

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

#### 1.1 Product identifier

Product name	:	DELIMER EL 60
Product code	:	114819E
Use of the Substance/Mixture	:	Delimer
Substance type:	:	Mixture

For professional users only.

Product dilution information	:	0.5 % - 2.0 %	

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

Identified uses	:	Descaling agent - Spray and rinse manual process, without PPE
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 Limited Forest Park Mullingar Industrial Estate, Mullingar Co. Westmeath Ireland +353 1 276 3500 infoireland@ecolab.com</li> </ul>
	Ecolab Ltd. PO Box 11; Winnington Avenue Northwich, Cheshire, United Kingdom CW8 4DX +353 (0)1 276 3500 ccs@ecolab.com

#### 1.4 Emergency telephone number

Poison Information Centre	:	Poisons Information: For information or to report a poisoning
telephone number		incident contact The National Poisons Information Centre (01
		8092166)

Date of Compilation/Revision	:	31.01.2022
version	:	1.1

#### Section: 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

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

#### Product AS SOLD

Not a hazardous substance or mixture. The classification of this product is based on toxicological assessment.

#### Product AT USE DILUTION

Not a hazardous substance or mixture.

#### 2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008) Product AS SOLD

Not a hazardous substance or mixture.

#### Product AT USE DILUTION

Not a hazardous substance or mixture.

#### Additional Labelling:

#### Product AS SOLD

Special labelling of certain : Safety data sheet available on request. mixtures

#### 2.3 Other hazards

#### **Product AS SOLD**

Do not mix with bleach or other chlorinated products – will cause chlorine gas.

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

#### 3.2 Mixtures

#### Product AS SOLD Hazardous components

Chemical Name	CAS-No.	Classification	Concentration
	EC-No.	REGULATION (EC) No 1272/2008	: [%]
	REACH No.		
aulphamia agid	5329-14-6	Skin irritation Category 2; H315	>= 5 - < 10
sulphamic acid			>= 5 - < 10
	226-218-8	Eye irritation Category 2; H319	
	01-2119488633-28	Chronic aquatic toxicity Category 3; H412	
Alcohols, C13, branched,	69011-36-5	Acute toxicity Category 4; H302	>= 2.5 - < 3
	POLYMER		>= 2.5 - < 5
ethoxylated	POLTWER	Serious eye damage Category 1; H318	
ethanol	64-17-5	Flammable liquids Category 2; H225	>= 1 - < 2.5
	200-578-6	Serious eye damage/eye irritation	
	01-2119457610-43	Category 2; H319	
	01-2119457610-45	Galegory 2, HS19	
		Serious eye damage/eye irritation	
		Category 2A	
		50 - 100 %	

#### Product AT USE DILUTION

S	ection: 4. FIRST AID MI		r r	
	For the full text of the	H-Statemer	nts mentioned in this Section, see Section 16.	
	Remarks	:	No hazardous ingredients	
	<b>D</b>			

#### 4.1 Description of first aid measures

#### Product AS SOLD

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.

#### 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 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 product may include following materials: Carbon oxides Sulphur oxides nitrogen oxides (NOx)	ts:

#### 5.3 Advice for firefighters

Special protective equipment : Use personal protective equipment.

### **DELIMER EL 60** 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 **Product AS SOLD** Advice for non-emergency : Ensure clean-up is conducted by trained personnel only. Refer to personnel protective measures listed in sections 7 and 8. Advice for emergency : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable responders materials. **Product AT USE DILUTION** Advice for non-emergency : Refer to protective measures listed in sections 7 and 8.

personnel 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

#### 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.
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#### 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 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

<b>Product AS SOLD</b> Advice on safe handling	: Use only with adequate ventilation. Wash hands thoroughly after handling. Do not mix with bleach or other chlorinated products – will cause chlorine gas. In case of mechanical malfunction, or if in contact with unknown dilution of product, wear full Personal Protective Equipment (PPE).
Hygiene measures	<ul> <li>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.</li> </ul>
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 away from strong bases. 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

FIGURE 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

#### 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
ethanol	64-17-5	OELV - 15 min (STEL)	1,000 ppm	IR_OEL

#### 8.2 Exposure controls

#### Product AS SOLD Appropriate engineering controls

DELIMER EL 60	
Engineering measures	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Individual protection measur	es
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)	: 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.
Product AT USE DILUTION Appropriate engineering con	trols
Engineering measures	: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
Individual protection measur	es
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.

