	CORROSIVE LIQUID, N.O.S. (CONTAINS GLUTARALDEHYDE, QUATERNARY AMMONIUM COMPOUNDS)
Proper shipping name (ICAO)	CORROSIVE LIQUID, N.O.S. (CONTAINS GLUTARALDEHYDE, QUATERNARY AMMONIUM COMPOUNDS)
Proper shipping name (ADN)	CORROSIVE LIQUID, N.O.S. (CONTAINS GLUTARALDEHYDE, QUATERNARY AMMONIUM COMPOUNDS)

14.3. Transport hazard class(es)

ADR/RID class	8
ADR/RID classification code	C9
ADR/RID label	8
IMDG class	8
ICAO class/division	8
ADN class	8

Transport labels



HORTICIDE

14.4. Packing group

ADR/RID packing group	II
IMDG packing group	II
ICAO packing group	II
ADN packing group	II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

IMDG Code segregation group	None
EmS	F-A, S-B
ADR transport category	2
Emergency Action Code	2X
Hazard Identification Number (ADR/RID)	80
Tunnel restriction code	(E)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

National regulations	<p>The Control of Substances Hazardous to Health Regulations 2002 (SI 2002 No. 2677) (as amended).</p> <p>Control of Pollution (Special Waste) Regulations 1980 (as amended).</p> <p>The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].</p> <p>EH40/2005 Workplace exposure limits.</p> <p>The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).</p> <p>The Hazardous Waste Regulations 2005.</p>
-----------------------------	---

HORTICIDE

EU legislation	<p>Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).</p> <p>Commission Regulation (EU) No 453/2010 of 20 May 2010.</p> <p>Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work (as amended).</p> <p>Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).</p> <p>Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.</p> <p>Commission Regulation (EU) No 2015/830 of 28 May 2015.</p>
Guidance	<p>CHIP for everyone HSG228.</p> <p>ECHA Guidance on the Application of the CLP Criteria.</p> <p>ECHA Guidance on the compilation of safety data sheets.</p> <p>Technical Guidance WM2: Hazardous Waste.</p> <p>Introduction to Local Exhaust Ventilation HS(G)37.</p>

15.2. Chemical safety assessment

This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	<p>DNEL: Derived No Effect Level.</p> <p>PBT: Persistent, Bioaccumulative and Toxic substance.</p> <p>PNEC: Predicted No Effect Concentration.</p> <p>MARPOL 73/78: International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978.</p> <p>vPvB: Very Persistent and Very Bioaccumulative.</p>
General information	<p>Only trained personnel should use this material.</p>
Key literature references and sources for data	<p>The active ingredient with the CAS no. 63449-41-2 is also notified with CAS no. 61789-71-7, 68391-01-5, 8001-54-5 and 68424-85-1. CAS no, 68424-85-1 is listed in Annex II to the Directive 2003/2032/EC.</p>
Revision comments	<p>This is the first issue.</p>
Revision date	<p>18/12/2019</p>
Revision	<p>1</p>
SDS number	<p>22179</p>

HORTICIDE

Hazard statements in full

H301 Toxic if swallowed.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H330 Fatal if inhaled.
H331 Toxic if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H411 Toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.