

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

#### 1.1 Product identifier

Product name	:	Apex Pot & Pan Soak
Product code	:	117000E
Use of the Substance/Mixture	:	Manual Warewashing Detergent
Substance type:	:	Mixture

#### For professional users only.

Product dilution information : Product is sold ready to use.

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

Identified uses	:	Dishwash and rinse aid product; Automatic process
Recommended restrictions on use	:	Reserved for industrial and professional use.

#### 1.3 Details of the supplier of the safety data sheet

Company	<ul> <li>Ecolab Ltd.</li> <li>PO Box 11; Winnington Avenue</li> <li>Northwich, Cheshire, United Kingdom CW8 4DX</li> <li>+ 44 (0)1606 74488</li> <li>ccs@ecolab.com</li> </ul>
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#### 1.4 Emergency telephone number

Emergency telephone	:	+441618841235
number		+32-(0)3-575-5555 Trans-European

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Version	:	2.0

#### Section: 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Serious eye damage, Category 1

H318

Not a hazardous substance or mixture.

#### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Apex Pot & Pan Soak		
Hazard pictograms		
Signal Word	: Danger	
Hazard Statements	: H318	Causes serious eye damage.
Precautionary Statements	: <b>Response:</b> P305 + P351 + F	2338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if
	P310	present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.

Hazardous components which must be listed on the label: Fattyalcohol ethoxylates =/< C15 and =/< 5EO

Not a hazardous substance or mixture.

#### 2.3 Other hazards

None known.

#### Section: 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.2 Mixtures

#### Hazardous components

Chemical Name	CAS-No.	Classification	Concentration
	EC-No. REACH No.	REGULATION (EC) No 1272/2008	: [%]
Sodium Carbonate	497-19-8 207-838-8 01-2119485498-19	Eye irritation Category 2; H319	>= 50 - <= 100
Sodium silicate	1344-09-8 215-687-4 01-2119448725-31	Skin corrosion Category 1B; H314 Serious eye damage Category 1; H318 Specific target organ toxicity - single exposure Category 3; H335 Serious eye damage/eye irritation Category 1 >= 28 % Serious eye damage/eye irritation Category 2A 24 - < 28 % Skin corrosion/irritation Category 1B >= 39 % Skin corrosion/irritation Category 2 24 - < 39 % Specific target organ toxicity - single exposure Category 3 >= 24 %	>= 10 - < 20
Fattyalcohol ethoxylates =/< C15 and =/< 5EO	68213-23-0 500-201-8 01-2119489387-20	Acute toxicity Category 4; H302 Serious eye damage Category 1; H318 Acute aquatic toxicity Category 1; H400 Chronic aquatic toxicity Category 3; H412	>= 3 - < 5

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

Apex Pot & Pan S	oak				
Remarks	: N	lo hazardous ingre	dients		
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

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 immediately.
In case of skin contact	:	Rinse with plenty of water.
If swallowed	:	Rinse mouth. Get medical attention if symptoms occur.
If inhaled	:	Remove to fresh air. Treat symptomatically. 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
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: 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.
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 metal oxides

#### 5.3 Advice for firefighters

Special protective equipment : Use personal protective equipment.

# Apex Pot & Pan Soak for firefighters 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 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

	protective measures listed in sections 7 and 8.	
Advice for emergency responders	If specialised clothing is required to deal with the spillage, note of any information in Section 8 on suitable and unsui materials.	
Product AT USE DILUTION	Pofer to protective measures listed in sections 7 and 9	
Advice for non-emergency personnel	Refer to protective measures listed in sections 7 and 8.	
Advice for emergency responders	If specialised clothing is required to deal with the spillage, note of any information in Section 8 on suitable and unsuitable	

exposure limit they must use appropriate certified respirators. Ensure clean-up is conducted by trained personnel only. Refer to

#### 6.2 Environmental precautions

Environmental precautions	: Do not allow contact with soil, surface or ground water.
Product AT USE DILUTION Environmental precautions	: No special environmental precautions required.

materials.

#### 6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	:	Sweep up and shovel into suitable containers for disposal.
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). 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 : Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation. Wash hands thoroughly after handling. Do not breathe

Apex Pot & Pan Soak		
	dust. 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.	
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		

Requirements for storage areas and containers		Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.
Storage temperature	:	-10 °C to 50 °C

Product /	AT USE	DILUTION

Requirements for storage	:	Keep out of reach of children. Keep container tightly closed. Store
areas and containers		in suitable labeled containers.

