

# Safety Data Sheet

According to Regulation (EC) No 1907/2006

# Supergel VG3

**Revision:** 2022-05-08 **Version:** 03.0

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Trade name: Supergel VG3

UFI: RPF1-10S7-J006-M0G3

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

Product use: Open plant cleaning chemical. For industrial use only..

Uses advised against: Uses other than those identified are not recommended.

#### SWED - Sector-specific worker exposure description :

AISE\_SWED\_IS\_8b\_1 AISE\_SWED\_IS\_4\_1 AISE\_SWED\_IS\_7\_4 AISE\_SWED\_IS\_7\_5

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

Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

#### Contact details

Diversey Ltd
Weston Favell Centre, Northampton NN3 8PD, United Kingdom Tel: 01604 405311, Fax: 01604 406809
Regulatory Email: customerservice.uk@diversey.com

### 1.4 Emergency telephone number

Seek medical advice (show the label or safety data sheet where possible) For medical or environmental emergency only: call 0800 052 0185

# **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture

Flam. Liq. 3 (H226) Skin Corr. 1B (H314) Eye Dam. 1 (H318) Aquatic Chronic 3 (H412) Met. Corr. 1 (H290)

# 2.2 Label elements



Signal word: Danger.

Contains sodium hydroxide (Sodium Hydroxide), tetrasodium ethylene diamine tetraacetate (Tetrasodium EDTA), ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides (Dihydroxyethyl Tallowamine Oxide), N,N-dimethyltetradecylamine N-oxide (Myristamine Oxide)

#### Hazard statements:

H226 - Flammable liquid and vapour.

H290 - May be corrosive to metals.

H314 - Causes severe skin burns and eye damage.

H412 - Harmful to aquatic life with long lasting effects.

#### **Precautionary statements:**

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 - Wear protective gloves, protective clothing and eye or face protection.

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

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 CENTRE, doctor or physician.

P403 + P235 - Store in a well-ventilated place. Keep cool.

#### 2.3 Other hazards

No other hazards known.

# **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
propan-2-ol	200-661-7	67-63-0	01-2119457558-25	Flam. Liq. 2 (H225) STOT SE 3 (H336) Eye Irrit. 2 (H319)		3-10
sodium hydroxide	215-185-5	1310-73-2	01-2119457892-27	Skin Corr. 1A (H314) Met. Corr. 1 (H290)		3-10
tetrasodium ethylene diamine tetraacetate	200-573-9	64-02-8	01-2119486762-27	Acute Tox. 4 (H302) Acute Tox. 4 (H332) STOT RE 2 (H373) Eye Dam. 1 (H318)		3-10
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	263-179-6	61791-46-6	01-2120770736-44	Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)		1-3
propane-1,2-diol	200-338-0	57-55-6	01-2119456809-23	Not classified as hazardous		1-3
N,N-dimethyltetradecylamine N-oxide	222-059-3	3332-27-2	01-2119949262-37	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411)		1-3

#### Specific concentration limits

sodium hydroxide:

- Eye Dam. 1 (H318) >= 3% > Eye Irrit. 2 (H319) >= 0.5%
- Skin Corr. 1A (H314) >= 5% > Skin Corr. 1B (H314) >= 2% > Skin Irrit. 2 (H315) >= 0.5%

Workplace exposure limit(s), if available, are listed in subsection 8.1.

ATE, if available, are listed in section 11.

For the full text of the H and EUH phrases mentioned in this Section, see Section 16...

# **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

**General Information:** If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is

irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose

resuscitation. Use Ambu bag or ventilator.

Inhalation: Remove person to fresh air and keep comfortable for breathing. Get medical attention or advice if

you feel unwell.

Skin contact: Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Wash skin with

plenty of lukewarm, gently flowing water. Take off immediately all contaminated clothing and wash it before reuse. Immediately call a POISON CENTRE, doctor or physician. If skin irritation occurs: Get

medical advice or attention.

Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove Eye contact:

contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE,

doctor or physician.

Ingestion: Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious

person. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or

physician.

Self-protection of first aider: Consider personal protective equipment as indicated in subsection 8.2.

### 4.2 Most important symptoms and effects, both acute and delayed

Inhalation: No known effects or symptoms in normal use.

Skin contact: Causes severe burns.

Eye contact: Causes severe or permanent damage.

Ingestion: Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of

oesophagus and stomach.

#### 4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

# **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

#### 5.2 Special hazards arising from the substance or mixture

No special hazards known.

#### 5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

# SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Turn off all sources of ignition. Ventilate the area. Wear suitable protective clothing. Wear eye/face protection. Wear suitable gloves.

