

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

#### 1.1 Product identifier

ECSLAB

Product name	:	P3-ansep CIP
Product code	:	116108E
Use of the Substance/Mixture	:	Cleaning product
Substance type:	:	Mixture
		For professional users only.
Product dilution information	:	2.0 %

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

Identified uses	:	Process cleaner. Cleaning In place (CIP) process
Recommended restrictions on use	:	Reserved for industrial and professional use.

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

Company	:	Ecolab Export GmbH Ecolab-Allee 1
		40789 Monheim am Rhein, Germany +49 2173 599 1127 DEDUSEXPServices@ecolab.com

#### **1.4 Emergency telephone number**

Emergency telephone number	:	0049-2173-5991700 (24/7)
Poison Information Centre telephone number	:	+49 (0)551 19240
Date of Compilation/Revision Version	:	03.04.2017 2.0

### Section: 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

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

Product AS SOLD	
Corrosive to metals, Category 1	H290
Skin corrosion, Category 1A	H314
Serious eye damage, Category 1	H318
Acute aquatic toxicity, Category 1	H400
Chronic aquatic toxicity, Category 2	H411

### Product AT USE DILUTION

Skin corrosion, Category 1A	H314
Serious eye damage, Category 1	H318
The classification of this product is based only of	on its extreme pH value (in accordance with current
European legislation).	

### 2.2 Label elements

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

Product AS SOLD Hazard pictograms	:		¥
Signal Word	:	Danger	
Hazard Statements	:	H290 H314 H400 H411	May be corrosive to metals. Causes severe skin burns and eye damage. Very toxic to aquatic life. Toxic to aquatic life with long lasting effects.
Supplemental Hazard Statements	:	EUH031	Contact with acids liberates toxic gas.
Precautionary Statements	:	Prevention: P273 P280 Response:	Avoid release to the environment. Wear protective gloves/ eye protection/ face protection.
		P303 + P361 + P3	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
		P305 + P351 + P3	338 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: sodium hydroxide sodium hypochlorite

Product AT USE DILUTION Hazard pictograms		
Signal Word	: Danger	
Hazard Statements	: H314	Causes severe skin burns and eye damage.
Precautionary Statements	: <b>Prevention:</b> P280 <b>Response:</b> P303 + P361 + P3	Wear protective gloves/ eye protection/ face protection. 353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water
for	several minutes. Remove contact lenses, if
pre	esent and easy to do. Continue rinsing.
P310 Imi	mediately call a POISON CENTER/doctor.

### 2.3 Other hazards

### **Product AS SOLD**

Mixing this product with acid or ammonia releases chlorine gas.

### 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: [%]
sodium hydroxide	1310-73-2 215-185-5 01-2119457892-27	Skin corrosion Category 1A; H314 Corrosive to metals Category 1; H290	>= 5 - < 10
sodium hypochlorite	7681-52-9 231-668-3 01-2119488154-34	Nota B Skin corrosion Category 1B; H314 Acute aquatic toxicity Category 1; H400 Chronic aquatic toxicity Category 1; H410	>= 2.5 - < 5

#### Product AT USE DILUTION Hazardous components

Chemical Name	CAS-No. EC-No. REACH No.	Classification (REGULATION (EC) No 1272/2008)	Concentration: [%]
sodium hypochlorite	7681-52-9 231-668-3 01-2119488154-34	Skin corrosionCategory 1B; H314 Acute aquatic toxicityCategory 1; H400 Chronic aquatic toxicityCategory 1; H410	< 0.1

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

P3-ansep CIP	
	Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
If swallowed	: Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
If inhaled	: Remove to fresh air. Treat symptomatically. Get medical attention if symptoms occur.
Product AT USE DILUTIO	N
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	: Wash off immediately with plenty of water for at least 15 minutes. Use a mild soap if available. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.
If swallowed	: Rinse mouth with water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention immediately.
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

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	posure to decomposition produ	icts may be a hazard to health.
Hazardous combustion products	ecomposition products may incl arbon oxides rogen oxides (NOx) Ilphur oxides kides of phosphorus	ude the following materials:

### 5.3 Advice for firefighters

Special protective equipment for firefighters	: Use personal protective equipment.
Further information	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. 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 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.
Product AT USE DILUTION		
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

Product AS SOLD Environmental precautions	: Do not allow contact with soil, surface or ground water.
Product AT USE DILUTION Environmental precautions	: Do not allow contact with soil, surface or ground water.

