Revision 1

ReAgent

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SAFETY DATA SHEET HYDROGEN PEROXIDE 100 VOL (27.5% W/W)

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

1.1. Product identifier	
Product name	HYDROGEN PEROXIDE 100 VOL (27.5% W/W)
Product No.	1208
1.2. Relevant identified u	ses of the substance or mixture and uses advised against
Identified uses	General chemical reagent Bleaching agent Water treatment chemical. Biocide Intermediate Cleaning agent. Dental care Sterilisation
Uses advised against	Processes that would lead to occupational exposure without the use of personal protective equipment. Processes involving incompatible materials. Use as described within any supplied exposure scenarios.
1.3. Details of the supplie	er of the safety data sheet
Supplier	Reagent Chemical Services
	18 Aston Fields Road
	Whitehouse Industrial Estate
	Runcorn
	Cheshire WA7 3DL
	T: 01928 716903 (08.30 - 17.00)
	F: 01928 716425
	E: info@reagent.co.uk

1.4. Emergency telephone number

NHS Direct. Tel. 0845 4647 (24 Hours)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Acute Tox. 4 - H302;Eye Dam. 1 - H318
Environment	Not classified.
Xn;R22. Xi;R41.	

Classification (67/548/EEC)

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

Human health

Irritating to the respiratory system and skin. Irritating to eyes. Irritation of the mouth, throat and gastrointestinal tract. Ingestion may cause a feeling of nausea, larger amounts may produce vomiting. Environment

The product is not classed as environmentally hazardous. The product is miscible with water and can spread in water systems.

Physical and Chemical Hazards

Corrosive to metals. Can supply oxygen in the event of a fire due the breakdown of hydrogen peroxide.

2.2. Label elements

Contains

HYDROGEN PEROXIDE SOLUTION ... %

Label In Accordance With (EC) No. 1272/2008



Signal Word

Hazard Statements		
	H302	Harmful if swallowed.
	H318	Causes serious eye damage.
Precautionary Statements		
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P301+312	IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
	P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P310	Immediately call a POISON CENTER or doctor/physician.
	P501	Dispose of contents / container to hazardous waste depot.
Supplementary Precautionary	Statements	
	P270	Do not eat, drink or smoke when using this product.
	P264	Wash contaminated skin thoroughly after handling.
	P330	Rinse mouth.

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

HYDROGEN PEROXIDE SOLUTION	%		10-30%
CAS-No.: 7722-84-1	EC No.: 231-765-0		
Classification (EC 1272/2008)		Classification (67/548/EEC)	
Ox. Liq. 1 - H271		R5	
Acute Tox. 4 - H302		O;R8	
Acute Tox. 4 - H332		C;R35	
Skin Corr. 1A - H314		Xn;R20/22	
STOT SE 3 - H335			

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

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

CAUTION! First aid personnel must be aware of own risk during rescue! Always consider any dangers in the vicinity before approaching to treat the casualty. First aid personnel must protect themselves with all necessary personal protective equipment during the assistance of casualties. When breathing is difficult, properly trained personnel may assist the casualty by administering oxygen. Check airway for any blockages. Place unconscious person on the side in the recovery position and ensure breathing can take place. Never give anything by mouth to an unconscious person. If medical assistance is needed take as much detail as possible about the incident and hazardous materials involved with the casualty.

Inhalation

Remove victim immediately from source of exposure. Provide rest, warmth and fresh air. In case of severe exposure or if any discomfort continues get medical attention.

Ingestion

Do not induce vomiting. Rinse mouth thoroughly with plenty of water. Get medical attention immediately!

Skin contact

Remove footwear if contaminated. Immediately remove contaminated clothing and wash before re-use. Rinse the skin immediately with lots of water. After contact with small amounts get medical attention if any discomfort continues. For large amounts, obtain medical attention. Eye contact

Promptly wash eyes with plenty of water or eye wash solution while lifting the eyelids. If possible remove any contact lenses and continue to wash. Get medical attention immediately.

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

General information

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation.

Irritation of nose, throat and airway. Coughing. Ingestion Nausea, vomiting. Irritation of the mouth, throat, oesophagus and gastorintestinal tract. Skin contact Skin irritation. Bleaching of the skin Eye contact

Causes irritation of the eyes. Possible corneal damage. May cause conjunctivitis Lachrymation. May cause burns.