#### 6.2 Environmental precautions

Dilute with plenty of water. Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

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

Dyke to collect large liquid spills. Use neutralising agent. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). Do not place spilled materials back into the original container. Collect in closed and suitable containers for disposal.

#### 6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

# SECTION 7: Handling and storage

# 7.1 Precautions for safe handling

#### Measures to prevent fire and explosions:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Take precautionary measures against static discharges. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools.

# Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

#### Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not mix with other products unless adviced by Diversey. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Avoid contact with skin and eyes. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

# 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a well-ventilated place. Store in a closed container. Keep only in original packaging. Keep cool. Keep away from heat and direct sunlight.

For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

Comah - Lower Tier requirements (tonnes): 5000 Comah - Upper Tier requirements (tonnes): 50000

#### 7.3 Specific end use(s)

No specific advice for end use available.

# SECTION 8: Exposure controls/personal protection

# 8.1 Control parameters

Workplace exposure limits

Air limit values, if available:

Ingredient(s)	UK - Long term value(s)	UK - Short term value(s)
propan-2-ol	400 ppm 999 mg/m³	500 ppm 1250 mg/m <sup>3</sup>
sodium hydroxide		2 mg/m <sup>3</sup>
propane-1,2-diol	150 ppm total vapour and particulates	450 ppm total vapour and particulates

474 mg/m3 total vapour	1422 mg/m³ total
and particulates	vapour and particulates
10 mg/m <sup>3</sup> particulates	30 mg/m <sup>3</sup> particulate

Biological limit values, if available:

# Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

# **DNEL/DMEL** and **PNEC** values

Human exposure
DNEL/DMEL oral expo

rnosure - Consumer (ma/ka hw)

DIVEL/DIVIEL GIAI exposure - Consumer (mg/kg bw)		la a l		
Ingredient(s)	Short term - Local	Short term - Systemic	Long term - Local	Long term - Systemic
	effects	effects	effects	effects
propan-2-ol	-	-	-	26
sodium hydroxide	-	-	-	-
tetrasodium ethylene diamine tetraacetate	-	-	-	25
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	-	-	-	-
propane-1,2-diol	-	-	-	85
N,N-dimethyltetradecylamine N-oxide	-	-	-	0.44

DNEL/DMEL dermal exposure - Worker

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
propan-2-ol	-	-	-	888
sodium hydroxide	2 %	-	-	-
tetrasodium ethylene diamine tetraacetate	-	-	-	-
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	-	-	-	0.3
propane-1,2-diol	-	-	-	-
N,N-dimethyltetradecylamine N-oxide	-	-	-	11

DNEL/DMEL dermal exposure - Consumer

Ingredient(s)	Short term - Local effects	Short term - Systemic effects (mg/kg bw)	Long term - Local effects	Long term - Systemic effects (mg/kg bw)
propan-2-ol	•	-	-	319
sodium hydroxide	2 %	-	-	-
tetrasodium ethylene diamine tetraacetate	-	-	-	-
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	No data available	-	-	-
propane-1,2-diol	-	-	-	213
N,N-dimethyltetradecylamine N-oxide	-	-	-	5.5

DNEL/DMEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
propan-2-ol	-	-	-	500
sodium hydroxide	-	-	1	-
tetrasodium ethylene diamine tetraacetate	3	3	1.5	1.5
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	-	-	-	1.48
propane-1,2-diol	-	-	10	168
N,N-dimethyltetradecylamine N-oxide	-	-	-	6.2

DNEL/DMEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
propan-2-ol	-	-	-	89
sodium hydroxide	-	-	1	-
tetrasodium ethylene diamine tetraacetate	1.2	1.2	0.6	-
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	-	-	-	-
propane-1,2-diol	-	-	10	50
N,N-dimethyltetradecylamine N-oxide	-	-	-	1.53

Environmental exposure Environmental exposure - PNEC

Ingredient(s)	Surface water, fresh (mg/l)	Surface water, marine (mg/l)	Intermittent (mg/l)	Sewage treatment plant (mg/l)
propan-2-ol	140.9	140.9	140.9	2251
sodium hydroxide	-	-	-	-
tetrasodium ethylene diamine tetraacetate	2.2	0.22	1.2	43

ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	0.000356	0.000036	0.00047	3.43
propane-1,2-diol	260	26	183	20000
N,N-dimethyltetradecylamine N-oxide	0.0335	0.00335	0.0335	24