#### 7.3 Specific end uses

Section: 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

DNEL

Sodium Carbonate	:	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: Acute local effects Value: 10 mg/m3
Sodium silicate	:	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 5.61 mg/m3 End Use: Workers Exposure routes: Dermal

	Potential health effects: Long-term systemic effects Value: 1.59 mg/cm2
	End Use: Consumers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 1.38 mg/m3
	End Use: Consumers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 0.8 mg/cm2
	End Use: Consumers Exposure routes: Ingestion Potential health effects: Long-term systemic effects Value: 0.8 ppm

#### PNEC

Sodium silicate	:	Fresh water
		Value: 7.5 mg/l
		Marine water
		Value: 1 mg/l
		Intermittent use/release
		Value: 7.5 mg/l
		Sewage treatment plant
		Value: 348 mg/l

# 8.2 Exposure controls

## Appropriate engineering controls

Engineering measures	:	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Individual protection measur	res	
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)	:	Due to the form and packaging of the product, no protective equipment is needed under normal use conditions.
Hand protection (EN 374)	:	No special protective equipment required.
Skin and body protection (EN 14605)	:	No special protective equipment required.
Respiratory protection (EN	:	When respiratory risks cannot be avoided or sufficiently limited by

ex Pot & Pan Soak	
143, 14387)	technical means of collective protection or by measures, method or procedures of work organization, consider the use of certified respiratory protection equipment meeting EU requirements (89/656/EEC, (EU) 2016/425), or equivalent, with filter type:A-P
Product AT USE DILUTION Appropriate engineering con	ntrols
Engineering measures	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Individual protection measu	res
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 t 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, method or procedures of work organization.

#### Environmental exposure controls

General advice

: Consider the provision of containment around storage vessels.

# Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

#### 9.1 Information on basic physical and chemical properties

Appearance	: solid
Colour	: opaque, orange
Odour	: citrus
рН	: 10.8 - 11.3, 1 %
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	: 17.0 - 19.0
Water solubility	: Not applicable and/or not determined for the mixture
Solubility in other solvents	: Not applicable and/or not determined for the mixture
Partition coefficient: n- octanol/water	: Not applicable and/or not determined for the mixture
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	: Not applicable and/or not determined for the mixture

#### 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.

#### 10.4 Conditions to avoid

None known.

#### 10.5 Incompatible materials

Acids

#### **10.6 Hazardous decomposition products**

Depending on combustion properties, decomposition products may include following materials: Carbon oxides metal oxides

#### Section: 11. TOXICOLOGICAL INFORMATION

#### **11.1 Information on toxicological effects**

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

#### 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		
Acute oral toxicity	:	Sodium Carbonate LD50 rat: 2,800 mg/kg
		Sodium silicate LD50 rat: 3,400 mg/kg
		Fattyalcohol ethoxylates =/< C15 and =/< 5EO LD50 rat: 1,150 mg/kg
Components		
Acute dermal toxicity	:	Sodium silicate LD50 rat: > 5,000 mg/kg Test substance: Information given is based on data obtained from similar substances.
Potential Health Effects		
Eyes	:	Causes serious eye damage.
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		
Eye contact	: Redness, Pain, Corrosion	
Skin contact	: No symptoms known or expected.	
Ingestion	: No symptoms known or expected.	
Inhalation	: No symptoms known or expected.	
Broduct AT LISE DIL LITION		
Product AT USE DILUTION	NL	
Eye contact	: No symptoms known or expected.	
Skin contact	: No symptoms known or expected.	

: No symptoms known or expected.

Inhalation	: No symptoms known or expected	ł.