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

Cases of eye contact and ingestion should be treated immediately. Have facilities in place to wash skin and eyes in case of exposure.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

The product is non-combustible. Use fire-extinguishing media appropriate for surrounding materials. Water spray, foam, dry powder or carbon dioxide.

Unsuitable extinguishing media

Do not use water jet as this can spread the fire. Do not use carbon dioxide in enclosed spaces with insufficient ventilation.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

The product in its normal state is not classed as combustible. In the heat of a fire it can produce: Oxygen.

Unusual Fire & Explosion Hazards

Oxidising material may promote the spread of fire. Product containers can melt in the heat of a fire. Packaging materials will be combustible and provide fuel for the fire.

Specific hazards

The mixture contains hydrogen peroxide which will promote the spread of fire by the supply of oxygen.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Prevent run-off from entering drains and watercourses. Use water spray to cool unopened containers. Evacuate and keep non-emergency personnel away from the fire area until it is properly extinguished with no danger of re-ignition. Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Have emergency procedures in place for treating spillages, evacuating the area and informing the emergency services if necessary. Restrict access to the area until the spillage is treated, if large amounts of vapours are produced that will be hazardous to others, evacuate the area. When any other effects of spillages will affect the safety of others the area should be evacuated. Avoid ingestion, inhalation of vapours and contact with skin and eyes. Spill control personnel should wear personal protective clothing and equipment as described in section 8 of this datasheet. Non-emergency personnel should be kept away from the area of spillage.

6.2. Environmental precautions

Avoid unauthorised discharge to the environment. Clean up any spillages immediately, prevent material from spreading and entering drains or sewage systems. Large spillages or uncontrolled discharge to water systems must be alerted to the Environmental Agency or other regulatory body. If spillages to land cannot be treated safely or if contamination will occur the Environment Agency must be alerted immediately. If the product has entered a foul drain or sewage system in significant amounts to cause a hazard then the local water treatment company must be informed.

6.3. Methods and material for containment and cleaning up

Small quantities (< 0.5L) can be flushed to drain with lots of water. OR Small spillages should be absorbed with an inert, non-combustible absorbent. Large Spillages: Dam and absorb spillages with sand, earth or other inert material. Fit drain covers where they are available if the spillage is likely to enter the drainage system. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Flush area clean with lots of water. Be aware of potential for surfaces to become slippery. Ventilate area and allow to dry before allowing access. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

Refer to sections 8 and 13 for additional information.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling the product. Avoid ingestion of the product, inhalation of any vapours/mists when produced and contact with skin and eyes. Do not eat, drink or smoke when handling. Wash at the end of each work shift, before eating, drinking, smoking and using the toilet. Do not mix with incompatible substances or mixtures. Remove contaminated clothing/footwear/equipment before entering eating areas or places that would expose others to the product. Do not use in areas close to drainage systems unless measures are in place to prevent access of product. Ensure emergency procedures are in place to treat spillages and cope with other situations such as evacuation. Provide eye washing and skin washing facilities, when handling large amounts a safety shower is recommended.

7.2. Conditions for safe storage, including any incompatibilities

Store in closed original container at temperatures between 5°C and 25°C. If the product is transferred to another container, this should be made of a compatible material that will not be affected preferrably plastic or glass. Do not use metal containers. The packaging manufacturer will advise on suitable packaging. Store away from heat, direct sunlight and moisture. Store in a stable situation to avoid spillages. It is advisable to store in a bunded area or use other protective measures such as a sump pallet or storage tray. Storage Class

Corrosive storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2. Registered uses can be found on the ECHA website under Registered Substances.

Usage Description

Use product under conditions described in this datasheet. Avoid exposure of operators and others who may be affected by its use. Avoid overuse of the product which would create waste and potential spillages. Always use recommended personal protective equipment. Only use the product for its intended use in a safe manner, do not use for other purposes.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Name	STD	TWA	- 8 Hrs	STEL	- 15 Min	Notes
HYDROGEN PEROXIDE SOLUTION %	WEL	1 ppm	1.4 mg/m3	2 ppm	2.8 mg/m3	

WEL = Workplace Exposure Limit.

DNEL

Industry Industry Consumer Consumer	Inhalation. Inhalation. Inhalation. Inhalation.	Short Term Long Term Short Term Long Term	Local Effects Local Effects Local Effects Local Effects	3 mg/m3 1.4 mg/m3 1.93 mg/m3 0.21 mg/m3
PNEC				
Freshwater	0.0126	mg/l		
Marinewater	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		

8.2. Exposure controls

Engineering measures

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined workplace exposure limit (WEL) is not exceeded.

