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

1.1. Product identifier

Product name

LCD CLEANER SPRAY

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

Relevant identified uses

Cleaning agent.

Uses advised against

No information.

1.3. Details of the supplier of the safety data sheet

Supplier

Wolfchester Australia
4/122 Beresford Road
Lilydale VIC 3140
Australia
P: +61 3 9737 2800
www.wolfchester.com.au

1.4. Emergency telephone number

Emergency

+61 3 9737 2800

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

Aerosol 1; H222 Extremely flammable aerosol.
Aerosol 1; H229 Pressurised container: May burst if heated.
Eye Irrit. 2; H319 Causes serious eye irritation.

2.2 Label elements

2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP]

Signal word: **Danger**

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H319 Causes serious eye irritation.
P102 Keep out of reach of children.
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Do not pierce or burn, even after use.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P410 + P412 Protect from sunlight. Do no expose to temperatures exceeding 50 °C/122°F.

2.2.2. Contains:

-

2.2.3. Special provisions

Special hazards are not known or expected.

2.3. Other hazards

No information.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

For mixtures see 3.2.

3.2. Mixtures

Name	CAS EC Index	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Conc. Limits	REACH Registration No.
propan-2-ol	67-63-0 200-661-7 603-117-00-0	10-<20	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336		01-2119457558-25
isobutane *[C, U]*	75-28-5 200-857-2 601-004-00-0	2,5-10	Flam. Gas 1; H220 Press. Gas; H280		01-2119485395-27
propane *[U]*	74-98-6 200-827-9 601-003-00-5	<2,5	Flam. Gas 1; H220 Press. Gas; H280		01-2119486944-21
2-butoxyethanol	111-76-2 203-905-0 603-014-00-0	<1	Acute Tox. 4; H302 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Acute Tox. 4; H332		01-2119475108-36
sodium N-lauroylsarcosinate	137-16-6 205-281-5 -	<1	Skin Irrit. 2; H315 Eye Dam. 1; H318 Acute Tox. 2; H330		-
ammonia *[B]*	1336-21-6 215-647-6 007-001-01-2	<1	Skin Corr. 1B; H314 Aquatic Acute 1; H400	STOT SE 3; H335: C ≥ 5 %	-

Notes for substances:

B	Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: "nitric acid … %". In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.
C	Some organic substances may be marketed either in a specific isomeric form or as a mixture of several isomers. In this case the supplier must state on the label whether the substance is a specific isomer or a mixture of isomers.
U	When put on the market gases have to be classified as 'Gases under pressure', in one of the groups compressed gas, liquefied gas, refrigerated liquefied gas or dissolved gas. The group depends on the physical state in which the gas is packaged and therefore has to be assigned case by case. The following codes are assigned: Press. Gas (Comp.) Press. Gas (Liq.) Press. Gas (Ref. Liq.) Press. Gas (Diss.) Aerosols shall not be classified as gases under pressure (See Annex I, Part 2, Section 2.3.2.1, Note 2).

SECTION 4. FIRST AID MEASURES

4.1. Description of first aid measures

General notes

When in doubt or if feeling unwell seek medical assistance. Show the safety data sheet and label to the physician.
No action shall be taken involving any personal risk or without suitable training.

Following inhalation

Leave contaminated area - breathe fresh air. If symptoms develop and persist, seek medical attention.

Following skin contact

Take off all contaminated clothing. Areas of the body that have come into contact with the product must be rinsed with water and soap. If symptoms develop and persist, seek medical attention. Wash contaminated clothes and shoes before reuse.

Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. If irritation persists, seek professional medical attention.

Following ingestion

Not likely. Accidental ingestion: Rinse mouth thoroughly with water. Do not induce vomiting without prior consultation with a doctor. In case of doubt or if feeling unwell seek medical help. Show the physician the safety data sheet or label.

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

Inhalation

Excessive exposure to spray mist, fog, or vapours may cause respiratory irritation.
Coughing, sneezing, nasal discharge, labored breathing.

Skin contact

Contact with skin may cause irritation (redness, itching).