# Section: 12. ECOLOGICAL INFORMATION

#### 12.1 Toxicity

Ingestion

Environmental Effects	:	This product has no known ecotoxicological effects.
Environmental Effects	:	This product has no known ecotoxicological effects.
Product		
Toxicity to fish	:	no data available
Toxicity to daphnia and other aquatic invertebrates	:	no data available
Toxicity to algae	:	no data available
Components		
Toxicity to fish	:	Sodium Carbonate96 h LC50 Lepomis macrochirus (Bluegill sunfish): 300 mg/l
		Sodium silicate96 h LC50 Oncorhynchus mykiss (rainbow trout): 260 mg/l
		Fattyalcohol ethoxylates =/< C15 and =/< 5EO96 h LC50 Danio rerio (zebra fish): 0.876 mg/l Test substance: Information given is based on data obtained from similar substances.
Components		
Toxicity to daphnia and other	:	Sodium Carbonate48 h EC50 Ceriodaphnia (water flea): 213.5

Apex Pot & Pan Soak	
aquatic invertebrates	mg/l
	Sodium silicate48 h EC50 Daphnia magna (Water flea): 1,700 mg/l
	Fattyalcohol ethoxylates =/< C15 and =/< 5EO48 h EC50 Daphnia magna (Water flea): 0.53 mg/l Test substance: Information given is based on data obtained from similar substances.
Components	
Toxicity to algae	: Sodium silicate72 h EC50 Desmodesmus subspicatus (green algae): 207 mg/l
	Fattyalcohol ethoxylates =/< C15 and =/< 5EO72 h EC50 Pseudokirchneriella subcapitata (algae): 0.41 mg/l Test substance: Information given is based on data obtained from similar substances.
12.2 Persistence and degrada	ability
Product	
Biodegradability	: The surfactants contained in the product are biodegradable according to the requirements of the detergent regulation 648/2004/EC
Components	
Biodegradability	: Sodium CarbonateResult: Not applicable - inorganic
	Sodium silicateResult: Not applicable - inorganic
	Fattyalcohol ethoxylates =/< C15 and =/< 5EOResult: Readily biodegradable.
12.3 Bioaccumulative potenti	al
no data available	
12.4 Mobility in soil	
no data available	
12.5 Results of PBT and vPvI	3 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 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	: Inorganic 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.
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

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 goods
14.2 UN proper shipping	: Not dangerous goods
name	
14.3 Transport hazard	: Not dangerous goods
class(es)	
14.4 Packing group	: Not dangerous goods
14.5 Environmental hazards	: Not dangerous goods
14.6 Special precautions for	: Not dangerous goods
user	

#### Air transport (IATA)

14.1 UN number	: Not dangerous goods
14.2 UN proper shipping	: Not dangerous goods
name	
14.3 Transport hazard	: Not dangerous goods
class(es)	
14.4 Packing group	: Not dangerous goods
14.5 Environmental hazards	: Not dangerous goods
14.6 Special precautions for	: Not dangerous goods
user	

#### Sea transport (IMDG/IMO)

14.1 UN number	: Not dangerous goods
14.2 UN proper shipping	: Not dangerous goods
name	
14.3 Transport hazard	: Not dangerous goods
class(es)	
14.4 Packing group	: Not dangerous goods
14.5 Environmental hazards	: Not dangerous goods
14.6 Special precautions for	: 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

	klure					
	according to Detergents Regulation EC 648/2004	:	5 % or over but less than 15 %: Non-ionic surfactants less than 5 %: Phosphonates, Polycarboxylates Preservation agents: A mixture of: 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl- 2H-isothiazol-3-one (3:1)			
	Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major- accident hazards involving dangerous substances.	:	Not applicable.			
	Candidate List of Substances of Very High Concern for Authorisation	:	Not applicable.			
	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.			

#### 15.2 Chemical Safety Assessment

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

Section: 16. OTHER INFORMATION	
Section. 10. UTHER INFORMATION	

Health and Safety at Work Act.

Classification	Justification
Serious eye damage 1, H318	Calculation method

#### Full text of H-Statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.
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 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: Dishwash and rinse aid product; Automatic process					
Life Cycle Stage	:	Widespread	d use by professional workers		
Product category	:	PC35	Washing and cleaning products (including solvent based products)		
Contributing scenario controlling environmental exposure for:					

# Environmental release : **ERC8a** Wide dispersive indoor use of processing aids in open

category	•		systems
Daily amount per site	:	7.5 kg	
Type of Sewage Treatment Plant	:	Municipal s	ewage treatment plant

#### Contributing scenario controlling worker exposure for:

Process category	:	PROC8a	Transfer of substance or preparation (charged discharging) from/ to vessels/ large contained dedicated facilities	•
Exposure duration	:	60 min		
Operational conditions and risk management measures	:	Indoor		
		Local Exha	ust 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	:	<b>PROC3</b> Use in closed batch process (synthesis or formulation)		
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	:	see section	8	
Respiratory Protection	:	see section	8	