#### 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
	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	: Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapours/spray. Use only with adequate ventilation. Wash hands thoroughly after handling. Mixing this product with acid or ammonia releases chlorine gas.
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.
Product AT USE DILUTION	
Advice on safe handling	: Do not ingest. Do not get in eyes, on skin, or on clothing. Do not breathe dust/fume/gas/mist/vapours/spray. Use only with adequate ventilation. Wash hands thoroughly after handling.
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

<b>Product AS SOLD</b> Requirements for storage areas and containers	:	Do not store near acids. Keep out of reach of children. Keep container tightly closed. Store in suitable labeled containers.
		Keep only in original container. Absorb spillage to prevent material damage.
Storage temperature	:	-5 °C to 30 °C
Packaging material	:	Suitable material: Plastic material Unsuitable material: Aluminium, Mild steel
<b>Product AT USE DILUTION</b> Requirements for storage areas and containers	:	Do not store near acids. Keep out of reach of children. Keep container tightly closed. Store 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

Contains no substances with occupational exposure limit values.

Components	CAS-No.		Value type (Form of exposure)	Control parameters	Basis		
chlorine	7782-5	0-5	AGW	0.5 ppm 1.5 mg/m3	TRGS 900		
Further information	DFG	Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).					
	EU	European Union (The EU has established a limit value: deviations in value and peak limit are possible)					
	Y	When there is compliance with the OEL and biological tolerance values, the is no risk of harming the unborn child					

### DNEL

DINEL		
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

#### 8.2 Exposure controls

#### Product AS SOLD Appropriate engineering controls

Engineering measures	:	Effective exhaust ventilation system. Maintain air concentrations below occupational exposure standards.
Individual protection measure	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. 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

P3-ansep CIP		
	B M m G	utyl-rubber reakthrough time: 1 – 4 hours inimum thickness for butyl-rubber 0.7 mm for nitrile rubber 0.4 m or equivalent (please refer to the gloves anufacturer/distributor for advise). loves should be discarded and replaced if there is any indication degradation or chemical breakthrough.
Skin and body protection 14605)		ersonal protective equipment comprising: suitable protective oves, safety goggles and protective clothing
Respiratory protection 143, 14387)	ex re re re te	one required if airborne concentrations are maintained below the posure limit listed in Exposure Limit Information. Use certified appiratory protection equipment meeting EU equirements(89/656/EEC, 89/686/EEC), or equivalent, when appiratory risks cannot be avoided or sufficiently limited by chnical means of collective protection or by measures, methods procedures of work organization.
Product AT USE DILL		
Appropriate engineer	ing controls	
Engineering measures		ffective exhaust ventilation system. Maintain air concentrations elow occupational exposure standards.
Individual protection	measures	
Hygiene measures	pi W ha	andle in accordance with good industrial hygiene and safety ractice. Remove and wash contaminated clothing before re-use. /ash face, hands and any exposed skin thoroughly after andling. Provide suitable facilities for quick drenching or flushing the eyes and body in case of contact or splash hazard.
Eye/face protection (El		afety goggles ace-shield
Hand protection (EN 3	G N B M m G	ecommended preventive skin protection loves itrile rubber utyl-rubber reakthrough time: 1 – 4 hours inimum thickness for butyl-rubber 0.7 mm for nitrile rubber 0.4 m or equivalent (please refer to the gloves anufacturer/distributor for advise). loves should be discarded and replaced if there is any indication i degradation or chemical breakthrough.
Skin and body protection 14605)		ersonal protective equipment comprising: suitable protective oves, safety goggles and protective clothing
Respiratory protection 143, 14387)	ex re re re te	one required if airborne concentrations are maintained below the consumption of the posterior of the poster