Eye contact

Strongly irritates the eyes.
Redness, tearing, pain.

Ingestion

Ingestion is unlikely because it is an aerosol.
Accidental ingestion:
May cause abdominal discomfort.
May cause nausea/vomiting and diarrhea.
Irritates mucous membranes in the mouth, throat, esophagus and in gastrointestinal area.

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

-

SECTION 5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO_2).
Fire extinguishing powder. Extinguish large fires with water spray or alcohol-resistant foam.

Unsuitable extinguishing media

Full water jet.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

In case of a fire toxic gases can be generated; do not inhale gases/smoke. In the event of fire the following can be generated: carbon monoxide (CO), carbon dioxide (CO_2).

5.3. Advice for firefighters

Protective actions

In case of fire or heating do not breathe fumes/vapours. Prolonged heating can cause an explosion. In case of fire aerosols can explode and be propelled to considerable distances in different directions. Cool containers at risk with water spray. If possible remove containers from endangered area. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for firefighters

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137).

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment

Use personal protective equipment (Section 8).

Emergency procedures

Ensure adequate ventilation. Keep away from sources of ignition and/or heat; No smoking! Take precautionary measures against static discharges. Prevent access to unauthorised personnel. Prevent access to unprotected personnel. Avoid contact with skin and eyes. Do not breathe vapour or mist.

6.1.2. For emergency responders

Use personal protective equipment.

6.2. Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil. If accidental large entry into water or ground occurs, inform responsible authorities.

6.3. Methods and material for containment and cleaning up

6.3.1. For containment

Stem the spill if this does not pose risks.

6.3.2. For cleaning up

Collect the spray cans and hand them over to an authorized waste disposal contractor. Release of liquid because of damaged aerosol can (release of large quantities): In case of bigger spill, dam the spillage, pump the liquid into appropriate labelled containers, absorb a residue with absorbent material and dispose of according to local regulations. Do not absorb spillage with sawdust or other combustible material. Dispose in accordance with applicable regulations (see Section 13).

6.3.3. Other information

-

6.4. Reference to other sections

See also Sections 8 and 13.

SECTION 7. HANDLING AND STORAGE

7.1. Precautions for safe handling

7.1.1. Protective measures

Measures to prevent fire

Ensure adequate ventilation. Take precautionary measures against static discharges. Ensure proper grounding of the equipment. Keep away from sources of ignition - no smoking.

Measures to prevent aerosol and dust generation

Use general or local exhaust ventilation to prevent inhaling vapours and aerosols.

Measures to protect the environment

-

7.1.2. Advice on general occupational hygiene

Consider measures required in Section 8 of this safety data sheet. Use personal protective equipment. Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes. Do not breathe vapours/mist.

7.2. Conditions for safe storage, including any incompatibilities

7.2.1. Technical measures and storage conditions

Store in accordance with local regulations. Keep in well closed containers. Keep in cool and well ventilated area. Protect from open fire, heat and direct sunlight. Keep away from sources of ignition. Keep away from oxidising substances. Keep away from food, drink and animal feeding stuffs.

7.2.2. Packaging materials

-

7.2.3. Requirements for storage rooms and vessels

Do not store in unlabelled containers.

7.2.4. Storage class

-

7.2.5. Further information on storage conditions

-

7.3. Specific end use(s)

Recommendations

-

Industrial sector specific solutions

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

8.1.1. Occupational exposure limit values

Name (CAS)	Limit values		Short-term exposure limit		Remarks	Biological Tolerance Values
	ml/m^3 (ppm)	mg/m^3	ml/m^3 (ppm)	mg/m^3		
Propane-1,2-diol total vapour and particulates (57-55-6)	150	474				
Propane-1,2-diol particulates (57-55-6)		10				
Propan-2-ol (67-63-0)	400	999	500	1250		
Ammonia (1336-21-6)	25	18	35	25		
2-Butoxyethanol (111-76-2)	25	123	50	246	Sk, BMGV	240 mmol butoxyacetic acid/mol creatinine in urine - Post shift

8.1.2. Information on monitoring procedures

BS EN 14042:2003 Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 482:2012+A1:2015 Workplace exposure. General requirements for the performance of procedures for the measurement of chemical agents. BS EN 689:2018 Workplace exposure. Measurement of exposure by inhalation to chemical agents. Strategy for testing compliance with occupational exposure limit values.

