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

1.1 Product identifier

Product name : Ecobrite Super Silex Liquid

Product code : 115611E

Use of the : Laundry detergent

Substance/Mixture

Substance type: : Mixture

For professional users only.

Product dilution information : No dilution information provided.

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

Identified uses : Laundry detergent. Automatic 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

Date of Compilation/Revision : 23.03.2020 Version : 2.0

Section: 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2 H315
Serious eye damage, Category 1 H318

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms

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Signal Word : Danger

Hazard Statements : H315 Causes skin irritation.

H318 Causes serious eye damage.

Precautionary Statements : **Prevention**:

P280 Wear protective gloves/ eye protection/ face

protection.

Response:

P305 + P351 + P338 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/doctor.

Hazardous components which must be listed on the label: benzenesulfonic acid, C10-13- alkyl derivs., sodium salt Alcohols, C13-15, branched and linear, ethoxylated

2.3 Other hazards

None known.

Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Hazardous components

benzenesulfonic acid, C10-13- alkyl derivs., sodium salt 01-	CAS-No. EC-No. REACH No. 68411-30-3 270-115-0 2119489428-22	Classification REGULATION (EC) No 1272/2008 Acute toxicity Category 4; H302 Skin irritation Category 2; H315 Serious eye damage Category 1; H318 Chronic aquatic toxicity Category 3; H412	Concentration: % >= 5 - < 10			
benzenesulfonic acid, C10-13- alkyl derivs., sodium salt Alcohols, C13-15,	REACH No. 68411-30-3 270-115-0 2119489428-22	Acute toxicity Category 4; H302 Skin irritation Category 2; H315 Serious eye damage Category 1; H318 Chronic aquatic toxicity Category 3;				
benzenesulfonic acid, C10-13- alkyl derivs., sodium salt Alcohols, C13-15,	68411-30-3 270-115-0 2119489428-22	Skin irritation Category 2; H315 Serious eye damage Category 1; H318 Chronic aquatic toxicity Category 3;	>= 5 - < 10			
C10-13- alkyl derivs., sodium salt 01-	2119489428-22	Skin irritation Category 2; H315 Serious eye damage Category 1; H318 Chronic aquatic toxicity Category 3;				
sodium salt 01- Alcohols, C13-15,		Serious eye damage Category 1; H318 Chronic aquatic toxicity Category 3;				
, ,	157627-86-6	Chronic aquatic toxicity Category 3;				
, ,	157627-86-6	H412				
· · · · · · · · · · · · · · · · · · ·	157627-86-6					
· · · · · · · · · · · · · · · · · · ·	157627-86-6					
branched and linear,	13/02/-00-0	Acute toxicity Category 4; H302	>= 5 - < 10			
	POLYMER	Serious eye damage Category 1; H318				
ethoxylated		Chronic aquatic toxicity Category 3;				
		H412				
fatty saids sacs same de	C4700 C4 F	Five impitation Catagory 2, 11240	>= 5 - < 10			
fatty acids, coco, compds. with triethanolamine	61790-64-5 263-155-5	Eye irritation Category 2; H319	>= 5 - < 10			
	CH EXEMPTED					
Fatty acids, coco, sodium	61789-31-9	Eye irritation Category 2; H319	>= 5 - < 10			
salts	263-050-4	Lye iiilialioii Calegory 2, 11319	/= 3 - < 10			
	EXEMPTED					
Alcohols, C13, branched,	69011-36-5	Acute toxicity Category 4; H302	>= 2.5 - < 3			
ethoxylated	POLYMER	Serious eye damage Category 1; H318	7 - 2.0			
	. •==	concae eye damage category 1,11010				
sodium hydroxide	1310-73-2	Skin corrosion Category 1A; H314	>= 0.5 - < 1			
, , , , , , , , , , , , , , , , , , ,	215-185-5	Corrosive to metals Category 1; H290				
01-	2119457892-27					
Substances with a workplace exposure limit :						
Propylene glycol	57-55-6	Not Classified;	>= 5 - < 10			
	200-338-0					
	2119456809-23					
glycerin	56-81-5	Not Classified;	>= 0.1 - < 0.25			
	200-289-5					

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01-2119471987-18

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

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

at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.

: Wash off immediately with plenty of water for at least 15 minutes. In case of skin contact

Use a mild soap if available. Get medical attention if irritation

develops and persists.

