

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

TOPAZ LD1

Section: 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name : TOPAZ LD1

Product code : 116656E

Use of the

Substance/Mixture

: Cleaning product

Substance type: : Mixture

For professional users only.

Product dilution information : 5.0 %

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

Identified uses : General purpose cleaner. Manual process

Foam cleaner. Semi-Automatic with venting process Foam cleaner. Semi-Automatic without venting process

Recommended restrictions

on use

: Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Company : Ecolab Ltd.

PO Box 11; Winnington Avenue

Northwich, Cheshire, United Kingdom CW8 4DX

+ 44 (0)1606 74488 ccs@ecolab.com

1.4 Emergency telephone number

Emergency telephone : +441618841235

number +32-(0)3-575-5555 Trans-European

Poison Information Centre

telephone number

: For medical professionals only: 0344 892 0111

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Section: 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Product AS SOLD

Eye irritation, Category 2 H319

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Product AT USE DILUTION

Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Product AS SOLD

Hazard pictograms



Signal Word : Warning

Hazard Statements : H319 Causes serious eye irritation.

Precautionary Statements : **Prevention:**

P280e Wear eye protection/face protection.

Product AT USE DILUTION

No hazard pictogram, no signal word, no hazard statement(s), no precautionary statement(s) required

2.3 Other hazards

Product AS SOLD

None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Product AS SOLD Hazardous components

Chemical Name	CAS-No. EC-No. REACH No.	Classification REGULATION (EC) No 1272/2008	Concentration : [%]
2-(2-butoxyethoxy)ethanol	112-34-5 203-961-6 01-2119475104-44	Eye irritation Category 2; H319	>= 2.5 - < 5
Sodium p- cumenesulphonate	15763-76-5 239-854-6 01-2119489411-37	Eye irritation Category 2; H319	>= 2.5 - < 5
Fattyalcohol ethoxylates =/< C15 and =/< 5EO	68213-23-0 01-2119489387-20	Acute toxicity Category 4; H302 Serious eye damage Category 1; H318 Chronic aquatic toxicity Category 3; H412	>= 1 - < 2.5
Alkylamineoxides	3332-27-2 222-059-3 01-2119949262-37	Acute toxicity Category 4; H302 Skin irritation Category 2; H315 Serious eye damage Category 1; H318 Acute aquatic toxicity Category 1; H400 Chronic aquatic toxicity Category 2; H411	>= 0.5 - < 1
Amines, C12-14	308062-28-4	Acute toxicity Category 4; H302	>= 0.5 - < 1

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alkyldimethyl, N-oxides	01-2119490061-47	Skin irritation Category 2; H315 Serious eye damage Category 1; H318 Acute aquatic toxicity Category 1; H400 Chronic aquatic toxicity Category 2; H411	
		M = 1	

Product AT USE DILUTION Hazardous components

Chemical Name	CAS-No. EC-No. REACH No.	Classification REGULATION (EC) No 1272/2008	Concentration : [%]	
Substances with a workplace exposure limit :				
2-(2-butoxyethoxy)ethanol	112-34-5 203-961-6 01-2119475104-44	Eye irritation Category 2; H319	>= 0.1 - < 0.25	

For the full text of the H-Statements mentioned in this Section, see Section 16.

Section: 4. FIRST AID MEASURES

4.1 Description of first aid measures

Product AS SOLD

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for

at least 15 minutes. Remove contact lenses, if present and easy

to do. Continue rinsing. Get medical attention.

In case of skin contact : Rinse with plenty of water.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

Product AT USE DILUTION

In case of eye contact : Rinse with plenty of water.

In case of skin contact : Rinse with plenty of water.

If swallowed : Rinse mouth. Get medical attention if symptoms occur.

If inhaled : Get medical attention if symptoms occur.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.

4.3 Indication of immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

Section: 5. FIREFIGHTING MEASURES

Product AS SOLD

5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

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circumstances and the surrounding environment.

Unsuitable extinguishing

media

: None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards during

firefighting

: Not flammable or combustible.

Hazardous combustion

products

: Depending on combustion properties, decomposition products

may include following materials:

Carbon oxides Sulphur oxides

Oxides of phosphorus

metal oxides

5.3 Advice for firefighters

for firefighters

Special protective equipment : Use personal protective equipment.

Further information : Fire residues and contaminated fire extinguishing water must be

disposed of in accordance with local regulations. In the event of

fire and/or explosion do not breathe fumes.

Section: 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Product AS SOLD

Advice for non-emergency

personnel

: Ensure clean-up is conducted by trained personnel only. Refer to

protective measures listed in sections 7 and 8.