8.1.3. DNEL/DMEL values

For components

Name	Type	Exposure route	Exposure frequency	Value	Remark
propan-2-ol (67-63-0)	Worker	inhalation	long term (systemic effects)	500 mg/m³	
propan-2-ol (67-63-0)	Worker	dermal	long term (systemic effects)	888 mg/kg bw/day	
propan-2-ol (67-63-0)	Consumer	inhalation	long term (systemic effects)	89 mg/m³	
propan-2-ol (67-63-0)	Consumer	dermal	long term (systemic effects)	319 mg/kg bw/day	
propan-2-ol (67-63-0)	Consumer	oral	long term (systemic effects)	26 mg/kg bw/day	
2-butoxyethanol (111-76-2)	Worker	inhalation	long term (systemic effects)	98 mg/m^3	
2-butoxyethanol (111-76-2)	Worker	inhalation	short term (systemic effects)	1091 mg/m^3	
2-butoxyethanol (111-76-2)	Worker	inhalation	short term (local effects)	246 mg/m^3	
2-butoxyethanol (111-76-2)	Worker	dermal	long term (systemic effects)	125 mg/kg bw/day	
2-butoxyethanol (111-76-2)	Worker	dermal	short term (systemic effects)	89 mg/kg bw/day	
2-butoxyethanol (111-76-2)	Consumer	inhalation	long term (systemic effects)	59 mg/m^3	
2-butoxyethanol (111-76-2)	Consumer	inhalation	short term (systemic effects)	426 mg/m^3	
2-butoxyethanol (111-76-2)	Consumer	inhalation	short term (local effects)	147 mg/m^3	
2-butoxyethanol (111-76-2)	Consumer	dermal	long term (systemic effects)	75 mg/kg bw/day	
2-butoxyethanol (111-76-2)	Consumer	dermal	short term (systemic effects)	89 mg/kg bw/day	
2-butoxyethanol (111-76-2)	Consumer	oral	long term (systemic effects)	6,3 mg/kg bw/day	
2-butoxyethanol (111-76-2)	Consumer	oral	short term (systemic effects)	26,7 mg/kg bw/day	

8.1.4. PNEC values

For components

Name	Exposure route	Value	Remark
propan-2-ol (67-63-0)	fresh water	140,9 mg/L	
propan-2-ol (67-63-0)	water, intermittent release	140,9 mg/L	fresh water
propan-2-ol (67-63-0)	marine water	140,9 mg/L	
propan-2-ol (67-63-0)	water treatment plant	2251 mg/L	
propan-2-ol (67-63-0)	fresh water sediment	552 mg/kg	dry weight
propan-2-ol (67-63-0)	marine water sediment	552 mg/kg	dry weight
propan-2-ol (67-63-0)	soil	28 mg/kg	dry weight
propan-2-ol (67-63-0)	food chain	160 mg/kg feed	oral
2-butoxyethanol (111-76-2)	fresh water	8,8 mg/L	
2-butoxyethanol (111-76-2)	marine water	0,88 mg/L	
2-butoxyethanol (111-76-2)	water, intermittent release	26,4 mg/L	fresh water
2-butoxyethanol (111-76-2)	water treatment plant	463 mg/L	
2-butoxyethanol (111-76-2)	fresh water sediment	34,6 mg/kg	dry weight
2-butoxyethanol (111-76-2)	marine water sediment	3,46 mg/kg	dry weight
2-butoxyethanol (111-76-2)	soil	2,33 mg/kg	dry weight
2-butoxyethanol (111-76-2)	food chain	20 mg/kg feed	oral

8.2. Exposure controls

8.2.1. Appropriate engineering control

Substance/mixture related measures to prevent exposure during identified uses

Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes. Do not breathe vapours/aerosols. Keep away from foodstuffs, beverages and feed.

Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration.

8.2.2. Personal protective equipment

Eye and face protection

Safety glasses with side protection (EN 166).

Hand protection

Protective gloves (EN 374).

Skin protection

Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345).

Respiratory protection

In case of insufficient ventilation wear suitable respiratory protection. If the concentration limit values are exceeded, it is necessary to wear appropriate respiratory protection. Wear suitable protective breathing mask (EN 136) with filter A2-P2 (EN 14387).

Thermal hazards

-

8.2.3. Environmental exposure controls

-

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

-	**Physical state:**	liquid; aerosol
-	**Colour:**	colourless to yellowish
-	**Odour:**	

Important health, safety and environmental information

-	**pH**	No information.
-	**Melting point/freezing point**	No information.
-	**Initial boiling point/boiling range**	No information.
-	**Flash point**	No information.
-	**Evaporation rate**	No information.
-	**Flammability (solid, gas)**	No information.
-	**Explosion limits (vol%)**	1,5 – 10,9 vol % (propellant)
-	**Vapour pressure**	< 1,0E-5 hPa at 25 °C (Hostapur OSB)
-	**Vapour density**	No information.
-	**Density**	**Density**: 0,953 kg/L at 20 °C (data refers to the liquid portion of the product)
-	**Solubility**	No information.
-	**Partition coefficient**	No information.
-	**Auto-ignition temperature**	No information.
-	**Decomposition temperature**	No information.
-	**Viscosity**	No information.
-	**Explosive properties**	No information.
-	**Oxidising properties**	No information.

9.2. Other information

-	**Weight organic solvents**	205 g/l (VOC) 22 % (VOC)
-	**Remarks:**	

SECTION 10. STABILITY AND REACTIVITY

10.1. Reactivity

Stable under recommended transport or storage conditions.

10.2. Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions.

10.3. Possibility of hazardous reactions

The product is stable under recommended storage and handling conditions.

10.4. Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not expose to heat and direct sunlight.

10.5. Incompatible materials

Strong oxidising agents. Halogens. Halogenated compounds. Strong inorganic acids. Aldehydes. Oxidants.

10.6. Hazardous decomposition products

In case of fire/explosion vapours/gases that pose a health hazard are released.

SECTION 11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

(a) Acute toxicity

Name	Exposure route	Type	Species	Time	Value	Method	Remark
propan-2-ol (67-63-0)	inhalation	LC_{50}	rat	4 h	> 20 mg/l		
propan-2-ol (67-63-0)	dermal	LD_{50}	rabbit		> 2000 mg/kg		
propan-2-ol (67-63-0)	oral	LD_{50}	rat		> 2000 mg/kg		
2-butoxyethanol (111-76-2)	oral	LD_{50}	rat		300 – 2000 mg/kg		
2-butoxyethanol (111-76-2)	dermal	LD_{50}	rat		1000 – 2000 mg/kg		
2-butoxyethanol (111-76-2)	inhalation	LC_{50}	rat		2 – 20 mg/l		
Additional information: The product is not classified for acute toxicity.							

(b) Skin corrosion/irritation

Name	Species	Time	Result	Method	Remark
propan-2-ol (67-63-0)			Non-irritant.		
2-butoxyethanol (111-76-2)			Irritating to skin.		
Additional information: The product is not classified as irritating to the skin.					

(c) Serious eye damage/irritation

Name	Species	Time	Result	Method	Remark
propan-2-ol (67-63-0)			Moderately irritating.		
2-butoxyethanol (111-76-2)			Causes severe eye irritation.		
Additional information: Causes serious eye irritation.					

(d) Respiratory or skin sensitisation

Name	Exposure route	Species	Time	Result	Method	Remark
propan-2-ol (67-63-0)	-			According to known data the substance is not a chemical sensitizer.		
Additional information: The product is not classified as sensitising.						

(e) (Germ cell) mutagenicity

Name	Type	Species	Time	Result	Method	Remark
propan-2-ol (67-63-0)				The chemical is not classified as mutagenic.		

