



syngenta.

A turf pigment.

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

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**In case of toxic or transport emergency ring
+44 (0)1484 538444 any time**

**PROTECT FROM FROST
SHAKE WELL BEFORE USE**

Product names marked ® or ™, the ALLIANCE FRAME
the SYNGENTA Logo and the PURPOSE ICON
are Trademarks of a Syngenta Group Company

1 Litre

RYDER®
A turf pigment.



Danger

May cause an allergic skin reaction.

Causes serious eye damage.

Harmful to aquatic life with long lasting effects.

Avoid breathing mist or vapours.

Wear protective gloves/ eye protection/ face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

If skin irritation or rash occurs: Get medical advice/ attention.

Take off contaminated clothing and wash it before reuse.

Collect spillage.

Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for triple rinsed clean containers which can be disposed of as non-hazardous waste.

UFI: 3C55-T012-0008-QXD4

SAFETY PRECAUTIONS

Keep out of reach of children.

Keep away from food, drink and animal feeding stuffs.

When using do not eat drink or smoke.

To avoid risks to human health and the environment, comply with the instructions for use.

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

WASH OUT CONTAINER THOROUGHLY, and dispose of safely.

DO NOT RE-USE CONTAINER for any other purpose.

DIRECTIONS FOR USE

GENERAL INFORMATION

RYDER® is a highly concentrated and stable green pigment designed for use on managed turf to improve its appearance and to help protect against UV radiation and excessive light intensities.

RYDER delivers a lasting and natural looking green colour for an enhanced, more uniform, appearance.

RYDER is safe to use on all turf species. For optimum turf quality RYDER should be used in conjunction with turf management practices that promote good turf health.

RESTRICTIONS

Prevent spray drift onto surrounding areas. Stone, paths and pavements will be stained if contacted.

Avoid product drift to open water bodies:

Apply vegetative buffer zones to water bodies of 3-5 m. Product application must be done using drift preventing practices and equipment (weather conditions during application, spraying equipment calibration)

Rates of Use

Greens and turf maintained at under 12mm

Apply at a rate of 0.75 to 1.5 l/ha in a water volume of 250-500 litres per hectare. Use higher rates for deeper green colour and higher heights of cut.

Turf maintained above 12mm

Apply at a rate of 1.0 to 2.0 l/ha in a water volume of 250-500 litres per hectare. Use higher rates for deeper green colour and higher heights of cut.

For superior coverage apply 0.5 – 1.0 l/ha in each of two directions (90° opposite directions)

Timing

Apply RYDER at approximately 2 to 3 week intervals during the main growing season and at 4- 6 week intervals when turf growth slows and mowing frequency drops.

RYDER can be applied throughout the year as required.

Apply after mowing.

MIXING AND SPRAYING

Use of PPE for mixing/loading and application: Impermeable clothing (long sleeves shirt, long trousers), footwear. Hand protection: nitrile gloves. Eye protection: Tightly fitting safety goggles, Face shield. During handling of concentrated product: respiratory protection.

Make sure the sprayer is clean and set to give an even application at the correct volume and an even deposit. Half fill the spray tank with clean water and commence agitation. Add the required quantity of RYDER to the spray tank. Complete filling to the required volume and continue to agitate throughout the spraying operation. Wash out containers thoroughly, preferably using an integrated pressure rinsing device, or manually rinse three times. Add washings to the sprayer at the time of filling. Complete filling to the required volume and continue to agitate throughout the spraying operation.

Do not leave the spray liquid in the sprayer for long periods (such as during meal breaks (>1 hour) or overnight). Make up only the amount of spray required for immediate use.

Thoroughly wash all spray equipment with water immediately after use.

Thoroughly wash out sprayer according to manufacturer's guidelines and dispose of washing and clean containers according to DEFRA Code of Practice and local water authority guidelines.

Good Field Practice

As part of our Product Stewardship policy, Syngenta Crop Protection recommends the following precautions should also be observed:

- Wear appropriate clothing – coveralls, eye protection and protective gloves, when handling the concentrate.

For further information please see www.greencast.co.uk or www.greencast.ie

RYDER® is a trademark of a Syngenta Group Company.

Section 6 of the Health and Safety at Work Act **Additional Product Safety Information**

(This section does not form part of the product label under the Plant Protection Products Regulations 1995.)

