



SAFETY DATA SHEET FOURTRESS CLUSTER SAN 15

According to Regulation (EC) No. 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures.

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

1.1. Product identifier

Product name FOURTRESS CLUSTER SAN 15

Product number HDD12

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

Identified uses Disinfectant. For professional use only.

Uses advised against Not for use by hand. Must not be used where Hypochlorite based chemicals (Bleach) are present. Not for direct contact with Food or Beverage stuffs. Must not be mixed with Alkaline/Caustic Products Not for Direct Oral Consumption.

1.3. Details of the supplier of the safety data sheet

Manufacturer Holchem Laboratories Limited
Gateway House, Pilsworth Road, Pilsworth Industrial Estate, Bury, Lancashire (UK), BL9 8RD

1.4. Emergency telephone number

Emergency telephone Out of Office Hours Emergency Information:-
For accidents and spillages involving this product that pose a threat to the environment, or human health, or require immediate first aid advice call:- +44(0) 7050 265597.
Note:- This number will not accept order queries or calls dealing with equipment breakdowns.
Irish Environmental Protection Agency 1890 335599 (This is a Lo Call Number)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Org. Perox. F - H242 Met. Corr. 1 - H290

Health hazards Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Corr. 1A - H314 Eye Dam. 1 - H318 STOT SE 3 - H335

Environmental hazards Aquatic Chronic 1 - H410

2.2. Label elements

Hazard pictograms



Signal word

Danger

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Hazard statements	H242 Heating may cause a fire. H290 May be corrosive to metals. H314 Causes severe skin burns and eye damage. H335 May cause respiratory irritation. H410 Very toxic to aquatic life with long lasting effects. H302+H312+H332 Harmful if swallowed, in contact with skin or if inhaled.
Precautionary statements	P234 Keep only in original packaging. P273 Avoid release to the environment. P280 Wear protective clothing, gloves, eye and face protection. 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. P313 Get medical advice/ attention. P403+P233 Store in a well-ventilated place. Keep container tightly closed. P501 Dispose of contents/ container in accordance with national regulations.
Contains	HYDROGEN PEROXIDE SOLUTION ... %, ACETIC ACID, PERACETIC ACID
Detergent labelling	15 - < 30% oxygen-based bleaching agents
Supplementary precautionary statements	P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB. Note H290 classification relates to the Neat Undiluted Product.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

HYDROGEN PEROXIDE SOLUTION ... %			10-30%
CAS number: 7722-84-1	EC number: 231-765-0	REACH registration number: 01-2119485845-22	
Classification		Classification (67/548/EEC or 1999/45/EC)	
Ox. Liq. 1 - H271		R5 O;R8 C;R35 Xn;R20/22	
Acute Tox. 4 - H302			
Acute Tox. 4 - H332			
Skin Corr. 1A - H314			
Eye Dam. 1 - H318			
STOT SE 3 - H335			
ACETIC ACID			10-30%
CAS number: 64-19-7	EC number: 200-580-7	REACH registration number: 01-2119475328-30-XXXX	
Classification		Classification (67/548/EEC or 1999/45/EC)	
Flam. Liq. 3 - H226		C;R35. R10.	
Skin Corr. 1A - H314			
Eye Dam. 1 - H318			

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PERACETIC ACID		10-30%
CAS number: 79-21-0	EC number: 201-186-8	REACH registration number: 01-2119531330-56-0000
M factor (Acute) = 1	M factor (Chronic) = 10	
Classification Flam. Liq. 3 - H226 Org. Perox. C - H242 Acute Tox. 4 - H302 Acute Tox. 4 - H312 Acute Tox. 4 - H332 Skin Corr. 1A - H314 Eye Dam. 1 - H318 STOT SE 3 - H335 Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410		Classification (67/548/EEC or 1999/45/EC) Xn;R20/21/22. C;R35. O;R7. N;R50. R10.

