

Creation Date 28-Oct-2009

Revision Date 25-Mar-2014

Revision Number 7

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

1.1. Product identifier

Product Description: Hydrogen peroxide 20-35wt% solution in water
Cat No. : 411880000; 411880010; 411880025; 411881000; 411885000
Synonyms Hydrogen Dioxide; Peroxide; Carbamide Peroxide
CAS-No 7722-84-1
EC-No. 231-765-0
Reach Registration Number --

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

Recommended Use Laboratory chemicals
Sector of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites
Product category PC21 - Laboratory chemicals
Process categories PROC15 - Use as a laboratory reagent
Environmental release category ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates)
Uses advised against No Information available

1.3. Details of the supplier of the safety data sheet

Company Acros Organics BVBA
 Janssen Pharmaceuticaaan 3a
 2440 Geel, Belgium
E-mail address begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

For information **US** call: 001-800-ACROS-01 / **Europe** call: +32 14 57 52 11
 Emergency Number **US**:001-201-796-7100 / **Europe**: +32 14 57 52 99
CHEMTREC Tel. No.**US**:001-800-424-9300 / **Europe**:001-703-527-3887

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP Classification - Regulation (EC) No 1272/2008

Physical hazards

Based on available data, the classification criteria are not met

Health hazards

Acute oral toxicity	Category 4
Serious Eye Damage/Eye Irritation	Category 1

Environmental hazards

Chronic aquatic toxicity	Category 3
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Classification according to EU Directives 67/548/EEC or 1999/45/EC

Symbol(s) Xn - Harmful

SECTION 2: HAZARDS IDENTIFICATION

R-phrase(s)
R22 - Harmful if swallowed
R41 - Risk of serious damage to eyes

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

2.2. Label elements**Signal Word****Danger****Hazard Statements**

H302 - Harmful if swallowed
H318 - Causes serious eye damage
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements

P301 + P330 + P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB)

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.2. Mixtures**

Component	CAS-No	EC-No.	Weight %	CLP Classification - Regulation (EC) No 1272/2008	DSD Classification - 67/548/EEC
Hydrogen peroxide	7722-84-1	231-765-0	25-35	Ox. Liq. 1 (H271) Acute Tox. 4 (H302) Acute Tox. 4 (H332) Skin Corr. 1A (H314) Eye Dam. 1 (H318) STOT SE 3 (H335) Aquatic Chronic 3 (H412)	R5 O; R8 Xn; R20/22 C; R35
Water	7732-18-5	231-791-2	65-75	-	-

Reach Registration Number

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For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16

SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures**

Hydrogen peroxide 20-35wt% solution in water

General Advice	If symptoms persist, call a physician.
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.
Ingestion	Clean mouth with water and drink afterwards plenty of water.
Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.
Protection of First-aiders	Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination

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

Causes eye burns.

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

Notes to Physician Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media****Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Extinguishing media which must not be used for safety reasons

Dry chemical. Carbon dioxide (CO₂).

5.2. Special hazards arising from the substance or mixture

Corrosive Material. Containers may explode when heated. Thermal decomposition can lead to release of irritating gases and vapors. In the event of fire and/or explosion do not breathe fumes.

Hazardous Combustion Products

oxygen, Hydrogen, Thermal decomposition can lead to release of irritating gases and vapors.

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation. Use personal protective equipment. Do not use steel or aluminum tools or equipment.

6.2. Environmental precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

Hydrogen peroxide 20-35wt% solution in water

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Ensure adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. To maintain product quality. Keep refrigerated.

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

List source(s):

UK - EH40/2005 Containing the workplace exposure limits (WELs) for use with the Control of Substances Hazardous to Health Regulations (COSHH) 2002 (as amended). Updated by September 2006 official press release and October 2007 Supplement.

IRE - 2010 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001. Published by the Health and Safety Authority.

Component	European Union	The United Kingdom	France	Belgium	Spain
Hydrogen peroxide		STEL: 2 ppm 15 min STEL: 2.8 mg/m ³ 15 min TWA: 1 ppm 8 hr TWA: 1.4 mg/m ³ 8 hr	TWA / VME: 1 ppm (8 heures). TWA / VME: 1.5 mg/m ³ (8 heures).	TWA: 1 ppm 8 uren TWA: 1.4 mg/m ³ 8 uren	TWA / VLA-ED: 1 ppm (8 horas) TWA / VLA-ED: 1.4 mg/m ³ (8 horas)