Advice for emergency

responders

: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable

materials.

Product AT USE DILUTION

Advice for non-emergency

personnel

Advice for emergency

responders

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

: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable

materials.

6.2 Environmental precautions

Product AS SOLD

Environmental precautions : Do not allow contact with soil, surface or ground water.

Product AT USE DILUTION

Environmental precautions : No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up

Product AS SOLD

Methods for cleaning up Stop leak if safe to do so. Contain spillage, and then collect with

> non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for

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disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

Product AT USE DILUTION

Methods for cleaning up

: Stop leak if safe to do so. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Flush away traces with water. For large spills, dike spilled material or otherwise contain material to ensure runoff does not reach a waterway.

6.4 Reference to other sections

See Section 1 for emergency contact information.

For personal protection see section 8.

See Section 13 for additional waste treatment information.

Section: 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Product AS SOLD

Advice on safe handling

: Avoid contact with skin and eyes. Use only with adequate ventilation. Wash hands thoroughly after handling. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).

Hygiene measures

: Handle in accordance with good industrial hygiene and safety practice. Remove and wash contaminated clothing before re-use. Wash face, hands and any exposed skin thoroughly after handling.

Product AT USE DILUTION

Advice on safe handling

: Wash hands after handling. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE). For personal protection see section

8.

Hygiene measures

: Wash hands before breaks and immediately after handling the

product.

7.2 Conditions for safe storage, including any incompatibilities

Product AS SOLD

Requirements for storage areas and containers

: Keep out of reach of children. Keep container tightly closed. Store

in suitable labeled containers.

Storage temperature : 0 °C to 40 °C

Product AT USE DILUTION

Requirements for storage areas and containers

: Keep out of reach of children. Keep container tightly closed. Store

in suitable labeled containers.

7.3 Specific end uses

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Product AS SOLD

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Product AS SOLD

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
2-(2- butoxyethoxy)ethanol	112-34-5	TWA	10 ppm 67.5 mg/m3	UKCOSSTD
		STEL	15 ppm 101.2 mg/m3	UKCOSSTD

DNFI

DNEL			
2-(2-butoxyethoxy)ethanol		End Use: Workers Exposure routes: Inhalation Potential health effects: Short-term - local Value: 101.2 mg/m3 End Use: Workers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 20 mg/kg End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 67.5 mg/m3 End Use: Workers Exposure routes: Inhalation Potential health effects: Short-term - local Value: 67.5 mg/m3	
Linear(C12-C14)alkanol, ethoxylated, sulfated, sodium salt	:	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 175 mg/m3 End Use: Workers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 2750 mg/m3 End Use: Workers Exposure routes: Dermal Potential health effects: Long-term local effects Value: 0.132 mg/m3 End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 52 mg/m3 End Use: Consumers Exposure routes: Dermal	

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Potential health effects: Long-term systemic effects

Value: 1650 mg/m3

End Use: Consumers Exposure routes: Dermal

Potential health effects: Long-term local effects

Value: 0.079 mg/m3

End Use: Consumers Exposure routes: Oral

Potential health effects: Long-term systemic effects

Value: 15 mg/m3

PNEC

2-(2-butoxyethoxy)ethanol		Fresh water Value: 1 mg/l Marine water Value: 0.1 mg/l Intermittent use/release Value: 3.9 mg/l
		Sewage treatment plant Value: 200 mg/l Sediment Value: 4 mg/kg Soil
Linear(C12-C14)alkanol,	-	Value: 0.4 mg/kg Oral Value: 56 mg/kg Fresh water
ethoxylated, sulfated, sodium salt		Value: 0.24 mg/l Marine water Value: 0.024 mg/l Sewage treatment plant Value: 10000 mg/l Fresh water sediment Value: 0.917 mg/kg
		Marine sediment Value: 0.092 mg/kg Soil Value: 7.5 mg/kg

8.2 Exposure controls

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Product AS SOLD Appropriate engineering controls

Engineering measures : Good general ventilation should be sufficient to control worker

exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice. Remove and wash contaminated clothing before re-use.

Wash face, hands and any exposed skin thoroughly after

handling.

Eye/face protection (EN 166) : Safety glasses with side-shields

Hand protection (EN 374) : No special protective equipment required.

Skin and body protection

(EN 14605)

: No special protective equipment required.

Respiratory protection (EN

143, 14387)

: None required if airborne concentrations are maintained below the

exposure limit listed in Exposure Limit Information. Use certified

respiratory protection equipment meeting EU

requirements(89/656/EEC, (EU) 2016/425), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods

or procedures of work organization.