Respiratory equipment

Wear suitable respiratory protection when vapours or mists are produced if the Workplace Exposure Limit is exceeded and there is insufficient ventilation or extraction. Respirator must be fitted with a cartridge suitable for the chemical of concern. Consult with the supplier as to the compatibility of the equipment with the chemical of concern. Respiratory protection should conform to the following standards. BS EN 140: Half-face masks. BS EN 136: Full face masks. CAUTION: Air purifying respirators do not protect the user in oxygen deficient atmospheres, use air supplied system. Powered air respirators should meet requirements of EN146 and EN12941. Airline fed respirators should meet the requirements of EN 270 and EN1835. Respiratory protection should be maintained in a proper condition and inspected at the frequency specified by current legislation.

Hand protection

Wear protective gloves. Butyl rubber. Rubber (natural, latex). Nitrile. Polyvinyl chloride (PVC). Be aware that latex gloves can produce an allergic reaction in sensitive individuals. For gloves involving total immersion 1.0mm thickness (if available) are recommended, at least 0.5mm and breakthrough time of >480 minutes. For splash resistance use minimum 0.5mm thickness and breakthrough time > 240 minutes. Gloves should have a breakthrough time sufficient for the amount of handling but allow dexterity for safe movement and handling. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Gloves showing signs of degradation should be changed to avoid skin contamination. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Gloves should carry the CE mark and conform to BS EN 374, chemicals and micro-organisms. When removing used gloves apply proper technique by avoiding skin contact with the outer surface. When packages of the product are being handled during storage or transport it is advisable to wear protective gloves to prevent damage to the skin. Eye protection

Wear approved chemical safety goggles conforming to EN 166.

Other Protection

Wear suitable protective clothing during transport, handling and storage operations connected with the product. Protective clothing should conform to the general requirements of EN 340:2003. Also consider EN 13034:2005; EN 14605:2005; EN 943:2002 dependent upon the situation resulting in exposure. Wear suitable protective footwear during handling of the product. When treating spillages it is recommended to wear protective boots, consult with the supplier as to the compatibility. Safety footwear should conform to standards EN 344 - 347. Wear rubber or plastic apron and full length gauntlets if handling large amounts. If there is a risk of splashing then wear a face shield. Have facilities in place to wash eyes in case of contact. If handling large amounts it is recommended to have a safety shower. Hygiene measures

Remove clothing when contamination will result in exposure to the substance, segregate and wash before re-use. Do not eat, drink or smoke in the work area. Wash hands at the end of each work shift and before eating, smoking and using the toilet. Remove contaminated clothing when entering eating areas or other places that could lead to contamination of others with the product. Environmental Exposure Controls

See section 6 for details.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Colourless.
Odour	Odourless.
Solubility	Miscible with water
Initial boiling point and boiling range	108°C 1013 hPa
Melting point (°C)	Approx33°C
Relative density	Approx. 1.13 @ 20°C
Bulk Density	
Not applicable.	
Vapour density (air=1)	
No information available.	
Vapour pressure	48 Pa @ 30°C
Evaporation rate	
No information available.	
Evaporation Factor	
No information available.	
pH-Value, Conc. Solution	2.7 @ 21°C
pH-Value, Diluted Solution	6 @ 21°C 0.35%
Viscosity	1.11 mPas @ 20°C
Solubility Value (G/100G	Completely miscible with water
H2O@20°C) Decomposition temperature (°C)	
No information available.	
Odour Threshold. Lower	
No information available.	
Odour Threshold, Upper	
No information available.	
Flash point	
Scientifically unjustified.	
Auto Ignition Temperature (°C)	
Scientifically unjustified.	

Flammability Limit - Lower(%) Scientifically unjustified. Flammability Limit - Upper(%) Scientifically unjustified. Partition Coefficient log Pow (N-Octanol/Water) -1.57 pH7 @ 20°C. Model calculation Explosive properties Not explosive EU Method A.14 (Explosive properties) Solid/Liquid Ignition On Contact With Air. Not applicable. Oxidising Comments

Unless otherwise stated the above information refers to 35% w/w Hydrogen Peroxide.

9.2. Other information

All available information has been included in section 9.1.

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Oxidising agent and reactive.

10.2. Chemical stability

Stable under normal conditions. Thermal decomposition can occur.