### **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
Appearance	:	liquid	liquid
Colour	:	light yellow	colourless
Odour	:	Chlorine	Chlorine
рН	:	13.5 - 14.0, 100 %	12.7
Flash point	:	Not applicable.	
Odour Threshold	:	Not applicable and/or not determ	ined for the mixture
Melting point/freezing point	:	Not applicable and/or not determ	ined for the mixture
Initial boiling point and boiling range	:	> 100 °C	
Evaporation rate	:	Not applicable and/or not determ	ined for the mixture
Flammability (solid, gas)	:	Not applicable and/or not determ	ined for the mixture
Upper explosion limit	:	Not applicable and/or not determ	ined for the mixture
Lower explosion limit	:	Not applicable and/or not determined for the mixture	
Vapour pressure	:	Not applicable and/or not determ	ined for the mixture
Relative vapour density	:	Not applicable and/or not determ	ined for the mixture
Relative density	:	1.16 - 1.2	
Water solubility	:	soluble	
Solubility in other solvents	:	Not applicable and/or not determ	ined for the mixture
Partition coefficient: n- octanol/water	:	Not applicable and/or not determ	ined for the mixture
Auto-ignition temperature	:	Not applicable and/or not determ	ined for the mixture
Thermal decomposition	:	Not applicable and/or not determ	ined for the mixture
Viscosity, kinematic	:	Not applicable and/or not determ	ined for the mixture
Explosive properties	:	Not applicable and/or not determ	ined for the mixture
Oxidizing properties	:	Yes	

#### 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

Mixing this product with acid or ammonia releases chlorine gas.

#### 10.4 Conditions to avoid

None known.

#### 10.5 Incompatible materials

Acids Metals

Mild steel Aluminium

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

Decomposition products may include the following materials: Carbon oxides nitrogen oxides (NOx) Sulphur oxides Oxides of phosphorus

### Section: 11. TOXICOLOGICAL INFORMATION

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

### **Product AS SOLD**

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

#### Product

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

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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 hypochlorite LD50 rat: 5,230 mg/kg
Acute inhalation toxicity	: sodium hypochlorite 4 h LC50 rat: 5.25 mg/l
Acute dermal toxicity	: sodium hypochlorite LD50 rabbit: 10,000 mg/kg
Potential Health Effects	
Product AS SOLD Eyes	: Causes serious eye damage.
Skin	: Causes severe skin burns.
Ingestion	: Causes digestive tract burns.
Inhalation	: May cause nose, throat, and lung irritation.
Chronic Exposure	: Health injuries are not known or expected under normal use.
Product AT USE DILUTION Eyes	: Causes serious eye damage.
Skin	: Causes severe skin burns.
Ingestion	: Causes digestive tract burns.
Inhalation	: May cause nose, throat, and lung irritation.
Chronic Exposure	: Health injuries are not known or expected under normal use.
Experience with human expo	osure
Product AS SOLD Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Corrosion
Ingestion	: Corrosion, Abdominal pain
Inhalation	: Respiratory irritation, Cough
Product AT USE DILUTION Eye contact	: Redness, Pain, Corrosion
Skin contact	: Redness, Pain, Corrosion
Ingestion	: Corrosion, Abdominal pain

3-ansep CIP	
Inhalation	: Respiratory irritation, Cough
ection: 12. ECOLOGICAL INFOR	RMATION
Product AS SOLD 2.1 Ecotoxicity	
Environmental Effects	: Very toxic to aquatic life. Toxic to aquatic life with long lasting 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 daphnia and other aquatic invertebrates	: sodium hydroxide 48 h EC50: 40 mg/l
	sodium hypochlorite 48 h EC50: 0.071 mg/l
2.2 Persistence and degradabili	ity
Product	
Biodegradability	: The surfactants contained in the product are biodegradable according to the requirements of the detergent regulation 648/2004/EC
Components	
Biodegradability	: sodium hydroxide Result: Not applicable - inorganic
	sodium hypochlorite Result: Not applicable - inorganic
2.3 Bioaccumulative potential	
no data available	
2.4 Mobility in soil	
no data available	
2.5 Results of PBT and vPvB as	sessment
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	: The product should not be allowed to enter drains, water courses or the soil. 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	: 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	: 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.