The product label provides information on a specific pesticidal use of the product; do not use otherwise, unless you have assessed any potential hazard involved, the safety measures required and that the particular use has 'extensions of use' approval or is otherwise permitted under the Plant Protection Products Regulations.

The information on this label is based on the best available information including data from test results.

SAFETY DATA SHEET - V1.0

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

1.1 Product Identifier

Trade name : RYDER

Design code : A22884A

Unique Formula Identifier (UFI): 3C55-T012-0008-QXD4

1.2 Relevant Identified Uses of the substance or mixture and uses advised against

Use of the Substance/Mixture: Colouring agents, pigments

Recommended restrictions on use: professional use

1.3 Details of the supplier of the safety data sheet

Company: Syngenta UK Ltd, CPC4, Capital Park, Fulbourn, Cambridge, CB21 5XE

Telephone: +44 (0) 1223 883400

Telefax: +44 (0) 1223 882195

E-mail address of person responsible for the SDS: customer.services@syngenta.com

1.4 Emergency telephone number

Emergency phone No.: +44 (0) 1484 538444

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Serious eye damage, Category 1 - H318: Causes serious eye damage.

Skin sensitisation, Category 1 - H317: May cause an allergic skin reaction.

Long-term (chronic) aquatic hazard, Category 3 - H412: Harmful to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008) as amended by GB-CLP Regulation, UK SI 2019/720, and UK SI 2020/1567)

Hazard pictograms



Signal Word Danger

Hazard H317 May cause an allergic skin reaction.

Statements H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements	P261	Avoid breathing mist or vapours.
	P280	Wear protective gloves/ eye protection/ face protection.
	P305+P351+P338+P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
	P333+P313	IF skin irritation or rash occurs: Get medical advice/ attention.
	P362+P364 P501	Take off contaminated clothing and wash it before reuse. Dispose of contents/container to a licensed hazardous waste disposal contractor or collection site except for empty triple rinsed clean containers which can be disposed of as non-hazardous waste.

Hazardous components which must be listed on the label:

- alcohols, C12-15,ethoxylated
- reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2 Mixtures

Components

Chemical Name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
alcohols, C12-15,ethoxylated	68131-39-5 500-195-7	Acute Tox. 4; H302 Eye Dam. 1; H318	>= 10 - < 20
Fatty acids, tall-oil, diesters with polypropylene glycol	68648-12-4	Skin Irrit. 2; H315 Eye Irrit. 2; H319	>= 1 - < 10
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9 613-167-00-5	Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 2; H310 Skin Corr. 1C; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M-Factor (Acute aquatic toxicity): 100 M-Factor (Chronic aquatic toxicity): 100 specific concentration limit Skin Corr. 1C; H314 >= 0.6 % Skin Irrit. 2; H315 >= 0.06 - < 0.6 % Eye Irrit. 2; H319 >= 0.06 - < 0.6 % Skin Sens. 1A; H317 >= 0.0015 % Eye Dam. 1; H318 >= 0.6 %	>= 0.0025 - < 0.025

Chemical Name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Substances with a workplace exposure limit :			
C.I. pigment green 7	1328-53-6 215-524-7	Eye Irrit. 2; H319	>= 50 - < 70
carbon black	1333-86-4 215-609-9		>= 1 - < 10

For explanation of abbreviations see section 16.

SECTION 4. FIRST-AID MEASURES

4.1 Description of first aid measures

General advice: Have the product container, label or Safety Data Sheet with you when calling the emergency number, a poison control center or physician, or going for treatment.

If inhaled: Move the victim to fresh air. If breathing is irregular or stopped, administer artificial respiration.

Keep patient warm and at rest. Call a physician or poison control centre immediately.

In case of skin contact: Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.

In case of eye contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Immediate medical attention is required.

If swallowed: If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms: Nonspecific. No symptoms known or expected.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment: There is no specific antidote available. Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:

Extinguishing media - small fires

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media - large fires

Use alcohol-resistant foam or water spray.

Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting: As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).

Exposure to decomposition products may be a hazard to health.

5.3 Advice for fire-fighters

Special protective equipment for firefighters: Wear full protective clothing and self-contained breathing apparatus.

Further information: Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions: Refer to protective measures listed in sections 7 and 8.

6.2 Environmental precautions

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Clean contaminated surface thoroughly. Clean with detergents. Avoid solvents. Retain and dispose of contaminated wash water.