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
propan-2-ol	552	552	28	-
sodium hydroxide	-	-	-	-
tetrasodium ethylene diamine tetraacetate	-	-	0.72	-
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	1.7	0.17	0.81	-
propane-1,2-diol	572	57.2	50	-
N,N-dimethyltetradecylamine N-oxide	5.24	0.524	1.02	-

#### 8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Recommended safety measures for handling the <u>undiluted</u> product:

Appropriate engineering controls: If the product is diluted by using specific dosing systems with no risk of splashes or direct skin

contact, the personal protection equipment as described in this section is not required. Where possible: use in automated/closed system and cover open containers. Transport over pipes. Filling

with automatic systems. Use tools for manual handling of product. **Appropriate organisational controls:**Avoid direct contact and/or splashes where possible. Train personnel.

REACH use scenarios considered for the undiluted product:

	SWED - Sector-specific worker exposure description	LCS	PROC	Duration (min)	ERC
Automatic transfer and dilution	AISE_SWED_IS_8b_1	IS	PROC 8b	60	ERC4

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 166). The use of a full-face shield or other full-face protection is

strongly recommended when handling open containers or if splashes may occur.

Hand protection: Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and

breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such

as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material

thickness: ≥ 0.7 mm

Suggested gloves for protection against splashes: Material: nitrile rubber Penetration time: ≥ 30 min

Material thickness: ≥ 0.4 mm

In consultation with the supplier of protective gloves a different type providing similar protection may

be chosen.

Body protection: No special requirements under normal use conditions. Wear chemical-resistant clothing and boots

in case direct dermal exposure and/or splashes may occur (EN 14605).

Respiratory protection: If exposure to liquid particles or splashes cannot be avoided use: half mask (EN 140) with particle

filter P2 (EN 143) or full-face mask (EN 136) with particle filter P1 (EN 143) Consider specific local use conditions. In consultation with the supplier of respiratory protection equipment a different type providing similar protection may be chosen. Specific applications tools may be available to limit exposure. Please refer to the product information sheet for the possibilities. Apply technical

measures to comply with the occupational exposure limits, if available

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted or unneutralised.

Recommended safety measures for handling the  $\underline{\ \ diluted\ \ }$  product:

Recommended maximum concentration (% w/w): 10

Appropriate engineering controls: Provide a good standard of general ventilation. Ensure that foam equipment does not generate

respirable particles.

Appropriate organisational controls: No special requirements under normal use conditions.

REACH use scenarios considered for the diluted product:

	p				
	SWED	LCS	PROC	Duration	ERC
				(min)	
Automatic application in a dedicated system	AISE_SWED_IS_4_1	IS	PROC 4	480	ERC8a
Foam spraying	AISE_SWED_IS_7_4	IS	PROC 7	480	ERC4
Spray application	AISE SWED IS 7 5				

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 166) are always recommended for foam applications.

Chemical-resistant protective gloves (EN 374) are always recommended for foam applications. Hand protection: Verify instructions regarding permeability and breakthrough time, as provided by the gloves

supplier. Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material

thickness: ≥ 0.7 mm

In consultation with the supplier of protective gloves a different type providing similar protection may

be chosen.

**Body protection:** No special requirements under normal use conditions. No special requirements under normal use conditions. Respiratory protection:

**Environmental exposure controls:** No special requirements under normal use conditions.

# SECTION 9: Physical and chemical properties

# 9.1 Information on basic physical and chemical properties

Information in this section refers to the product, unless it is specifically stated that substance data is listed

Method / remark

Physical state: Liquid Colour: Clear , Pale , Brown Odour: Product specific Odour threshold: Not applicable

Melting point/freezing point (°C): Not determined Not relevant to classification of this product

Initial boiling point and boiling range (°C): Not determined See substance data

Substance data, boiling point

Ingredient(s)	Value (°C)	Method	Atmospheric pressure (hPa)
propan-2-ol	82	Method not given	1013
sodium hydroxide	> 990	Method not given	
tetrasodium ethylene diamine tetraacetate	No data available	Non-experimental data	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	No data available		
propane-1,2-diol	185-190	Method not given	1013
N,N-dimethyltetradecylamine N-oxide	100	Method not given	

# Method / remark

Flammability (solid, gas): Not applicable to liquids

Flammability (liquid): Flammable. Flash point (°C): ≈ 29 °C

Sustained combustion: Not applicable. (UN Manual of Tests and Criteria, section 32, L.2) closed cup

Lower and upper explosion limit/flammability limit (%): Not determined See substance data

Substance data, flammability or explosive limits, if available:

Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
propan-2-ol	2	13
propane-1,2-diol	2.6	12.6

# Method / remark

Autoignition temperature: Not determined

Decomposition temperature: Not applicable.