## Section: 9. PHYSICAL AND CHEMICAL PROPERTIES

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

		Product AS SOLD	Product AT USE DILUTION
Physical state	:		liquid
Colour	:	·	colourless
Odour	:	Perfumes, fragrances	characteristic
pH	:	0.5 - 1.0, 100 %	2.01 - 2.8
Particle characteristics	•	0.5 - 1.0, 100 /6	2.01 - 2.0
Assessment		not applicable	not applicable
Particle size	•	not applicable	not applicable
	•	not applicable	not applicable
Particle Size Distribution	•	not applicable	not applicable
Dustiness	:	not applicable	not applicable
Specific surface area	:		not applicable
Surface charge/Zeta potential	:	not applicable	not applicable
Shape	:	not applicable	not applicable
Crystallinity	:	not applicable	not applicable
Surface treatment /Coatings	:	not applicable	not applicable
Flash point	:	closed cupNot applicable.	
Odour Threshold	:	Not applicable and/or not determine	ined for the mixture
Melting point/freezing point	:	Not applicable and/or not determine	ined for the mixture
Boiling point, initial boiling point and boiling range	:	Not applicable and/or not determine	ined for the mixture
Evaporation rate	:	Not applicable and/or not determine	ined for the mixture
Flammability	:	Not applicable and/or not determine	ined for the mixture
Upper explosion limit	:	Not applicable and/or not determine	ined for the mixture
Lower explosion limit	:	Not applicable and/or not determine	ined for the mixture
Vapour pressure	:	Not applicable and/or not determine	ined for the mixture
Relative vapour density	:	Not applicable and/or not determine	ined for the mixture
Density and / or relative density	:	1.036 - 1.046	
Water solubility	:	soluble	
Solubility in other solvents	:	Not applicable and/or not determine	ined for the mixture
Partition coefficient: n- octanol/water (log value)	:	Not applicable and/or not determ	ined for the mixture
Auto-ignition temperature	:	Not applicable and/or not determine	ined for the mixture
Thermal decomposition	:	Not applicable and/or not determine	ined for the mixture
Viscosity, kinematic	:	Not applicable and/or not determine	ined for the mixture
Explosive properties	:	Not applicable and/or not determine	
Oxidizing properties	:	The substance or mixture is not c	
			-

#### 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

Do not mix with bleach or other chlorinated products - will cause chlorine gas.

#### 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 nitrogen oxides (NOx)

### Section: 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Product AS SOLD

Information on likely routes of : Inhalation, 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	No skin irritationThe classification of this product is bas toxicological assessment.	sed on
Serious eye damage/eye irritation	No eye irritationThe classification of this product is bas toxicological assessment.	ed on
Respiratory or skin sensitization	There is no data available for this product.	

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

## DELIMER EL 60

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	: sulphamic acid LD50 rat: 3,160 mg/kg
	Alcohols, C13, branched, ethoxylated LD50 rat: > 500 mg/kg
	ethanol LD50 rat: 10,470 mg/kg
Components	
Acute inhalation toxicity	: ethanol 4 h LC50 rat: 117 mg/l Test atmosphere: vapour
Components	
Acute dermal toxicity	: sulphamic acid LD50 rat: > 2,000 mg/kg
	ethanol LD50 rabbit: 15,800 mg/kg
Potential Health Effects	
Product AS SOLD 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.
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	
	<ul><li>Health injuries are not known or expected under normal use.</li><li>Health injuries are not known or expected under normal use.</li></ul>
Chronic Exposure	. Treattringunes are not known of expected under normal use.

#### Experience with human exposure

Product AS SOLD 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.
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.

#### 11.2 Information on other hazards

Further information

: no data available

## Section: 12. ECOLOGICAL INFORMATION

#### 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 aquatic invertebrates	:	no data available		
Toxicity to algae	:	no data available		
Components				
Toxicity to fish	:	Alcohols, C13, branched, ethoxylated96 h LC50 Fish: 3 mg/l		
		ethanol96 h LC50 Pimephales promelas (fathead minnow): > 100 mg/l		
Components				
Toxicity to daphnia and other aquatic invertebrates	:	Alcohols, C13, branched, ethoxylated48 h EC50 Daphnia magna (Water flea): 1.5 mg/l		
		ethanol48 h EC50 Aquatic Invertebrate: 857 mg/l		
Components				
Toxicity to algae	:	sulphamic acid72 h EC50: 48 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	: sulphamic acidResult: Not applicable - inorganic
	Alcohols, C13, branched, ethoxylatedResult: Biodegradable
	ethanolResult: 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 Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher

#### 12.7 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	:	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 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 or ID	: Not dangerous goods
number	
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 or ID number	: Not dangerous goods
14.2 UN proper shipping	: Not dangerous goods
name 14.3 Transport hazard	: Not dangerous goods
class(es)	. Not dangerous goods
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 or ID 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 Maritime transport in	: Not dangerous goods
bulk according to IMO	
instruments	

#### Section: 15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture according to Detergents : less than 5 %: Non-ionic surfactants Regulation EC 648/2004

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.

#### **National Regulations**

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

Other regulations : Safety, Health and Welfare at Work Act, 2005 European Communities (Classification, Packaging, Labelling and Notification of Dangerous Preparations) Regulations 1995. (S.I. 272 of 1995) as amended

#### **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
Not a hazardous substance or mixture.	Calculation method

#### Full text of H-Statements

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
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; 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: Descaling agent - Spray and rinse manual process, without PPE

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	:	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 sewage treatment plant						
Contributing scenario controlling worker exposure for:								
Process category	:	PROC10	Roller application or brushing					
Exposure duration	:	480 min						
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:

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					
Contributing scenario controlling worker exposure for:								
Process category	:	PROC11	Non industrial spraying					
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	