(f) Carcinogenicity

Name	Exposure route	Type	Species	Time	Value	Result	Method	Remark
propan-2-ol (67-63-0)						Substance is not classified as carcinogenic.		

(g) Reproductive toxicity

Name	Reproductive toxicity type	Type	Species	Time	Value	Result	Method	Remark
propan-2-ol (67-63-0)						The chemical is not classified as toxic for reproduction.		

Summary of evaluation of the CMR properties

The product is not classified as carcinogenic, mutagenic or toxic for reproduction.

(h) STOT-single exposure

Additional information: STOT SE (single exposure): Not classified.

(i) STOT-repeated exposure

Additional information: STOT RE (repeated exposure): Not classified.

(j) Aspiration hazard

Additional information: Aspiration hazard: Not classified.

SECTION 12. ECOLOGICAL INFORMATION

12.1. Toxicity

12.1.1. Acute (short-term) toxicity

For components

Substance (CAS №)	Type	Value	Exposure time	Species	Organism	Method	Remark
propan-2-ol (67-63-0)	LC/EC/IC50	100 – 1000 mg/L		fish			
	LC/EC/IC50	> 1000 mg/L		invertebrates			
	LC/EC/IC50	> 1000 mg/L		algae			
	LC/EC/IC50	> 1000 mg/L		bacteria			
2-butoxyethanol (111-76-2)	LC_{50}	100 mg/L		algae			
	LC_{50}	100 mg/L		bacteria			
	LC_{50}	10000 mg/L		*Daphnia*			
	LC_{50}	1000 mg/L		fish			

12.1.2. Chronic (long-term) toxicity

No information.

12.2. Persistence and degradability

12.2.1. Abiotic degradation, physical- and photo-chemical elimination

No information.

12.2.2. Biodegradation

For components

Substance (CAS №)	Type	Rate	Time	Evaluation	Method	Remark
propan-2-ol (67-63-0)	biodegradability	84 %	28 days			closed cup

12.3. Bioaccumulative potential

12.3.1. Partition coefficient

For components

Substance (CAS №)	Media	Value	Temperature	pH	Concentration	Method
propan-2-ol (67-63-0)	Octanol-water	0,05				

12.3.2. Bioconcentration factor (BCF)

No information.

12.4. Mobility in soil

12.4.1. Known or predicted distribution to environmental compartments

No information.

12.4.2. Surface tension

No information.

12.4.3. Adsorption/Desorption

No information.

12.5. Results of PBT and vPvB assessment

No evaluation.

12.6. Other adverse effects

No information.

12.7. Additional information

For product

Product is not classified as dangerous for environment.
Water hazard class 2 (self-assessment): hazardous for water.
Handle in accordance with good working practices so that the product is not released into the environment.

For components

Substance: propan-2-ol

Low bioaccumulation potential.
Soluble in water.
It evaporates or dissolves in water within 24 hours. Larger amounts can penetrate the soil and pollute groundwater.

Substance: 2-butoxyethanol

Water hazard class 1 (Self-assessment): slightly hazardous for water

SECTION 13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

13.1.1. Product / Packaging disposal

Waste chemical

Avoid release to the environment. Product and container must be disposed of safely. Dispose of in accordance with applicable waste disposal regulation. Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste.

Waste codes / waste designations according to LoW

16 05 04* - gases in pressure containers (including halons) containing dangerous substances

Packaging

Uncleaned containers should not be perforated, cut or welded. Pressurized container. Do not pierce or burn, even after use. Dispose of in accordance with applicable waste disposal regulation. Deliver completely emptied containers to approved waste disposal authorities.

Waste codes / waste designations according to LoW

15 01 11* - metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers

13.1.2. Waste treatment-relevant information

-

13.1.3. Sewage disposal-relevant information

-

13.1.4. Other disposal recommendations

-

SECTION 14. TRANSPORT INFORMATION

14.1. UN number

UN 1950

14.2. UN proper shipping name

AEROSOLS

14.3. Transport hazard class(es)

2

14.4. Packing group

Not applicable.