**pH:** >= 11.5 (neat) **Dilution pH:** > 11 (10 %) ISO 4316 ISO 4316

Kinematic viscosity: ≈ 100 mPa.s (20 °C) Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
propan-2-ol	Soluble	Method not given	
sodium hydroxide	1000	Method not given	20
tetrasodium ethylene diamine tetraacetate	500	Method not given	20
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	No data available		
propane-1,2-diol	Soluble	Method not given	
N,N-dimethyltetradecylamine N-oxide	Soluble		

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Method / remark See substance data

Vapour pressure: Not determined

Substance data, vanour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
propan-2-ol	4200	Method not given	20
sodium hydroxide	< 1330	Method not given	20
tetrasodium ethylene diamine tetraacetate	0.000000002	Read across	25
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	No data available		
propane-1,2-diol	18.6	Method not given	20
N,N-dimethyltetradecylamine N-oxide	230	Method not given	25

Method / remark

OECD 109 (EU A.3)

Not relevant to classification of this product

Not applicable to liquids.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

**Explosive properties:** Not explosive. Vapours may form explosive mixtures with air. **Oxidising properties:** Not oxidising.

Relative density: ≈ 1.06 (20 °C)

Relative vapour density: No data available.

Particle characteristics: No data available.

Corrosion to metals: Corrosive Weight of evidence

9.2.2 Other safety characteristics

No other relevant information available.

# SECTION 10: Stability and reactivity

#### 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

# 10.2 Chemical stability

Stable under normal storage and use conditions.

### 10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

# 10.4 Conditions to avoid

None known under normal storage and use conditions.

# 10.5 Incompatible materials

May be corrosive to metals. Reacts with acids.

# 10.6 Hazardous decomposition products

None known under normal storage and use conditions.

# **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects

Mixture data:.

# Relevant calculated ATE(s):

ATE - Oral (mg/kg): >2000 ATE - Inhalatory, mists (mg/l): >5

Substance data, where relevant and available, are listed below:.

# Acute toxicity

Acute oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
propan-2-ol	LD 50	5840	Rat	OECD 401 (EU B.1)		Not established
sodium hydroxide		No data available				Not established

tetrasodium ethylene diamine tetraacetate	LD 50	1780	Rat	OECD 401 (EU B.1)	12000
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	LD 50	> 2000	Rat	Read across	98000
propane-1,2-diol	LD 50	> 10000	Rat	Method not given	Not established
N,N-dimethyltetradecylamine N-oxide	LD 50	> 300-2000	Rat	OECD 401 (EU B.1)	30000

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
propan-2-ol	LD 50	> 2000	Rabbit	Method not given		Not established
sodium hydroxide	LD 50	1350	Rabbit	Method not given		Not established
tetrasodium ethylene diamine tetraacetate	LD 50	> 5000	Rabbit	Method not given		Not established
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	LD 50	> 2000	Rat	Read across		Not established
propane-1,2-diol	LD 50	> 2000	Rabbit	Method not given		Not established
N,N-dimethyltetradecylamine N-oxide		No data available				Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
propan-2-ol	LC 50	> 25 (vapour)	Rat	OECD 403 (EU B.2)	6
sodium hydroxide		No data available			
tetrasodium ethylene diamine tetraacetate	LC 50	≥ 1-5 (dust)	Rat	OECD 403 (EU B.2)	6
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides		No data available			
propane-1,2-diol	LC 50	> 317 (mist) No mortality observed	Rabbit	Non guideline test	
N,N-dimethyltetradecylamine N-oxide		No data available			

Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust (mg/l)	ATE - inhalation, mist (mg/l)	ATE - inhalation, vapour (mg/l)	ATE - inhalation, gas (mg/l)
propan-2-ol	Not established	Not established	Not established	Not established
sodium hydroxide	Not established	Not established	Not established	Not established
tetrasodium ethylene diamine tetraacetate	Not established	15	Not established	Not established
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	Not established	Not established	Not established	Not established
propane-1,2-diol	Not established	Not established	Not established	Not established
N,N-dimethyltetradecylamine N-oxide	Not established	Not established	Not established	Not established