10.3. Possibility of hazardous reactions

May react vigorously or exothermically. Reactions in a sealed container may result in pressure build up with possible rupture of the container. May react explosively. Release of oxygen may support combustion. Hazardous Polymerisation

Will not polymerise.

10.4. Conditions to avoid

Avoid heat, direct sunlight and moisture. Avoid storage with incompatible materials. Avoid storage in freezing conditions. Avoid storage near to unprotected drainage systems. It is advisable to store the product within some form of containment to prevent spillages reaching drainage systems. Do not allow the storage container to be left exposed to the atmosphere. Avoid storage in an unstable manner or in a situation that would result in exposure to the product.

10.5. Incompatible materials

Materials To Avoid Metals. Metal salts Alkalis Acids. Reducing agents Organic solvents.

10.6. Hazardous decomposition products

See section 5 for thermal decomposition products.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information

The following information has been taken from the ECHA website: List of registered substances - Toxicological information.

Acute toxicity: Acute Toxicity (Oral LD50) 1193 mg/kg Rat US EPA Guidelines

Acute Toxicity (Dermal LD50) > 2000 mg/kg Rabbit US EPA Guidelines

Acute Toxicity (Inhalation LC50) > 0.17 mg/l (vapours) Rat 4 hours Hydrogen peroxide 50% w/w solution. US EPA Guidelines

Skin Corrosion/Irritation:

Dose 0.5ml of 35% w/w solution 4 hours Rabbit Primary dermal irritation index (PDI) 1.6 (mean) 4 hour exposure, 14 day observation period. Moderately Irritating.

Serious eye damage/irritation:

Tests on rabbits, OECD Guideline 405, Acute eye Irritation / Corrosion. Extremely irritating; 10% w/w solution.

Respiratory or skin sensitisation: Respiratory sensitisation No information available. Skin sensitisation Not available. No reliable information.

Germ cell mutagenicity: Genotoxicity - In Vitro Gene Mutation: OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test). Positive without metabolic activation. Hydrogen peroxide has the potential to induce mutations in mammalian cells. Genotoxicity - In Vivo Chromosome aberration: OECD Guideline 474. 35% solution. Negative. No genotoxicity under the conditions of the test. Intraperitoneal route.

Carcinogenicity: Carcinogenicity Scientifically unjustified.

Reproductive Toxicity: Reproductive Toxicity - Fertility Scientifically unjustified. No adverse effects to reproduction Reproductive Toxicity - Development Scientifically unjustified. Not toxic to reproductive development.

<u>Specific target organ toxicity - single exposure:</u> STOT - Single exposure No information available.

Specific target organ toxicity - repeated exposure: STOT - Repeated exposure NOEL = 2.03 ppmV/6hr/day Inhalation. Rat Hydrogen peroxide 50% w/w solution. OECD 412 (Repeated dose Inhalation Toxicity: 28/14 day) Respiratory tract irritant

General information

Effects will be dependent upon the concentration and length of time of exposure. Higher concentrations will produce more pronounced effects.

Inhalation

Vapours or mists will irritate the nose, throat and respiratory tract. Coughing and difficulties in breathing. Severe exposure may cause pulmonary oedema and bronchitis.

Ingestion

Irritation of the mouth, the oesophagus and the gastrointestinal tract. Stomach pain and vomiting. Shock Ingestion of large amounts may cause unconsciousness and can be fatal.

Skin contact

Bleaching of the skin Irritation May cause burns. Eye contact Severely irritating to eyes. Lacrimation. Conjunctivitis may develop. Risk of serious damage to eyes.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Acute Toxicity - Fish LC50 96 hours 16.4 mg/l Pimephales promelas (Fat-head Minnow) Freshwater, semi-static. Acute Toxicity - Aquatic Invertebrates NOEC 48 hours 1 mg/l Daphnia pulex, semi-static, freshwater. Acute Toxicity - Aquatic Plants EC50 72 hours 1.38 mg/l Static, saltwater, Skeletonema costatum. Growth rate test. Acute Toxicity - Microorganisms EC50 3 hours > 1000 mg/l Activated sludge OECD Guideline 209: Activated Sludge, Respiration Inhibition Test. Chronic Toxicity - Fish Early life Stage Scientifically unjustified. Short Term Toxicity - Embryo and Sac Fry Stages NOEC 500 ppm Salmo trutta Sac fry, 45 min exposure, static. Chronic Toxicity - Aquatic Invertebrates NOEC 21 days 0.63 mg/l Daphnia magna Freshwater, flow through. Acute Toxicity - Terrestrial Scientifically unjustified. Toxicity to terrestrial plants: Scientifically unjustified.