6.4 Reference to other sections

For disposal considerations see section 13., Refer to protective measures listed in sections 7 and 8.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Advice on safe handling: No special protective measures against fire required. Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers: No special storage conditions required. Keep containers tight-ly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.

7.3 Specific end use(s)

Specific use(s): Refer to protective measures listed in sections 7 and 8.

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
C.I. pigment green 7	1328-53-6	TWA (Dusts and mists)	1 mg/m ³ (Copper)	GB EH40
		STEL (Dusts and mists)	2 mg/m ³ (Copper)	GB EH40
carbon black	1333-86-4	TWA	3.5 mg/m ³	GB EH40
		STEL	7 mg/m ³	GB EH40
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	55965-84-9	STEL	0.2 mg/m ³	

Derived No Effect Level (DNEL):

Substance name	End Use	Exposure routes	Potential health effects	Value
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)	Workers	Inhalation	Local effects	0.02 mg/m ³
	Consumers	Inhalation	Local effects	0.02 mg/m ³
	Consumers	Oral	Systemic effects	0.09 mg/kg bw/day

Predicted No Effect Concentration (PNEC):

Substance name	Environmental Compartment	Value
reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one(3:1)	Fresh water	3.39 µg/l
	Marine water	3.39 µg/l
	Sewage treatment plant	0.23 mg/l
	Fresh water sediment	0.027 mg/kg dry weight (d.w.)
	Marine sediment	0.027 mg/kg dry weight (d.w.)
	Soil	0.01 mg/kg dry weight (d.w.)

8.2 Exposure controls**Engineering Measures:**

Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. Maintain air concentrations below occupational exposure standards. Where necessary, seek additional occupational hygiene advice.

Personal protective equipment

Eye protection: Tightly fitting safety goggles

Always wear eye protection when the potential for inadvertent eye contact with the product cannot be excluded. Use eye protection according to EN 166.

Hand protection

Material: Nitrile rubber

Break through time: > 480 min

Glove length: 0.5 mm

Remarks: Wear protective gloves. The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. The break through time depends amongst other things on the material, the thickness and the type of glove and therefore has to be measured for each case. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Skin and body protection: Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. Remove and wash contaminated clothing before re-use.

Wear as appropriate: Impervious clothing

Respiratory protection: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Suitable respiratory equipment: Respirator with combination filter for vapour/particulate (EN 141)

The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

Filter type: Combined particulates and organic vapour type (A-P)

Protective measures: The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

Appearance : liquid

Colour : green

Odour : characteristic

Odour Threshold : No data available

pH : 7.7. Concentration: 100 % w/v

Melting point/range : No data available

Boiling point/boiling range : >= 100 °C

Flash point : Method: Setta closed cup, does not flash

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit / Upper flammability limit: No data available

Lower explosion limit / Lower flammability limit: No data available

Vapour pressure : No data available

Relative vapour density : No data available

Density : 1.33 - 1.35 g/cm³ (20 °C)

Water solubility : soluble

Solubility in other solvents : No data available

Partition coefficient: noctanol/ water: No data available

Auto-ignition temperature : 433 °C

Decomposition temperature : No data available

Viscosity, kinematic : No data available

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

9.2 Other Information

Particle size : No data available

SECTION 10. STABILITY AND REACTIVITY**10.1 Reactivity:**

None reasonably foreseeable.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions: No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

Conditions to avoid: No decomposition if used as directed.

10.5 Incompatible materials

Materials to avoid: None known.

10.6 Hazardous decomposition products

Hazardous decomposition products: No hazardous decomposition products are known.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Information on likely routes of exposure: Ingestion, Inhalation, Skin contact, Eye contact

Acute oral toxicity:

Product:

Acute oral toxicity: Acute toxicity estimate: > 2,000 mg/kg
Method: Calculation method

Components:

alcohols, C12-15,ethoxylated:

Acute oral toxicity: LD50 (Rat): 1,000 - 2,000 mg/kg
Remarks: Information given is based on data obtained from similar substances.

Fatty acids, tall-oil, diesters with polypropylene glycol:

Acute oral toxicity: Assessment: The component/mixture is minimally toxic after single ingestion.

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1):

Acute oral toxicity: Assessment: The component/mixture is toxic after single ingestion.

Acute inhalation toxicity: Assessment: The component/mixture is highly toxic after short term inhalation.

Acute dermal toxicity: Assessment: The component/mixture is highly toxic after single contact with skin.

Skin corrosion/irritation

Components:

Fatty acids, tall-oil, diesters with polypropylene glycol:

Result : Irritating to skin.