# Irritation and corrosivity Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
propan-2-ol	Not irritant	Rabbit	OECD 404 (EU B.4)	
sodium hydroxide	Corrosive	Rabbit	Method not given	
tetrasodium ethylene diamine tetraacetate	Not irritant	Rabbit	OECD 404 (EU B.4)	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	Not irritant			
propane-1,2-diol	Not irritant	Rabbit	OECD 404 (EU B.4)	
N,N-dimethyltetradecylamine N-oxide	Irritant	Rabbit	OECD 404 (EU B.4)	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
propan-2-ol	Irritant	Rabbit	OECD 405 (EU B.5)	
sodium hydroxide	Corrosive	Rabbit	Method not given	
tetrasodium ethylene diamine tetraacetate	Severe damage		Method not given	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	Severe damage	Rabbit	OECD 405 (EU B.5) Read across	
propane-1,2-diol	Not corrosive or irritant	Rabbit	OECD 405 (EU B.5)	
N,N-dimethyltetradecylamine N-oxide	Severe damage	Rabbit	OECD 405 (EU B.5)	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
propan-2-ol	No data available			
sodium hydroxide	No data available			
tetrasodium ethylene diamine tetraacetate	No data available			
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	No data available			
propane-1,2-diol	No data available			

N,N-dimethyltetradecylamine N-oxide	No data available		

Sensitisation Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
propan-2-ol	Not sensitising	Guinea pig	OECD 406 (EU B.6) /	
			Buehler test	
sodium hydroxide	Not sensitising		Human repeated patch	
			test	
tetrasodium ethylene diamine tetraacetate	Not sensitising	Guinea pig	OECD 406 (EU B.6) /	
			GPMT	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	Not sensitising	Guinea pig	OECD 406 (EU B.6) /	
			Buehler test Read	
			across	
propane-1,2-diol	Not sensitising	Guinea pig	OECD 406 (EU B.6) /	
			GPMT	
N,N-dimethyltetradecylamine N-oxide	No data available			

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
propan-2-ol	No data available			
sodium hydroxide	No data available			
tetrasodium ethylene diamine tetraacetate	No data available			
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	No data available			
propane-1,2-diol	No data available			
N,N-dimethyltetradecylamine N-oxide	No data available			

# CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) $\underline{\text{Mutagenicity}}$

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
propan-2-ol	No evidence for mutagenicity, negative test results No evidence of genotoxicity, negative test results		No evidence of genotoxicity, negative test results	OECD 474 (EU B.12)
sodium hydroxide	No evidence for mutagenicity, negative test results		No evidence for mutagenicity, negative test results	OECD 474 (EU B.12) OECD 475 (EU B.11)
tetrasodium ethylene diamine tetraacetate	No evidence for mutagenicity, negative test results		No evidence of genotoxicity, negative test results	Method not given
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) Read across	No evidence of genotoxicity, negative test results	OECD 475 (EU B.11) OECD 478 Read across
propane-1,2-diol	No evidence for mutagenicity, negative test results	Method not given	No data available	
N,N-dimethyltetradecylamine N-oxide	No data available		No data available	

Carcinogenicity

Carolinegerilony	
Ingredient(s)	Effect
propan-2-ol	No evidence for carcinogenicity, negative test results
sodium hydroxide	No evidence for carcinogenicity, weight-of-evidence
tetrasodium ethylene diamine tetraacetate	No evidence for carcinogenicity, weight-of-evidence
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	No evidence for carcinogenicity, negative test results
propane-1,2-diol	No evidence for carcinogenicity, negative test results
N,N-dimethyltetradecylamine N-oxide	No data available

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
propan-2-ol			No data available				
sodium hydroxide			No data available				No evidence for developmental toxicity No evidence for reproductive toxicity
tetrasodium ethylene diamine tetraacetate			No data available				No evidence for reproductive toxicity
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	NOAEL	Developmental toxicity Teratogenic effects	25	Rat	Read across		No evidence for developmental toxicity
propane-1,2-diol			No data available				No evidence for reproductive toxicity
N,N-dimethyltetradecyl amine N-oxide			No data available				

Repeated dose toxicity
Sub-acute or sub-chronic oral toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
propan-2-ol		No data available				
sodium hydroxide		No data available				
tetrasodium ethylene diamine tetraacetate		No data available				
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides		No data available				
propane-1,2-diol		No data available				
N,N-dimethyltetradecylamine N-oxide		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
propan-2-ol		No data available				
sodium hydroxide		No data available				
tetrasodium ethylene diamine tetraacetate		No data available				
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides		No data available				
propane-1,2-diol		No data available				
N,N-dimethyltetradecylamine N-oxide		No data available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
propan-2-ol		No data available				
sodium hydroxide		No data available				
tetrasodium ethylene diamine tetraacetate		No data available				
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides		No data available				
propane-1,2-diol		No data available				
N,N-dimethyltetradecylamine N-oxide		No data available				