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

Composition comments The Biocidally Active components of this product are supported in the Biocidal Products Regulation. Note:- H290 "May be Corrosive to Metals" refers to the neat product.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	When it is safe to do so, remove victim immediately from source of exposure. However, consideration should be given as to whether moving the victim will cause further injury. For immediate First Aid advice in the UK, dial 111.
Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. If breathing stops, provide artificial respiration. Get medical attention.
Ingestion	Do not induce vomiting. Rinse mouth thoroughly with water. Place unconscious person on the side in the recovery position and ensure breathing can take place. Get medical attention.
Skin contact	Immediately remove contaminated clothing. Rinse immediately with plenty of water. Get medical attention immediately.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention.
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 information given here relates to the neat chemical, dilutions may also cause chemical burns to skin and permanent eye damage.
Inhalation	Severe respiratory irritant. Breathing difficulties will be experienced, together with coughing, pulmonary oedema. On repeated exposure nose bleeds and chronic bronchitis may be experienced. If mixed with Hypochlorite based products (Bleach) Chlorine Gas may be evolved, this can result in irritation to eyes and difficulty in breathing. If inhaled this may result in irritation to the mouth, nose and respiratory tract.

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Ingestion Unlikely route of exposure without deliberate abuse. If neat chemical is ingested, chemical burning of mouth, throat and GI tract will occur. There is potential for perforation of the oesophagus and stomach. Similar but less severe symptoms will be seen if dilute chemical is ingested.

Skin contact This product is strongly corrosive.

Eye contact This product is strongly corrosive. May result in permanent eye damage.

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

Notes for the doctor Strongly Oxidising Acid in Aqueous Solution. Rinse well with water to neutral pH. Risk of Respiratory disorder.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is non-combustible. Use fire-extinguishing media suitable for the surrounding fire. Water. Water spray, fog or mist.

5.2. Special hazards arising from the substance or mixture

Specific hazards Strong Oxidiser, may cause fire or explosion.
Oxygen released in thermal decomposition may support combustion. When heated may cause fire. In contact with some metals (Aluminium, Zinc and their Alloys) Hydrogen Gas is formed, which may form an explosive mixture with air. Note - Comment refers to neat product. Contact with Sodium Hypochlorite liberates toxic Chlorine Gas.

5.3. Advice for firefighters

Protective actions during firefighting Use air respirator if substance is involved in a fire. Cool containers exposed to flames with water until well after the fire is out.

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 Wear protective clothing as described in Section 8 of this safety data sheet.

6.2. Environmental precautions

Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Stop leak if possible without risk. Wear suitable protective equipment, including gloves, goggles/face shield, respirator, boots, clothing or apron, as appropriate. Avoid the spillage or runoff entering drains, sewers or watercourses. Absorb in vermiculite, dry sand or earth and place into containers. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.

6.4. Reference to other sections

Reference to other sections See sections 8, 12 & 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Wear suitable protective equipment for prolonged exposure and/or high concentrations of vapours, spray or mist. Read and follow manufacturer's recommendations.

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7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Keep container tightly closed. Keep only in the original container in a cool, well-ventilated place. Store in a demarcated bunded area to prevent release to drains and/or watercourses. Keep above the chemical's freezing point. Keep away from chlorinated and alkaline products.

7.3. Specific end use(s)

Specific end use(s) Disinfectant. Refer to user information sheet for specific instructions.

Usage description This product is suitable for use in High Care Food and Dairy production areas, it is not suitable for direct contact with food.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

HYDROGEN PEROXIDE SOLUTION ... %

Long-term exposure limit (8-hour TWA): WEL 1 ppm 1.4 mg/m³

Short-term exposure limit (15-minute): WEL 2 ppm 2.8 mg/m³

ACETIC ACID

Short-term exposure limit (15-minute): WEL 15 ppm

Long-term exposure limit (8-hour TWA): WEL 10 ppm

PERACETIC ACID

Short-term exposure limit (15-minute): 0.4 ppm

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

HYDROGEN PEROXIDE SOLUTION ... % (CAS: 7722-84-1)