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1):

Result : Corrosive after 1 to 4 hours of exposure

Serious eye damage/eye irritation

Components:

alcohols, C12-15,ethoxylated:

Species: Rabbit

Result: Risk of serious damage to eyes.

Remarks: Information given is based on data obtained from similar substances.

Fatty acids, tall-oil, diesters with polypropylene glycol:

Result: Eye irritation

Respiratory or skin sensitisation

Components:

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1):

Result : The product is a skin sensitiser, sub-category 1A.

SECTION 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Components:

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1):

Toxicity to fish : LC50 (*Oncorhynchus mykiss* (rainbow trout)): 0.22 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (*Daphnia* (water flea)): 0.1 mg/l
Exposure time: 48 h

Toxicity to algae/aquatic plants: ErC50 (*Raphidocelis subcapitata* (freshwater green alga)): 0.048 mg/l
Exposure time: 72 h
NOEC (*Raphidocelis subcapitata* (freshwater green alga)): 0.0012 mg/l
End point: Growth rate
Exposure time: 72 h
ErC50 (*Skeletonema costatum* (marine diatom)): 0.0052 mg/l
Exposure time: 48 h
NOEC (*Skeletonema costatum* (marine diatom)): 0.00064 mg/l
End point: Growth rate
Exposure time: 48 h

M-Factor (Acute aquatic toxicity): 100

Toxicity to fish (Chronic toxicity): NOEC: 0.098 mg/l
Exposure time: 28 d
Species: *Oncorhynchus mykiss* (rainbow trout)

Toxicity to daphnia and other aquatic invertebrates

(Chronic toxicity): NOEC: 0.004 mg/l
Exposure time: 21 d
Species: *Daphnia* (water flea)

M-Factor (Chronic aquatic toxicity): 100

C.1. pigment green 7:

Toxicity to fish : LC50 (*Danio rerio* (zebra fish)): > 1,000 mg/l
Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates: EC50 (*Daphnia magna* (Water flea)): > 5,600 mg/l
Exposure time: 24 h

Toxicity to algae/aquatic plants: EC50 (*Desmodesmus subspicatus* (green algae)): > 10,000 mg/l
Exposure time: 72 h

12.2 Persistence and degradability

Components:

reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1):

Biodegradability : Result: Readily biodegradable.

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:

Endocrine disrupting potential: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product: Where possible recycling is preferred to disposal or incineration. It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations.

Contaminated packaging: Dispose of as unused product.

SECTION 14. TRANSPORT INFORMATION

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

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

Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17) : Conditions of restriction for the following entries should be considered: Number on list 3

UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation: Not applicable
The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain): Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer: Not applicable

UK REACH List of substances subject to authorisation (Annex XIV): Not applicable
GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation: Not applicable
Control of Major Accident Hazards Regulations 2015 (COMAH): Not applicable

15.2 Chemical Safety Assessment

A Chemical Safety Assessment is not required for this substance when it is used in the specified applications.

SECTION 16. OTHER INFORMATION

Full text of H-statements

H301 : Toxic if swallowed.

H302 : Harmful if swallowed.

H310 : Fatal in contact with skin.

H314 : Causes severe skin burns and eye damage.

H315 : Causes skin irritation.

H317 : May cause an allergic skin reaction.

H318 : Causes serious eye damage.

H319 : Causes serious eye irritation.

H330 : Fatal if inhaled.

H400 : Very toxic to aquatic life.

H410 : Very toxic to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox. : Acute toxicity

Aquatic Acute : Short-term (acute) aquatic hazard

Aquatic Chronic : Long-term (chronic) aquatic hazard

Eye Dam. : Serious eye damage

Eye Irrit. : Eye irritation

Skin Corr. : Skin corrosion

Skin Irrit. : Skin irritation

Skin Sens. : Skin sensitisation

GB EH40 : UK. EH40 WEL - Workplace Exposure Limits

GB EH40 / TWA : Long-term exposure limit (8-hour TWA reference period)

GB EH40 / STEL : Short-term exposure limit (15-minute reference period)

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways;
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation;
DSL - Domestic Substances List (Canada-da); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ERcX - Concentration associated with x% growth rate response; GHS - Globally Harmonized System;
GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying

Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Classification of the mixture: **Classification procedure:**

Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	Calculation method
Aquatic Chronic 3	H412	Calculation method

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.