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

If inhaled : Remove to fresh air. Treat symptomatically. 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

: Treat symptomatically. Treatment

Section: 5. FIREFIGHTING MEASURES

5.1 Extinguishing media

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

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

nitrogen oxides (NOx) Sulphur 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

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6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency

personnel

: Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid inhalation, ingestion and contact with skin and eyes. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. 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.

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

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

Advice on safe handling : Avoid contact with skin and eyes. Do not get in eyes, on skin, or

on clothing. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not breathe spray, vapour. 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. Provide suitable facilities for quick drenching or flushing

of the eyes and body in case of contact or splash hazard.

7.2 Conditions for safe storage, including any incompatibilities

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

7.3 Specific end uses

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Specific use(s) : Laundry detergent. Automatic process

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.		Value type (Form	Control parameters	Basis	
			of exposure)			
Propylene glycol	57-55-6		TWA (particles)	10 mg/m3	UKCOSSTD	
Further information	16 Where		no specific short-term exposure limit is listed, a figure three times the			
		long-te	erm exposure limit should be used.			
			TWA (Total vapour	150 ppm	UKCOSSTD	
			and particles)	474 mg/m3		
Further information	16	Where	no specific short-term	exposure limit is listed, a figure	three times the	
	long-term exposure limit should be used.					
sodium hydroxide	1310-73-2		STEL	2 mg/m3	UKCOSSTD	
glycerin	56-81-5		TWA (Mist)	10 mg/m3	UKCOSSTD	
Further information	16	Where	no specific short-term exposure limit is listed, a figure three times the			
		long-te	erm exposure limit sho	uld be used.		

DNEL

DNEL		
benzenesulfonic acid, C10- 13- alkyl derivs., sodium salt		End Use: Workers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 85 mg/cm2 End Use: Workers Exposure routes: Dermal Potential health effects: Long-term local effects Value: 85 mg/cm2 End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 6 mg/m3 End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 6 mg/m3
Propylene glycol	:	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 168 mg/m3 End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 10 mg/m3 End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 50 mg/m3

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		End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 10 mg/m3 End Use: Consumers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 213 mg/cm2 End Use: Consumers Exposure routes: Ingestion Potential health effects: Long-term systemic effects Value: 85 ppm
sodium hydroxide	:	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 1 mg/m3 End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 1 mg/m3

PNEC

benzenesulfonic acid, C10-		
13- alkyl derivs., sodium salt		Value: 0.268 mg/l
		Marine water
		Value: 0.0268 mg/l
		Intermittent use/release
		Value: 0.0167 mg/l
		Fresh water sediment
		Value: 8.1 mg/kg
		Marine sediment
		Value: 8.1 mg/kg
		Sewage treatment plant
		Value: 3.43 mg/l
Propylene glycol	:	Fresh water
		Value: 260 mg/l
		Marine water
		Value: 26 mg/l
		Intermittent use/release
		Value: 183 mg/l
		Fresh water sediment
		Value: 572 mg/kg

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Marine sediment Value: 57.2 mg/kg

Sewage treatment plant Value: 20000 mg/l

Soil

Value: 50 mg/kg

8.2 Exposure controls

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. Provide suitable facilities for quick drenching or flushing of the eyes and body in case of contact or splash hazard.

Eye/face protection (EN 166) : Safety goggles

Face-shield

Hand protection (EN 374) : Recommended preventive skin protection

Gloves Nitrile rubber butyl-rubber

Breakthrough time: 1 – 4 hours

Minimum thickness for butyl-rubber 0.3 mm for nitrile rubber 0.2

mm or equivalent (please refer to the gloves

manufacturer/distributor for advise).

Gloves should be discarded and replaced if there is any indication

of degradation or chemical breakthrough.

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.

Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

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9.1 Information on basic physical and chemical properties

Appearance : liquid

Colour : light green

Odour : Perfumes, fragrances

pH : 8.0 - 8.7, 100 % Flash point : Not applicable.

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 : Not applicable and/or not determined for the mixture

boiling range

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 : 1.03 - 1.05
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 : 173.389 mm2/s (40 °C)

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

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

No dangerous reaction known under conditions of normal use.