DNEL Professional - Inhalation; Short term local effects: 3 mg/m³
Professional - Inhalation; Long term local effects: 1.4 mg/m³
Consumer - Inhalation; Short term local effects: 1.93 mg/m³
Consumer - Inhalation; Long term local effects: 0.21 mg/m³

PNEC - Fresh water; 0.0126 mg/l
- marine water; 0.0126 mg/l
- Intermittent release; 0.0138 mg/l
- STP; 4.66 mg/l
- Sediment (Freshwater); 0.047 mg/kg
- Sediment (Marinewater); 0.047 mg/kg
- Soil; 0.0023 mg/kg

ACETIC ACID (CAS: 64-19-7)

DNEL General population - Inhalation; Long term systemic effects: 25 mg/m³
General population - Inhalation; Acute local effects: 25 mg/m³
General population - Oral; Long term systemic effects: 7.20 ug/KG bw/day

PERACETIC ACID (CAS: 79-21-0)

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DNEL

Professional - Inhalation; Short term systemic effects: 0.6 mg/m³
 Professional - Inhalation; Long term systemic effects: 0.6 mg/m³
 Professional - Inhalation; Short term local effects: 0.6 mg/m³
 Professional - Inhalation; Long term local effects: 0.6 mg/m³
 Professional - Dermal; Short term local effects: 0.12 %
 Consumer - Inhalation; Short term systemic effects: 0.6 mg/m³
 Consumer - Inhalation; Long term systemic effects: 0.6 mg/m³
 Consumer - Inhalation; Long term local effects: 0.6 mg/m³
 Consumer - Inhalation; Short term local effects: 0.3 mg/m³
 Consumer - Dermal; Short term local effects: 0.12 %

PNEC

- Fresh water; 0.000224 mg/l
 - STP; 0.051 mg/l
 - Sediment (Freshwater); 0.00018 mg/kg
 - Soil; 0.320 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

If use of this product generates dust, mists, vapours or fumes, process enclosures or local exhaust ventilation or other engineering controls should be used to keep worker exposure below any statutory or recommended limits quoted in this msds or other data sources.

Personal protection

The PPE indicated above is not a COSHH assessment. It represents PPE that should be considered during the manufacture, distribution, use and final disposal stages of this product's life cycle. It is the responsibility of employers to conduct a COSHH/risk assessment to determine appropriate PPE levels. The information given below should be used to support this assessment. Where possible replace manual processes with automated or closed processes to minimise contact with the product.

Eye/face protection

The following protection should be worn: Full face visor or shield. Refer to EN Standard 166 to select appropriate level of protection.

Hand protection

It is recommended that gloves are made of the following material: Butyl rubber. Refer to Standard EN 374 and EN 16523 The selected gloves should have a breakthrough time of at least 8 hours.

Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible. Reference to EN 13832 and EN 943 is useful when selecting footwear and clothing.

Hygiene measures

Provide eyewash station and safety shower. Promptly remove non-impervious clothing that has become contaminated, provided it is not adhered to the skin. Contaminated clothing and shoes must be discarded.

Respiratory protection

No specific recommendation made, but respiratory protection must be used if the general level exceeds the Workplace Exposure Limit. Recommended filter type ABEK-P2. Consult EN133 AND EN141.

Environmental exposure controls

Do not allow the substance to contaminate surface water/ground water. See points 6, 12 & 13. Discharge of solutions into effluent systems (including municipal drains) or to surface water are expected to cause significant pH changes. Discharge of solutions should be carried out such that pH changes are minimised. Where necessary pH buffering measures should be adopted. Note refers to neat product.

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General Health and Safety Measures.