Chronic toxicity

Ingredient(s)	Exposure route	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time	Specific effects and organs affected	Remark
propan-2-ol			No data available				-	
sodium hydroxide			No data available					
tetrasodium ethylene diamine tetraacetate			No data available					
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides			No data available					
propane-1,2-diol			No data available					
N,N-dimethyltetradecyl amine N-oxide			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
propan-2-ol	Central nervous system
sodium hydroxide	No data available
tetrasodium ethylene diamine tetraacetate	No data available
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	Not applicable
propane-1,2-diol	No data available
N,N-dimethyltetradecylamine N-oxide	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
propan-2-ol	No data available
sodium hydroxide	No data available
tetrasodium ethylene diamine tetraacetate	Respiratory tract
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	Not applicable
propane-1,2-diol	No data available
N,N-dimethyltetradecylamine N-oxide	No data available

# **Aspiration hazard**

Substances with an aspiration hazard (H304), if any, are listed in section 3.

# Potential adverse health effects and symptoms

Effects and symptoms related to the product, if any, are listed in subsection 4.2.

# 11.2 Information on other hazards

# 11.2.1 Endocrine disrupting properties

Endocrine disrupting properties - Human data, if available:

# 11.2.2 Other information

No other relevant information available.

# **SECTION 12: Ecological information**

# 12.1 Toxicity

No data is available on the mixture.

Substance data, where relevant and available, are listed below:

# Aquatic short-term toxicity Aquatic short-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
propan-2-ol	LC 50	> 100	Pimephales promelas	Method not given	48
sodium hydroxide	LC 50	35	Various species	Method not given	96
tetrasodium ethylene diamine tetraacetate	LC 50	> 100	Lepomis macrochirus	OPP 72-1, static (EPA)	96
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	LC 50	> 0.1 - 1	Brachydanio rerio	OECD 203 (EU C.1)	96
propane-1,2-diol	LC 50	> 1000	Fish	Method not given	24
N,N-dimethyltetradecylamine N-oxide	LC 50	1-10	Brachydanio rerio	OECD 203, semi-static	96

Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
propan-2-ol	EC 50	> 100	Daphnia magna Straus	Method not given	48
sodium hydroxide	EC 50	40.4	Ceriodaphnia sp.	Method not given	48
tetrasodium ethylene diamine tetraacetate	EC 50	140	Daphnia magna Straus	DIN 38412, Part 11	48
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	EC 50	0.082	Daphnia magna Straus	OECD 202, static	48
propane-1,2-diol	EC 50	> 100	Daphnia	Method not given	48
N,N-dimethyltetradecylamine N-oxide	EC 50	> 1-10	Daphnia magna Straus	OECD 202, static	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
propan-2-ol	EC 50	> 100	Scenedesmus quadricauda	Method not given	72
sodium hydroxide	EC 50	22	Photobacteriu m phosphoreum	Method not given	0.25
tetrasodium ethylene diamine tetraacetate	EC 50	> 100	Scenedesmus obliquus	88/302/EEC, Part C, static	72
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	Er C 50	0.1-1	Pseudokirchner iella subcapitata	OECD 201 (EU C.3)	72

propane-1,2-diol	EC 50	24200	Desmodesmus	OECD 201 (EU C.3)	72
			subspicatus		
N,N-dimethyltetradecylamine N-oxide	EC 50	0.19	Pseudokirchner	Read across	72
			iella		
			subcapitata		

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
propan-2-ol		No data available			
sodium hydroxide		No data available			
tetrasodium ethylene diamine tetraacetate		No data available			
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides		No data available			
propane-1,2-diol		No data available			
N,N-dimethyltetradecylamine N-oxide		No data available			

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
propan-2-ol	EC 50	> 1000	Activated sludge	Method not given	
sodium hydroxide		No data available			
tetrasodium ethylene diamine tetraacetate	EC 20	> 500	Activated sludge	OECD 209	0.5 hour(s)
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	EC 10	24	Pseudomonas putida	Read across	18 hour(s)
propane-1,2-diol	EC o	> 20000	Pseudomonas putida	Method not given	18 hour(s)
N,N-dimethyltetradecylamine N-oxide	EC 50	56	Pseudomonas putida	DIN 38412 / Part 8 Read across	

# Aquatic long-term toxicity Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
propan-2-ol		No data available				
sodium hydroxide		No data available				
tetrasodium ethylene diamine tetraacetate	NOEC	> 25.7	Brachydanio rerio	OECD 210	35 day(s)	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	NOEC	0.42	Pimephales promelas	Read across		
propane-1,2-diol		No data available				
N,N-dimethyltetradecylamine N-oxide		No data available				