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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 nitrogen oxides (NOx) Sulphur oxides

Section: 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

exposure

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

Product

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

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

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

: benzenesulfonic acid, C10-13- alkyl derivs., sodium salt Acute oral toxicity

LD50 rat: 1,080 mg/kg

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fatty acids, coco, compds. with triethanolamine

LD50 rat: 6,400 mg/kg

Alcohols, C13, branched, ethoxylated

LD50 rat: > 500 mg/kg

Propylene glycol

LD50 rat: 22,000 mg/kg

glycerin

LD50 rat: 18,300 mg/kg

Components

Acute inhalation toxicity : Propylene glycol

4 h LC50 rat: > 158.5 mg/l Test atmosphere: dust/mist

Components

Acute dermal toxicity : glycerin

LD50 rabbit: 23,000 mg/kg

Potential Health Effects

Eyes : Causes serious eye damage.

Skin : Causes skin irritation.

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

Eye contact : Redness, Pain, Corrosion

Skin contact : Redness, Irritation

Ingestion : No symptoms known or expected.

Inhalation : No symptoms known or expected.

Section: 12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Environmental Effects : This product has no known ecotoxicological effects.

Product

Toxicity to fish : no data available

Toxicity to daphnia and other : no data available

aquatic invertebrates

Toxicity to algae : no data available

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Components

Toxicity to fish : benzenesulfonic acid, C10-13- alkyl derivs., sodium salt

96 h LC50 Lepomis macrochirus (Bluegill sunfish): 1.67 mg/l

Alcohols, C13, branched, ethoxylated

96 h LC50 Fish: 3 mg/l

Propylene glycol

96 h LC50: > 10,000 mg/l

glycerin

96 h LC50 Fish: 855 mg/l

Components

Toxicity to daphnia and other

aquatic invertebrates

benzenesulfonic acid, C10-13- alkyl derivs., sodium salt

48 h LC50 Daphnia magna (Water flea): 2.4 mg/l

Alcohols, C13, branched, ethoxylated

48 h EC50 Daphnia magna (Water flea): 1.5 mg/l

sodium hydroxide 48 h EC50: 40 mg/l

Propylene glycol

48 h EC50: 18,340 mg/l

Components

Toxicity to algae : benzenesulfonic acid, C10-13- alkyl derivs., sodium salt

96 h EC50 Pseudokirchneriella subcapitata (green algae): 29 mg/l

Propylene glycol

96 h EC50: 19,000 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 : benzenesulfonic acid, C10-13- alkyl derivs., sodium salt

Result: Readily biodegradable.

Alcohols, C13-15, branched and linear, ethoxylated

Result: Readily biodegradable.

fatty acids, coco, compds. with triethanolamine

Result: Readily biodegradable.

Alcohols, C13, branched, ethoxylated

Result: Biodegradable

sodium hydroxide

Result: Not applicable - inorganic

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Propylene glycol

Result: Readily biodegradable.

glycerin

Result: 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 : Where possible recycling is preferred to disposal or incineration. If

recycling is not practicable, dispose of in compliance 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.

Section: 14. TRANSPORT INFORMATION

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

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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 group
14.5 Environmental hazards
14.6 Special precautions for
Not dangerous goods
Not 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 group14.5 Environmental hazards14.6 Special precautions forNot dangerous goodsNot 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
14.6 Not dangerous goods
14.6 Not dangerous goods
14.6 Special precautions for

14:0 Opeolal precaditions

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

according to Detergents Regulation EC 648/2004 : 5 % or over but less than 15 %: Anionic surfactants, Non-ionic

surfactants, Soap

Other constituents: Enzymes, Optical brighteners, Perfumes

Preservation agents: 2-phenoxyethanol

Allergens: Benzyl salicylate Hexyl cinnamal Amyl cinnamal

Alpha-Isomethyl Ionone

National Regulations

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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

- 10000 and 0 and 10 and 0 and					
Classification	Justification				
Skin irritation 2, H315	Calculation method				
Serious eye damage 1, H318	Calculation method				

Full text of H-Statements

H290	May be corrosive to metals.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
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; AICS - Australian Inventory of Chemical Substances; 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 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

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Goods by Rail; SADT – Self-Accelerating Decomposition Temperature; SDS – Safety Data Sheet; TCSI – Taiwan Chemical Substance 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: Laundry detergent. Automatic 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

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

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Skin Protection : Yes: See Section 8

Respiratory Protection : No

Contributing scenario controlling worker exposure for:

Process category : **PROC2** Use in closed, continuous process with occasional

controlled exposure

Exposure duration : 480 min

Operational conditions and

risk management measures

: Indoor

Local Exhaust Ventilation is not required

General ventilation Ventilation rate per hour 1

Skin Protection : No

Respiratory Protection : No

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