### 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	: 3266
14.2 UN proper shipping name	: CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.
	(sodium hydroxide, sodium hypochlorite)
14.3 Transport hazard class(es)	: 8

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14.4 Packing group 14.5 Environmental hazards 14.6 Special precautions for user	: Yes
Air transport (IATA) 14.1 UN number 14.2 UN proper shipping name 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazards	<ul> <li>3266</li> <li>Corrosive liquid, basic, inorganic, n.o.s.</li> <li>(sodium hydroxide, sodium hypochlorite)</li> <li>8</li> <li>II</li> <li>Yes</li> </ul>
14.6 Special precautions for user	: None
Sea transport (IMDG/IMO) 14.1 UN number 14.2 UN proper shipping name 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazards	<ul> <li>3266</li> <li>CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S.</li> <li>(sodium hydroxide, sodium hypochlorite)</li> <li>8</li> <li>II</li> <li>Yoo</li> </ul>
14.5 Environmental hazards 14.6 Special precautions for user 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	<ul><li>Yes</li><li>None</li><li>Not applicable.</li></ul>

### Section: 15. REGULATORY INFORMATION

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

according to Detergents	:	less than 5 %: Phosphonates, Chlorine-based bleaching agents
Regulation EC 648/2004		

#### **National Regulations**

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

Hazard class for water :	WGK 2 Classification according VwVwS, Annex 4.
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German storage class : 8B

#### **15.2 Chemical Safety Assessment**

This product contains substances for which Chemical Safety Assessments are still required.

#### Section: 16. OTHER INFORMATION

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

Classification	Justification
Corrosive to metals 1, H290	Calculation method
Skin corrosion 1A, H314	Based on product data or assessment
Serious eye damage 1, H318	Based on product data or assessment
Acute aquatic toxicity 1, H400	Calculation method
Chronic aquatic toxicity 2, H411	Calculation method

#### Full text of H-Statements

H290	May be corrosive to metals.
H314	Causes severe skin burns and eye damage.
H400	Very toxic to aquatic life.
H410	Very toxic 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 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

#### **DPD+ Substances:**

The following substances are the lead substances that contribute to the mixture Exposure Scenario according to the DPD+ Rule:

Route	Substance	CAS-No.	EINECS-No.
Ingestion	sodium hydroxide	1310-73-2	215-185-5
Inhalation	sodium hypochlorite	7681-52-9	231-668-3
Dermal	sodium hydroxide	1310-73-2	215-185-5
Eyes	sodium hydroxide	1310-73-2	215-185-5
aquatic environment	sodium hypochlorite	7681-52-9	231-668-3

#### **Physical properties DPD+ Substances:**

Substance	Vapour pressure	Water solubility	Pow	Molar Mass
sodium hydroxide		1 g/ml		40 g/mol
sodium hypochlorite	25 hPa	1,000 g/l		

To calculate if your downstream Operating Conditions and Risk management Measures are safe, please calculate your risk factor at the website below:

#### www.ecetoc.org/tra

Short title of Exposure Scenario	:	Process cleaner. Cleaning In place (CIP) process
Use descriptors		
Main User Groups	:	Industrial uses: Uses of substances as such or in preparations at industrial sites
Sectors of end-use	:	<b>SU3:</b> Industrial uses: Uses of substances as such or in preparations at industrial sites
Process categories	:	PROC1: Use in closed process, no likelihood of exposure

P3-ansep CIP				
		<b>PROC8b:</b> Transfer of substance or preparation (charging/ discharging) from/ to vessels/ large containers at dedicated facilities		
Product categories	:	<b>PC35:</b> Washing and cleaning products (including solvent based products)		
Environmental Release Categories	:	<b>ERC4:</b> Industrial use of processing aids in processes and products, not becoming part of articles		