14.5. Environmental hazards

NO.

14.6. Special precautions for user

Limited quantities

1 L

Tunnel restriction code

(D)

IMDG EmS

F-D, S-U

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

Goods may not be carried in bulk in bulk containers, containers or vehicles.

SECTION 15. REGULATORY INFORMATION

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2015/830)

- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

15.1.1. Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)

Not applicable.

15.1.2. Ingredients according to Regulation EC 648/2004 on detergents

5% - < 15%: aliphatic hydrocarbons, perfumes (Citral); < 5%: anionic surfactants

15.2. Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16. OTHER INFORMATION

Indication of changes

-

Abbreviations and acronyms

ATE - Acute Toxicity Estimate
ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CEN - European Committee for Standardisation
C&L - Classification and Labelling
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
CAS# - Chemical Abstracts Service number
CMR - Carcinogen, Mutagen, or Reproductive Toxicant
CSA - Chemical Safety Assessment
CSR - Chemical Safety Report
DMEL - Derived Minimal Effect Level
DNEL - Derived No Effect Level
DPD - Dangerous Preparations Directive 1999/45/EC
DSD - Dangerous Substances Directive 67/548/EEC
DU - Downstream User
EC - European Community
ECHA - European Chemicals Agency
EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)

EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)
EEC - European Economic Community
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
EN - European Standard
EQS - Environmental Quality Standard
EU - European Union
Euphrac - European Phrase Catalogue
EWC - European Waste Catalogue (replaced by LoW – see below)
GES - Generic Exposure Scenario
GHS - Globally Harmonized System
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
IMSBC - International Maritime Solid Bulk Cargoes
IT - Information Technology
IUCLID - International Uniform Chemical Information Database
IUPAC - International Union for Pure Applied Chemistry
JRC - Joint Research Centre
Kow - octanol-water partition coefficient
LC_{50} Lethal Concentration to 50 % of a test population
LD_{50} Lethal Dose to 50% of a test population (Median Lethal Dose)
LE - Legal Entity
LoW - List of Wastes (see http://ec.europa.eu/environment/waste/framework/list.htm)
LR - Lead Registrant
M/I - Manufacturer / Importer
MS - Member States
MSDS - Material Safety Data Sheet
OC - Operational Conditions
OECD - Organization for Economic Co-operation and Development
OEL - Occupational Exposure Limit
OJ - Official Journal
OR - Only Representative
OSHA - European Agency for Safety and Health at work
PBT - Persistent, Bioaccumulative and Toxic substance
PEC - Predicted Effect Concentration
PNEC(s) - Predicted No Effect Concentration(s)
PPE - Personal Protection Equipment
(Q)SAR - Qualitative Structure Activity Relationship
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
RIP - REACH Implementation Project
RMM - Risk Management Measure
SCBA - Self-Contained Breathing Apparatus
SDS - Safety data sheet
SIEF - Substance Information Exchange Forum
SME - Small and Medium sized Enterprises
STOT - Specific Target Organ Toxicity
(STOT) RE - Repeated Exposure
(STOT) SE - Single Exposure
SVHC - Substances of Very High Concern
UN - United Nations
vPvB - Very Persistent and Very Bioaccumulative

Key literature references and sources for data

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List of relevant H phrases

H220 Extremely flammable gas.
H225 Highly flammable liquid and vapour.
H280 Contains gas under pressure; may explode if heated.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.
H400 Very toxic to aquatic life.

The information of this SDS is based on the present state of our knowledge and meets the requirements of EU and national laws. The user's working conditions however, are beyond our knowledge and control. The product is not to be used for purposes other than those specified under Section 1 without a written permission. It remains the responsibility of the user to ensure that the necessary steps are taken to meet the laws and regulations. Handling of the product may only be done by people above 18 years of age, who are satisfactorily informed of how to do the work, the hazardous properties and necessary safety precautions. The information given in this SDS is to describe the product only in terms of health and safety requirements and should not, therefore, be construed as guaranteeing specific properties.