The above requirements refer to the neat chemical. In-use solutions may have a lower classification, however, a full risk assessment should be carried out before handling any chemical(s). Risk assessments should refer to COSHH and any other relevant legislation or industry specific guidelines governing the use of chemicals. Note a 1% solution would have no health risk classification, but would still have the environmental classification H412 Harmful to aquatic life with long lasting effects.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance	Clear liquid.
Colour	Colourless.
Odour	Pungent. Acetic acid.
Odour threshold	Not applicable.
pH	pH (concentrated solution): < 1
Melting point	< 0°C
Initial boiling point and range	105 Degrees C
Flash point	Not applicable.
Evaporation rate	Not applicable.
Evaporation factor	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Vapour pressure	32hPa (calculated) @ 25°C
Vapour density	Not applicable.
Relative density	1.1 @ 20°C
Bulk density	Not applicable.
Solubility(ies)	Soluble in water.
Partition coefficient	Not applicable. Technically not feasible.
Auto-ignition temperature	Not applicable.
Decomposition Temperature	Not applicable. >=60°C Self-Accelerating decomposition temperature (SADT)
Viscosity	Not determined.
Explosive properties	Not applicable.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Classified as Oxidising.

9.2. Other information

Refractive index	Not applicable.
Particle size	Not applicable.
Molecular weight	Not applicable.
Volatility	Not applicable.

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Saturation concentration	Not applicable.
Critical temperature	Not applicable.
Volatile organic compound	Not applicable.
Explosive Properties	Not Classified as Explosive
Storage Temperature Range	0 to +25 degrees C

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Not expected to react when correctly stored and used. Mixing with other chemicals may produce unexpected reactions. Stable under normal temperature conditions and recommended use. Avoid contact with caustic/alkaline material; this will generate heat and potentially corrosive vapour. Avoid contact with bleach and other hypochlorite based products; this will produce toxic Chlorine gas.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures. Decomposes on heating.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions	Refer to section 10.1. Do not mix with Hypochlorite based chemicals, this will result in the generation of toxic chlorine gas. Contact with combustible material may cause fire or explosions. Contact with flammable material may cause fire or explosions. Risk of explosion if heated under confinement. Fire or intense heat may cause violent rupture or packages.
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10.4. Conditions to avoid

Conditions to avoid	Avoid heat, flames and other sources of ignition. Avoid pressure build up, contamination by dust or combustible materials.
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10.5. Incompatible materials

Materials to avoid	Reacts violently with readily oxidisable organic materials, acids, alkalis, reducing agents and other oxidisers. Catalytically decomposed by heavy metals and their salts, enzymes and contaminants such as dirt or rust. Flammable/combustible materials.
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10.6. Hazardous decomposition products

Hazardous decomposition products	Oxygen.
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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

Acute toxicity oral (LD₅₀ mg/kg)	652.0
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Species	Rat
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Notes (oral LD₅₀)	Data is for a 11.7% PAA solution.
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ATE oral (mg/kg)	652.0
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Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg)	1,957.0
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Species Rabbit

Notes (dermal LD₅₀) Data is for a 11.7% PAA solution.

ATE dermal (mg/kg) 1,957.0

Acute toxicity - inhalation

Acute toxicity inhalation (LC₅₀ dust/mist mg/l) 652.0

Species Rat

Notes (inhalation LC₅₀) 0.5 - 1.3mg/l, aerosol (15% PAA mixture).

ATE inhalation (dusts/mists mg/l) 1.5

Carcinogenicity

Carcinogenicity The components of this formulation will not be systemically available in the body under normal conditions of handling. As a consequence it is not expected to cause cancer.

General information See section 4.2.

Inhalation May cause damage to mucous membranes in nose, throat, lungs and bronchial system.

Ingestion Causes burns. May cause internal injury.

Skin contact This product is strongly corrosive.

Eye contact This product is strongly corrosive. May cause permanent eye injury.

SECTION 12: Ecological information

Ecotoxicity This product is classified as very toxic to aquatic life, this refers to the neat product. Normal use is not expected to pose a risk.

12.1. Toxicity

Acute aquatic toxicity

Acute toxicity - fish See note 12.0.

12.2. Persistence and degradability

Persistence and degradability The product is expected to be biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential Not expected to bioaccumulate.

Partition coefficient Not applicable. Technically not feasible.