Product AT USE DILUTION Appropriate engineering controls

Engineering measures : Good general ventilation should be sufficient to control worker

exposure to airborne contaminants.

Individual protection measures

Hygiene measures : Wash hands before breaks and immediately after handling the

product.

Eye/face protection (EN

166)

: No special protective equipment required.

Hand protection (EN 374) : No special protective equipment required.

Skin and body protection

(EN 14605)

: No special protective equipment required.

Respiratory protection (EN

143, 14387)

: None required if airborne concentrations are maintained below the

exposure limit listed in Exposure Limit Information. Use certified

respiratory protection equipment meeting EU

requirements(89/656/EEC, (EU) 2016/425), or equivalent, when respiratory risks cannot be avoided or sufficiently limited by technical means of collective protection or by measures, methods

or procedures of work organization.

Environmental exposure controls

General advice : Consider the provision of containment around storage vessels.

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Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Product AS SOLD Product AT USE DILUTION

Appearance : liquid liquid

Colour : clear, colourless colourless
Odour : amine-like not significant

pH : 8.5 - 9.5, 100 % 8.7

Flash point : Not applicable., Does not sustain combustion.

Odour Threshold : Not applicable and/or not determined for the mixture Melting point/freezing point : Not applicable and/or not determined for the mixture

Initial boiling point and

boiling range

: > 100 °C

Evaporation rate : Not applicable and/or not determined for the mixture Flammability (solid, gas) : Not applicable and/or not determined for the mixture Upper explosion limit : Not applicable and/or not determined for the mixture Lower explosion limit : Not applicable and/or not determined for the mixture Vapour pressure : Not applicable and/or not determined for the mixture Relative vapour density : Not applicable and/or not determined for the mixture

Relative density : 1.018 - 1.098

Water solubility : soluble

Solubility in other solvents : Not applicable and/or not determined for the mixture Partition coefficient: n- : Not applicable and/or not determined for the mixture

octanol/water

Auto-ignition temperature : Not applicable and/or not determined for the mixture

Thermal decomposition : Not applicable and/or not determined for the mixture

Viscosity, kinematic : Not applicable and/or not determined for the mixture

Explosive properties : Not applicable and/or not determined for the mixture

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

9.2 Other information

Not applicable and/or not determined for the mixture

Section: 10. STABILITY AND REACTIVITY

Product AS SOLD 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

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No dangerous reaction known under conditions of normal use.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

Depending on combustion properties, decomposition products may include following materials: Carbon oxides Sulphur oxides Oxides of phosphorus metal oxides

Section: 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Product AS SOLD

exposure

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

Product

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

Acute inhalation toxicity : There is no data available for this product.

Acute dermal toxicity : There is no data available for this product.

Skin corrosion/irritation : There is no data available for this product.

Serious eye damage/eye

irritation

: There is no data available for this product.

Respiratory or skin

sensitization

: There is no data available for this product.

Carcinogenicity : There is no data available for this product.

Reproductive effects : There is no data available for this product.

Germ cell mutagenicity : There is no data available for this product.

Teratogenicity : There is no data available for this product.

STOT - single exposure : There is no data available for this product.

STOT - repeated exposure : There is no data available for this product.

Aspiration toxicity : There is no data available for this product.

Components

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Acute oral toxicity : 2-(2-butoxyethoxy)ethanol LD50 rat: 3,306 mg/kg

Sodium p-cumenesulphonate LD50 rat: > 7,000 mg/kg

Alkylamineoxides LD50 rat: > 1,495 mg/kg

Amines, C12-14 alkyldimethyl, N-oxides LD50 rat: 1,064 mg/kg

Components

Acute dermal toxicity : 2-(2-butoxyethoxy)ethanol LD50 rabbit: 2,764 mg/kg

Potential Health Effects

Product AS SOLD

Eyes : Causes serious eye irritation.

Skin : Health injuries are not known or expected under normal use.

Ingestion : Health injuries are not known or expected under normal use.

Inhalation : Health injuries are not known or expected under normal use.

Chronic Exposure : Health injuries are not known or expected under normal use.

Product AT USE DILUTION

Eyes : Health injuries are not known or expected under normal use.

Skin : Health injuries are not known or expected under normal use.

Ingestion : Health injuries are not known or expected under normal use.

Inhalation : Health injuries are not known or expected under normal use.

Chronic Exposure : Health injuries are not known or expected under normal use.

Experience with human exposure

Product AS SOLD

Eye contact : Redness, Pain, Irritation

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

Product AT USE DILUTION

Eye contact : No symptoms known or expected.