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
propan-2-ol		No data available				
sodium hydroxide		No data available				
tetrasodium ethylene diamine tetraacetate	NOEC	25	Daphnia magna	OECD 211	21 day(s)	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	NOEC	< 0.1	Daphnia magna	OECD 211	21 day(s)	
propane-1,2-diol	NOEC	13020	Ceriodaphnia dubia	Method not given	7 day(s)	
N,N-dimethyltetradecylamine N-oxide		No data				

Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw sediment)	Species	Method	Exposure time (days)	Effects observed
propan-2-ol		No data				
		available				
sodium hydroxide		No data				

	available		
tetrasodium ethylene diamine tetraacetate	No data		
	available		
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	No data		
	available		
propane-1,2-diol	No data		
	available		
N,N-dimethyltetradecylamine N-oxide	No data	•	
	available		

Terrestrial toxicity
Terrestrial toxicity - soil invertebrates, including earthworms, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw	Species	Method	Exposure time (days)	Effects observed
		soil)			, , ,	
propan-2-ol		No data				_
		available				
sodium hydroxide		No data				
		available				
tetrasodium ethylene diamine tetraacetate	LD 50	156	Eisenia fetida	OECD 207	14	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
propan-2-ol		No data available				
sodium hydroxide		No data available				
tetrasodium ethylene diamine tetraacetate	NOEC	0.25 - 1.25			21	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
propan-2-ol		No data available				
sodium hydroxide		No data available				

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
propan-2-ol		No data				
		available				
sodium hydroxide		No data				
		available				

Terrestrial toxicity - soil bacteria, if available:

Terrestriai toxicity - soli bacteria, ii avallable.						
Ingredient(s)	Endpoint	Value (mg/kg dw	Species	Method	Exposure time (days)	Effects observed
		soil)				
propan-2-ol		No data				
		available				
sodium hydroxide		No data				
		available				

# 12.2 Persistence and degradability

Abiotic degradation
Abiotic degradation - photodegradation in air, if available:

Ingredient(s)	Half-life time	Method	Evaluation	Remark
propan-2-ol	No data available			
sodium hydroxide	13 second(s)	Method not given	Rapidly photodegradable	
tetrasodium ethylene diamine tetraacetate	No data available			

Abiotic degradation - hydrolysis, if available:

Ingredient(s)	Half-life time in fresh water	Method	Evaluation	Remark
propan-2-ol	No data available			
sodium hydroxide	No data available			
tetrasodium ethylene diamine tetraacetate	No data available			

Abiotic degradation - other processes, if available:

Ingredient(s)	Туре	Half-life time	Method	Evaluation	Remark
propan-2-ol		No data available			
sodium hydroxide		No data available			
tetrasodium ethylene		No data available			
diamine tetraacetate					

**Biodegradation**Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
propan-2-ol			95 % in 21 day(s)	OECD 301E	Readily biodegradable
sodium hydroxide					Not applicable (inorganic substance)
tetrasodium ethylene diamine tetraacetate				Weight of evidence	Not readily biodegradable. Inherently biodegradable.
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides		Oxygen depletion	> 60%	OECD 301D	Readily biodegradable
propane-1,2-diol			> 70 % in 28 day(s)	OECD 301A	Readily biodegradable
N,N-dimethyltetradecylamine N-oxide	Activated sludge, aerobe	CO <sub>2</sub> production	> 60 % in 28 day(s)	OECD 301B	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Ingredient(s)	Medium & Type	Analytical method	DT 50	Method	Evaluation
propan-2-ol					No data available
sodium hydroxide					No data available
tetrasodium ethylene diamine tetraacetate					No data available

Degradation in relevant environmental compartments, if available:

Ingredient(s)	Medium & Type	Analytical method	DT 50	Method	Evaluation
propan-2-ol					No data available
sodium hydroxide					No data available
tetrasodium ethylene diamine tetraacetate					No data available

12.3 Bioaccumulative potential
Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
propan-2-ol	0.05	OECD 107	No bioaccumulation expected	
sodium hydroxide	No data available		Not relevant, does not bioaccumulate	
tetrasodium ethylene diamine tetraacetate	-3.86	Method not given	No bioaccumulation expected	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	No data available		No bioaccumulation expected	
propane-1,2-diol	-1.07	Method not given	No bioaccumulation expected	
N,N-dimethyltetradecylamine N-oxide	No data available		No bioaccumulation expected	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
propan-2-ol	No data available				
sodium hydroxide	No data available				
tetrasodium ethylene diamine tetraacetate	1.8	Lepomis macrochirus	OECD 305	Low potential for bioaccumulation	
ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	-			Not relevant, does not bioaccumulate	
propane-1,2-diol	No data available				
N,N-dimethyltetradecyl amine N-oxide	No data available				