12.4. Mobility in soil

Mobility The product contains substances which are water soluble and may spread in water systems.

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.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

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13.1. Waste treatment methods

General information

When handling waste, the safety precautions applying to handling of the product should be considered. Do not mix with other chemicals. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

Disposal methods

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Disposal of large volumes of neat or use strength solution can be detrimental to small biological effluent treatment systems.

SECTION 14: Transport information

14.1. UN number

UN No. (ADR/RID) 3109

UN No. (IMDG) 3109

UN No. (ICAO) 3109

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ORGANIC PEROXIDE TYPE F, LIQUID (PEROXYACETIC ACID)

Proper shipping name (IMDG) ORGANIC PEROXIDE TYPE F, LIQUID (PEROXYACETIC ACID)

Proper shipping name (ICAO) ORGANIC PEROXIDE TYPE F, LIQUID (PEROXYACETIC ACID)

Proper shipping name (ADN) ORGANIC PEROXIDE TYPE F, LIQUID (PEROXYACETIC ACID)

14.3. Transport hazard class(es)

ADR/RID class 5.2

ADR/RID label 5.2 & 8

IMDG class 5.2

ICAO class/division 5.2

ICAO subsidiary risk 8

Transport labels



14.4. Packing group

ADR/RID packing group II

IMDG packing group II

ICAO packing group II

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

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EmS 5.1-02/03/05

Emergency Action Code 2W

Hazard Identification Number 539
(ADR/RID)

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

Transport in bulk according to Not applicable.

Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

EU legislation European Regulation (EC) No 1272/2008 on Classification, Labelling and Packaging of Substances and Mixtures.
This replaces Directive 67/548/EEC - Classification, Packaging and Labelling of Dangerous Substances and Regulation (EC) No. 453/2010 relating to the Classification, Packaging and Labelling of Dangerous Preparations. Also considered is the REACH Regulation (EC) No.1907/2006.

15.2. Chemical safety assessment

Pcs Information A suspension concentrate containing 15% wt/wt Peracetic acid in a corrosive/harmful/oxidising formulant. Authorisation Holder Holchem Laboratories Ltd.

Pcs Number PCS No:- 98801

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet (EC) No. 1272/2008 : EU Regulation on Classification, Labelling and Packaging of Substances and Mixtures.
NPIS - National Poisons Information Service.
PBT - Persistent, Bioaccumulative & Toxic.
vPvB - Very Persistent, Very bioaccumulative.
REACH - Registration, Evaluation, Authorisation & restriction of CHemicals (Regulation EC 1907/2006).
DNEL - Derived No Effect Limit.
PNEC - Predicted No Effect Concentration.
COSHH - Control of Substances Hazardous to Health.
Industry - Refers in section 8 to application of the substance in an industrial process.
Professional - Refers in section 8 to application/use of the preparation/product in a skilled trade premises.

Revision comments Product Launch

Revision date 19/08/2016

SDS number 24314

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Risk phrases in full

R10 Flammable.
R20/21/22 Harmful by inhalation, in contact with skin and if swallowed.
R20/22 Harmful by inhalation and if swallowed.
R35 Causes severe burns.
R37 Irritating to respiratory system.
R5 Heating may cause an explosion.
R50 Very toxic to aquatic organisms.
R7 May cause fire.
R8 Contact with combustible material may cause fire.

Hazard statements in full

H226 Flammable liquid and vapour.
H242 Heating may cause a fire.
H271 May cause fire or explosion; strong oxidiser.
H290 May be corrosive to metals.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
H412 Harmful to aquatic life with long lasting effects.

REACH extended MSDS comments

REACH requires that persons handling chemicals should take the necessary risk management measures, in accordance with assessments from manufacturers and importers of chemical substances. The relevant recommendations must be passed along the supply chain. These assessments are generally reported in Exposure Scenarios. Where Exposure Scenarios have been provided for substances used in this product, the relevant information is incorporated into the safety data sheet.

END OF SAFETY DATA SHEET

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use. All composition information is based on suppliers data.