Skin contact : No symptoms known or expected.

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

Section: 12. ECOLOGICAL INFORMATION

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12.1 Toxicity

Product AS SOLD

Environmental Effects : This product has no known ecotoxicological effects.

Product AT USE DILUTION

Environmental Effects : This product has no known ecotoxicological effects.

Product AS SOLD

Product

Toxicity to fish : no data available

Toxicity to daphnia and other : no data available

aquatic invertebrates

Toxicity to algae : no data available

Components

Toxicity to fish : 2-(2-butoxyethoxy)ethanol96 h LC50 Fish: 1,300 mg/l

Sodium p-cumenesulphonate96 h LC50 Oncorhynchus mykiss

(rainbow trout): > 1,000 mg/l

Alkylamineoxides96 h LC50 Danio rerio (zebra fish): 2.4 mg/l

Amines, C12-14 alkyldimethyl, N-oxides96 h LC50: 2.67 mg/l

Components

Toxicity to daphnia and other

aquatic invertebrates

: Alkylamineoxides48 h EC50 Daphnia magna (Water flea): 2.64

mg/l

Amines, C12-14 alkyldimethyl, N-oxides48 h EC50 Daphnia

magna (Water flea): 3.1 mg/l

Components

Toxicity to algae : Sodium p-cumenesulphonate96 h EC50 Pseudokirchneriella

subcapitata (algae): > 230 mg/l

Alkylamineoxides72 h EC50 Pseudokirchneriella subcapitata

(green algae): 0.266 mg/l 28 d NOEC: > 0.067 mg/l

Amines, C12-14 alkyldimethyl, N-oxides72 h LC50: 0.143 mg/l

72 h NOEC: 0.067 mg/l

12.2 Persistence and degradability

Product

Biodegradability : The surfactants contained in the product are biodegradable

according to the requirements of the detergent regulation

648/2004/EC

Components

Biodegradability : 2-(2-butoxyethoxy)ethanolResult: Readily biodegradable.

Sodium p-cumenesulphonateResult: Readily biodegradable.

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Fattyalcohol ethoxylates =/< C15 and =/< 5EOResult: Readily biodegradable.

AlkylamineoxidesResult: Readily biodegradable.

Amines, C12-14 alkyldimethyl, N-oxidesResult: Readily biodegradable.

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

Product

Assessment : This substance/mixture contains no components considered to be

either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or

higher.

12.6 Other adverse effects

no data available

Section: 13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with the European Directives on waste and hazardous waste. Waste codes should be assigned by the user, preferably in discussion with the waste disposal authorities.

13.1 Waste treatment methods

Product AS SOLD

Product : Do not contaminate storm water drains, natural waterways or soil

with chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of contents/container in accordance with local regulations

Dispose of wastes in an approved waste disposal facility.

Contaminated packaging : Dispose of as unused product. Empty containers should be taken

to an approved waste handling site for recycling or disposal. Do not re-use empty containers. Dispose of in accordance with local,

state, and federal regulations.

Guidance for Waste Code

selection

: Organic wastes containing dangerous substances. If this product is used in any further processes, the final user must redefine and

assign the most appropriate European Waste Catalogue Code. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in

compliance with applicable European (EU Directive 2008/98/EC)

and local regulations.

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Product AT USE DILUTION

Product : Diluted product can be flushed to sanitary sewer if regulations

permit.

Contaminated packaging : Dispose of in accordance with local, state, and federal regulations.

Section: 14. TRANSPORT INFORMATION

Product AS SOLD

The shipper/consignor/sender is responsible to ensure that the packaging, labeling, and markings are in compliance with the selected mode of transport.

Land transport (ADR/ADN/RID)

14.1 UN number : Not dangerous goods14.2 UN proper shipping : Not dangerous goods

name

14.3 Transport hazard : Not dangerous goods

class(es)

14.4 Packing group14.5 Environmental hazards14.6 Special precautions forNot dangerous goodsNot dangerous goods

user

Air transport (IATA)

14.1 UN number : Not dangerous goods14.2 UN proper shipping : Not dangerous goods

name

14.3 Transport hazard : Not dangerous goods

class(es)

14.4 Packing group
14.5 Environmental hazards
14.6 Special precautions for
14.6 Not dangerous goods
14.6 Not dangerous goods
14.6 Not dangerous goods

user

Sea transport (IMDG/IMO)

14.1 UN number : Not dangerous goods14.2 UN proper shipping : Not dangerous goods

name

14.3 Transport hazard : Not dangerous goods

class(es)

14.4 Packing group
14.5 Environmental hazards
14.6 Special precautions for
Not dangerous goods
Not dangerous goods

user

14.7 Transport in bulk : Not dangerous goods according to 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

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according to Detergents

: 5 % or over but less than 15 %: Phosphates

Regulation EC 648/2004 less than 5 %: Anionic surfactants, Non-ionic surfactants,

> Polycarboxylates Preservation agents: 2-phenoxyethanol

Seveso III: Directive

: Not applicable.