Component	Italy	Germany	Portugal	The Netherlands	Finland
Hydrogen peroxide		TWA: 0.5 ppm (8 Stunden). MAK TWA: 0.71 mg/m ³ (8 Stunden). MAK Höhepunkt: 0.5 ppm Höhepunkt: 0.71 mg/m ³	TWA: 1 ppm 8 horas		TWA: 1 ppm 8 tunteina TWA: 1.4 mg/m ³ 8 tunteina STEL: 3 ppm 15 minuutteina STEL: 4.2 mg/m ³ 15 minuutteina

Component	Austria	Denmark	Switzerland	Poland	Norway
Hydrogen peroxide	MAK-KZW: 2 ppm 15 Minuten MAK-KZW: 2.8 mg/m ³ 15 Minuten MAK-TMW: 1 ppm 8 Stunden MAK-TMW: 1.4 mg/m ³ 8 Stunden	TWA: 1 ppm 8 timer TWA: 1.4 mg/m ³ 8 timer	STEL: 0.5 ppm 15 Minuten STEL: 0.71 mg/m ³ 15 Minuten TWA: 0.5 ppm 8 Stunden TWA: 0.71 mg/m ³ 8 Stunden	STEL: 4 mg/m ³ 15 minutach TWA: 1.5 mg/m ³ 8 godzinach	TWA: 1 ppm 8 timer TWA: 1.4 mg/m ³ 8 timer STEL: 3 ppm 15 minutter. STEL: 2.8 mg/m ³ 15 minutter.

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Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Hydrogen peroxide	TWA: 1.5 mg/m ³	TWA-GVI: 1 ppm 8 satima. TWA-GVI: 1.4 mg/m ³ 8 satima. STEL-KGVI: 2 ppm 15 minutama. STEL-KGVI: 2.8 mg/m ³ 15 minutama.	TWA: 1 ppm 8 hr. TWA: 1.5 mg/m ³ 8 hr. STEL: 2 ppm 15 min STEL: 3 mg/m ³ 15 min		TWA: 1 mg/m ³ 8 hodinách. Ceiling: 2 mg/m ³

Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Hydrogen peroxide	TWA: 1 ppm 8 tundides. TWA: 1.4 mg/m ³ 8 tundides. Ceiling: 2 ppm Ceiling: 3 mg/m ³		STEL: 3 mg/m ³ TWA: 1 ppm TWA: 1.4 mg/m ³		TWA: 1 ppm 8 klukkustundum. TWA: 1.4 mg/m ³ 8 klukkustundum. Ceiling: 2 ppm Ceiling: 2.8 mg/m ³

Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Hydrogen peroxide		Ceiling: 2 ppm Ceiling: 3 mg/m ³ TWA: 1 ppm IPRD TWA: 1.4 mg/m ³ IPRD			

Component	Russia	Slovak Republic	Slovenia	Sweden	Turkey
Hydrogen peroxide		Ceiling: 2.8 mg/m ³ TWA: 1 ppm TWA: 1.4 mg/m ³	TWA: 1 ppm 8 urah TWA: 1.4 mg/m ³ 8 urah STEL: 1 ppm 15 minutah STEL: 1.4 mg/m ³ 15 minutah	LLV: 1 ppm 8 timmar. LLV: 1.4 mg/m ³ 8 timmar. CLV: 2 ppm CLV: 3 mg/m ³	

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

Derived No Effect Level (DNEL) Workers

Route of exposure	Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Oral				
Dermal				
Inhalation	3 mg/m ³		1.4 mg/m ³	

Predicted No Effect Concentration (PNEC) See values below.

Fresh water	0.0126 mg/L
Fresh water sediment	0.047 mg/kg
Marine water	0.0126 mg/L
Marine water sediment	0.047 mg/kg
Water Intermittent	0.0138 mg/L
Microorganisms in sewage treatment	4,66 mg/L
Soil (Agriculture)	0.0019 mg/kg

8.2. Exposure controls

Hydrogen peroxide 20-35wt% solution in water

Engineering Measures

Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source.

Personal protective equipment**Eye Protection**

Goggles (European standard - EN 166)

Hand Protection

Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Butyl rubber	> 480 minutes	0.35 mm	EN 374	(minimum requirement)
Neoprene	> 480 minutes	0.45 mm		
Natural rubber	> 480 minutes	0.5 mm		
Nitrile rubber				
PVC				
Nitrile rubber	> 480 minutes	0.1 - 0.2 mm		
Viton (R)	> 480 minutes	0.3 mm		

Skin and body protection

Long sleeved clothing

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Remove gloves with care avoiding skin contamination.

Respiratory Protection

When workers are facing concentrations above the exposure limit they must use appropriate certified respirators

To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained properly.

Large scale/emergency use

Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced..