**12.4 Mobility in soil**Adsorption/Desorption to soil or sediment

Ingredient(s)	Adsorption coefficient Log Koc	Desorption coefficient Log Koc(des)	Method	Soil/sediment type	Evaluation
propan-2-ol	No data available				Potential for mobility in soil, soluble in water
sodium hydroxide	No data available				Mobile in soil
tetrasodium ethylene diamine tetraacetate	No data available				Adsorption to solid soil phase is not expected

ethanol, 2,2'-iminobis-, N-tallow alkyl derivs., N-oxides	No data available		
propane-1,2-diol	No data available		Potential for mobility in soil, soluble in water
N,N-dimethyltetradecylamine N-oxide	No data available		

#### 12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

#### 12.6 Endocrine disrupting properties

Endocrine disrupting properties - Environmental effects, if available:

#### 12.7 Other adverse effects

No other adverse effects known.

# **SECTION 13: Disposal considerations**

13.1 Waste treatment methods

Waste from residues / unused

**European Waste Catalogue:** 

products:

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging

material is suitable for energy recovery or recycling in line with local legislation. 20 01 15\* - alkalines.

**Empty packaging** 

Recommendation: Suitable cleaning agents: Dispose of observing national or local regulations.

Water, if necessary with cleaning agent.

# SECTION 14: Transport information

# Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number: 2920

14.2 UN proper shipping name:

Corrosive liquid, flammable, n.o.s. (sodium hydroxide, isopropanol)

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 8(3)

14.4 Packing group: II

14.5 Environmental hazards:

Marine pollutant: No

14.6 Special precautions for user:

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:

Other relevant information:

Classification code: CF1
Tunnel restriction code: D/E
Hazard identification number: 83

IMO/IMDG

EmS: F-E, S-C

# **SECTION 15: Regulatory information**

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

#### National regulations:

- Regulation (EC) 1907/2006 REACH (UK amended)
- Regulation (EC) 1272/2008 CLP (UK amended)
- Regulation (EC) 648/2004 Detergents regulation (UK amended)
- Delegated Regulation (EU) 2017/2100 and Regulation (EU) 2018/605 (UK amended)
- Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
- International Maritime Dangerous Goods (IMDG) Code

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

# Ingredients according to Detergents Regulation

non-ionic surfactants, soap, EDTA and salts thereof

< 5 %

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) 648/2004 on detergents (UK amended). Data to support this assertion are held at the disposal of the competent authorities of the UK and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Comah - classification: P5c - FLAMMABLE LIQUIDS

# 15.2 Chemical safety assessment

A chemical safety assessment has not been carried out on the mixture

# **SECTION 16: Other information**

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

**SDS code:** MS1001712 Version: 03.0 Revision: 2022-05-08

#### Reason for revision:

Overall design adjusted in accordance with Amendment 2020/878, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 2, 3, 4, 6, 7, 8, 9, 11, 12, 16

# Classification procedure

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

# Full text of the H and EUH phrases mentioned in section 3:

- H225 Highly flammable liquid and vapour. 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.
  H332 Harmful if inhaled.
- H336 May cause drowsiness or dizziness.
- H373 May cause damage to organs through prolonged or repeated exposure.
- · H400 Very toxic to aquatic life.
- H411 Toxic to aquatic life with long lasting effects.

#### Abbreviations and acronyms:

- AISE The international Association for Soaps, Detergents and Maintenance Products
- ATE Acute Toxicity Estimate
- DNEL Derived No Effect Limit
- EC50 effective concentration, 50%
- ERC Environmental release categories
   EUH CLP Specific hazard statement
   LC50 Lethal Concentration, 50% / Median Lethal Concentration
- LCS Life cycle stage
   LD50 Lethal Dose, 50% / Median Lethal dose
- · NOAEL No observed adverse effect level
- NOEL No observed effect level
- OECD Organisation for Economic Cooperation and Development
- PBT Persistent, Bioaccumulative and Toxic
   PNEC Predicted No Effect Concentration

- PROC Process categories
   REACH number REACH registration number, without supplier specific part
- vPvB very Persistent and very Bioaccumulative

**End of Safety Data Sheet**