2012/18/EU of the European Parliament and of the Council on the control of majoraccident hazards involving dangerous substances.

Candidate List of Substances : Not applicable.

of Very High Concern for

Authorisation

National Regulations

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

Other regulations : The Chemicals (Hazard Information and Packaging for Supply)

Regulations.

The Control of Substances Hazardous to Health Regulations.

Health and Safety at Work Act.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out on the product.

Section: 16. OTHER INFORMATION

Procedure used to derive the classification according to REGULATION (EC) No 1272/2008

Classification	Justification
Eye irritation 2, H319	Calculation method

Full text of H-Statements

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H400	Very toxic to aquatic life.
H411	Toxic to aquatic life with long las

I oxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

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

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

Prepared by : Regulatory Affairs

Numbers quoted in the MSDS are given in the format: 1,000,000 = 1 million and 1,000 = 1 thousand. 0.1 = 1 tenth and 0.001 = 1 thousandth

REVISED INFORMATION: Significant changes to regulatory or health information for this revision is indicated by a bar in the left-hand margin of the SDS.

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

Annex: Exposure Scenarios

Exposure Scenario: Foam cleaner. Semi-Automatic without venting process

Life Cycle Stage : Use at industrial sites

Product category : **PC35** Washing and cleaning products (including solvent based

products)

Contributing scenario controlling environmental exposure for:

Environmental release : ERC4 Industrial use of processing aids in processes and

products, not becoming part of articles

Daily amount per site : 50 kg

Type of Sewage Treatment : Municipal sewage treatment plant

Plant

category

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Indoor

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Contributing scenario controlling worker exposure for:

Process category : **PROC7** Industrial spraying

Exposure duration : 240 min

Operational conditions and

risk management measures

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour 1

Skin Protection : see section 8

Respiratory Protection : see section 8

Contributing scenario controlling worker exposure for:

Process category : PROC8b Transfer of substance or preparation (charging/

discharging) from/ to vessels/ large containers at

dedicated facilities

Exposure duration : 60 min

Operational conditions and

risk management measures

Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour 1

Skin Protection : see section 8

Respiratory Protection : see section 8

Exposure Scenario: Foam cleaner. Semi-Automatic with venting process

Life Cycle Stage : Use at industrial sites

Product category : PC35 Washing and cleaning products (including solvent based

products)

Contributing scenario controlling environmental exposure for:

Environmental release

category

: ERC4

Industrial use of processing aids in processes and

products, not becoming part of articles

Daily amount per site : 50 kg

Type of Sewage Treatment

Plant

Municipal sewage treatment plant

Contributing scenario controlling worker exposure for:

Process category : **PROC7** Industrial spraying

Exposure duration : 240 min

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Operational conditions and

risk management measures

: Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour 1

1

Skin Protection see section 8

Respiratory Protection see section 8

Contributing scenario controlling worker exposure for:

PROC8b Transfer of substance or preparation (charging/ Process category

discharging) from/ to vessels/ large containers at

dedicated facilities

Exposure duration 60 min

Operational conditions and

risk management measures

Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour

Skin Protection see section 8

Respiratory Protection see section 8

Exposure Scenario: General purpose cleaner. Manual process

Life Cycle Stage Widespread use by professional workers

Product category **PC35** Washing and cleaning products (including solvent based

products)

Contributing scenario controlling environmental exposure for:

Environmental release

category

ERC8a

Wide dispersive indoor use of processing aids in open

systems

Daily amount per site 7.5 kg

Type of Sewage Treatment

Plant

Municipal sewage treatment plant

Contributing scenario controlling worker exposure for:

PROC10 Roller application or brushing Process category

Exposure duration 480 min

Operational conditions and

risk management measures

Indoor

Local Exhaust Ventilation is not required

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General ventilation Ventilation rate per hour 1

Skin Protection : see section 8

Respiratory Protection : see section 8

Contributing scenario controlling worker exposure for:

Process category : **PROC8a** Transfer of substance or preparation (charging/

discharging) from/ to vessels/ large containers at non-

dedicated facilities

Exposure duration : 60 min

Operational conditions and risk management measures

Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour 1

Skin Protection : see section 8

Respiratory Protection : see section 8

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