Recommended Filter type: Particulates filter conforming to EN 143, Inorganic gases and vapours filter, Type B, Grey, conforming to EN14387.

Small scale/Laboratory use

Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Recommended half mask:- Particle filtering: EN149:2001

When RPE is used a face piece Fit Test should be conducted.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls

Prevent product from entering drains. Do not allow material to contaminate ground water system. Local authorities should be advised if significant spillages cannot be contained.

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

Hydrogen peroxide 20-35wt% solution in water

Appearance	Colorless	
Physical State	Liquid.	
Odor	slight	
Odor Threshold	No data available	
pH	3.3	
Melting Point/Range	-33°C / -27.4°F	
Softening Point	No data available	
Boiling Point/Range	108°C / 226.4°F	@ 760 mmHg
Flash Point	No information available.	Method - No information available
Evaporation Rate	1.0 (Butyl acetate = 1.0)	
Flammability (solid,gas)	Not applicable	Liquid
Explosion Limits	No data available.	
Vapor Pressure	No data available	
Vapor Density	1.10	(Air = 1.0)
Specific Gravity / Density	1.110	
Bulk Density	Not applicable	Liquid
Water Solubility	soluble	
Solubility in other solvents	No information available	
Partition Coefficient (n-octanol/water)	Component Hydrogen peroxide	log Pow -1.1
Autoignition Temperature	No data available	
Decomposition temperature	> 125°C	
Viscosity	No data available	
Explosive Properties	Not explosive	
Oxidizing Properties	No information available	

9.2. Other information**SECTION 10: STABILITY AND REACTIVITY**10.1. Reactivity

None known, based on information available.

10.2. Chemical stability

Stable under normal conditions. Sensitivity to light.

10.3. Possibility of hazardous reactions**Hazardous Polymerization
Hazardous Reactions**Hazardous polymerization does not occur.
None under normal processing.10.4. Conditions to avoid

Incompatible products, Excess heat, Exposure to light.

10.5. Incompatible materials

Strong oxidizing agents. Metals. Reducing agents. Alcohols. Ammonia. copper. Copper alloys. lead oxides. Cyanides. Sulfides. lead. Acetone. Aluminium. . Zinc.

10.6. Hazardous decomposition products

oxygen, Hydrogen, Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****Product Information****(a) acute toxicity;****Oral**

Category 4

Dermal

Based on available data, the classification criteria are not met

Inhalation

Based on available data, the classification criteria are not met

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Hydrogen peroxide	376 mg/kg (Rat) (90%) 910 mg/kg (Rat) (20-60%) 1518 mg/kg (Rat) (8-20% sol)	>2000 mg/kg (Rabbit)	2 g/m ³ (Rat) 4 h
Water	-		

(b) skin corrosion/irritation;

Based on available data, the classification criteria are not met

(c) serious eye damage/irritation;

Category 1

(d) respiratory or skin sensitization;**Respiratory**

Based on available data, the classification criteria are not met

Skin

Based on available data, the classification criteria are not met

(e) germ cell mutagenicity;

Based on available data, the classification criteria are not met

(f) carcinogenicity;

Based on available data, the classification criteria are not met

The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	EU	UK	Germany	IARC
Hydrogen peroxide				Group 3 (not classifiable)

(g) reproductive toxicity;

Based on available data, the classification criteria are not met

(h) STOT-single exposure;

Based on available data, the classification criteria are not met

(i) STOT-repeated exposure;

Based on available data, the classification criteria are not met

Target Organs

Eyes, Skin, Gastrointestinal tract (GI), Respiratory system.

(j) aspiration hazard;

Based on available data, the classification criteria are not met

Other Adverse Effects

See actual entry in RTECS for complete information

Symptoms / effects,

No information available.

both acute and delayed**SECTION 12: ECOLOGICAL INFORMATION****12.1. Toxicity**

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity effects Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Hydrogen peroxide	LC50: 16.4 mg/L/96h (P.promelas)	EC50 7.7 mg/L/24h	EC50 2.5 mg/L/72h	

12.2. Persistence and degradability Readily biodegradable
Persistence Persistence is unlikely, Decomposes, Soluble in water.
Degradability Not relevant for inorganic substances.
Degradation in sewage treatment plant No inhibition of bacteria is expected if properly introduced into a biological treatment facility. Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

12.3. Bioaccumulative potential Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Hydrogen peroxide	-1.1	No data available

12.4. Mobility in soil The product is water soluble, and may spread in water systems. Will likely be mobile in the environment due to its water solubility. Highly mobile in soils.