12.2. Persistence and degradability

Phototransformation Not available. No reliable information Stability (Hydrolysis) Scientifically unjustified. Biodegradation Water Degradation (99%%) 30 min. OECD Guideline 209: Activated Sludge, Respiration Inhibition Test. Aerobic; activated sludge, domestic. 30% solution. Biological Oxygen Demand Not available. Chemical Oxygen Demand Not available.

12.3. Bioaccumulative potential

Bioaccumulative potential Study scientifically unjustifiable. Bioaccumulation factor Not relevant Partition coefficient log Pow -1.57 pH7 @ 20°C. Model calculation

12.4. Mobility in soil

Adsorption/Desorption Coefficient Scientifically unjustified. Henry's Law Constant 0.00075 Pa m3/mol @ 20°C Surface tension 74.67 mN/m @ 20°C 37.33% solution

12.5. Results of PBT and vPvB assessment

Not Classified as PBT/vPvB by current EU criteria.

12.6. Other adverse effects

Will affect drinking water supplies.

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Any waste material is classed as hazardous waste, it should only be disposed of through licenced waste handlers and treatment sites. Do not allow unauthorised disposal to the environment. If operators are exposed to vapours during the disposal process then suitable respiratory protection should be worn. All other personal protective equipment as described in section 8 should be worn.

13.1. Waste treatment methods

Uncleaned empty containers should be treated as hazardous waste. Avoid unauthorised disposal. Do not dump illegally onto land or into water. When dealing with waste always consider the waste management hierarchy of Prevention, Preparation for re-use, Recycling, Recovery and Disposal. It is advisable to minimise waste at source if possible, then re-use, recover or recycle wherever possible before considering waste disposal options. Small amounts (<500ml) can be flushed to drain with plenty of water. Large amounts should be sent for disposal through a reputable hazardous waste company.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

014
014
014

14.2. UN proper shipping name

Proper Shi	pping Name
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HYDROGEN PEROXIDE, AQUEOUS SOLUTION

14.3. Transport hazard class(es)

ADR/RID/ADN Class	5.1
ADR/RID/ADN Class	Class 5.1: Oxidising substances.
ADR Label No.	5.1 & 8
IMDG Class	5.1

ICAO Class/Division ICAO Subsidiary risk Transport Labels 5.1 8



14.4. Packing group

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

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant No.

14.6. Special precautions for user

EMS	F-H, S-Q
Emergency Action Code	2P
Hazard No. (ADR)	58
Tunnel Restriction Code	(E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

Statutory Instruments

Control of Substances Hazardous to Health. The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716).

Guidance Notes

Approved Classification and Labelling Guide (CHIP 4) ECHA Guidance on the Compilation of Safety Data Sheets, September 2011. Workplace Exposure Limits EH40.

EU Legislation

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), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. 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, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments. Regulation (EU) 453/2010.

15.2. Chemical Safety Assessment

Information from the manufacturer of the raw material has not been received regarding Chemical Safety Assessments, Exposure Scenarios or a Chemical Safety Report.

SECTION 16: OTHER INFORMATION

General information

This datasheet is not intended to be a replacement for a full risk assessment, these should always be carried out by competent persons. Under REACH Material Safety Datasheets (MSDS) are referred to as Safety Datasheets (SDS). Toxicological and ecotoxicological information has been taken from the ECHA website of registered substances.

Information Sources		
Raw material safety data sheets. ECHA website. Health Protection Agency Information.		
Revision Comments		
General rewrite		
Revision Date	05/09/2012	
Revision	1	
SDS No.	11802	
Risk Phrases In Full		
R35	Causes severe burns.	
R8	Contact with combustible material may cause fire.	
R20/22	Harmful by inhalation and if swallowed.	
R22	Harmful if swallowed.	
R5	Heating may cause an explosion.	
R37	Irritating to respiratory system.	
R41	Risk of serious damage to eyes.	
Hazard Statements In Full		
H318	Causes serious eye damage.	
H314	Causes severe skin burns and eye damage.	
H332	Harmful if inhaled.	
H302	Harmful if swallowed.	
H271	May cause fire or explosion; strong oxidiser.	
H335	May cause respiratory irritation.	