12.5. Results of PBT and vPvB assessment Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB).

12.6. Other adverse effects
Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors
Persistent Organic Pollutant This product does not contain any known or suspected substance
Ozone Depletion Potential This product does not contain any known or suspected substance

SECTION 13: DISPOSAL CONSIDERATIONS**13.1. Waste treatment methods**

Waste from Residues / Unused Products Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

Contaminated Packaging Dispose of this container to hazardous or special waste collection point..

European Waste Catalogue (EWC) According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

Other Information Do not dispose of waste into sewer. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not let this chemical enter the environment.

SECTION 14: TRANSPORT INFORMATION**IMDG/IMO**

14.1. UN number UN2014
14.2. UN proper shipping name HYDROGEN PEROXIDE, AQUEOUS SOLUTION
14.3. Transport hazard class(es) 5.1
Subsidiary Hazard Class 8
14.4. Packing group II

ADR

14.1. UN number UN2014

Hydrogen peroxide 20-35wt% solution in water

14.2. UN proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
14.3. Transport hazard class(es)	5.1
Subsidiary Hazard Class	8
14.4. Packing group	II

IATA

14.1. UN number	UN2014
14.2. UN proper shipping name	HYDROGEN PEROXIDE, AQUEOUS SOLUTION
14.3. Transport hazard class(es)	5.1
Subsidiary Hazard Class	8
14.4. Packing group	II
14.5. Environmental hazards	No hazards identified
14.6. Special precautions for user	No special precautions required
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable, packaged goods

SECTION 15: REGULATORY INFORMATION**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

International Inventories X = listed

Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	IECSC	AICS	KECL
Hydrogen peroxide	231-765-0	-		X	X	-	X	X	X	X	X
Water	231-791-2	-		X	X	-	X	-	X	X	X

National Regulations

Component	Germany - Water Classification (VwVWS)	Germany - TA-Luft Class
Hydrogen peroxide	WGK 1	

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment

Take note of Dir 94/33/EC on the protection of young people at work

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

15.2. Chemical safety assessment

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures

SECTION 16: OTHER INFORMATION**Full text of R-phrases referred to under sections 2 and 3**

R 5 - Heating may cause an explosion

R 8 - Contact with combustible material may cause fire

R22 - Harmful if swallowed

R35 - Causes severe burns

R41 - Risk of serious damage to eyes

R20/22 - Harmful by inhalation and if swallowed

SECTION 16: OTHER INFORMATION**Full text of H-Statements referred to under sections 2 and 3**

H271 - May cause fire or explosion; strong oxidizer
 H302 - Harmful if swallowed
 H314 - Causes severe skin burns and eye damage
 H318 - Causes serious eye damage
 H332 - Harmful if inhaled
 H335 - May cause respiratory irritation
 H412 - Harmful to aquatic life with long lasting effects

Legend

CAS - Chemical Abstracts Service	TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances	DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
PICCS - Philippines Inventory of Chemicals and Chemical Substances	ENCS - Japanese Existing and New Chemical Substances
IECSC - Chinese Inventory of Existing Chemical Substances	AICS - Australian Inventory of Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances	NZIoC - New Zealand Inventory of Chemicals
WEL - Workplace Exposure Limit	TWA - Time Weighted Average
ACGIH - American Conference of Governmental Hygienists	IARC - International Agency for Research on Cancer
DNEL - Derived No Effect Level	PNEC - Predicted No Effect Concentration
RPE - Respiratory Protective Equipment	LD50 - Lethal Dose 50%
LC50 - Lethal Concentration 50%	EC50 - Effective Concentration 50%
NOEC - No Observed Effect Concentration	POW - Partition coefficient Octanol:Water
PBT - Persistent, Bioaccumulative, Toxic	vPvB - very Persistent, very Bioaccumulative
ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road	ICAO/IATA - International Civil Aviation Organization/International Air Transport Association
IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code	MARPOL - International Convention for the Prevention of Pollution from Ships
OECD - Organisation for Economic Co-operation and Development	ATE - Acute Toxicity Estimate
BCF - Bioconcentration factor	VOC - Volatile Organic Compounds

Key literature references and sources for data

Suppliers safety data sheet,
 Chemadvisor - LOLI,
 Merck index,
 RTECS

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards	On basis of test data
Health Hazards	Calculation method
Environmental hazards	Calculation method

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.
 Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.
 First aid for chemical exposure, including the use of eye wash and safety showers.

Creation Date	28-Oct-2009
Revision Date	25-Mar-2014
Revision Summary	Update to Format, (M)SDS sections updated, 2, 3.

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

The information provided on 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 guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of Safety Data Sheet