

ZENITH 50 HEAVY DUTY LIQUID DEGREASER

Revision: 2020-12-21

Version: 01.0

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

1.1 Product identifier

Trade name: ZENITH 50 HEAVY DUTY LIQUID DEGREASER

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

Identified uses:

For professional use only.

AISE-P301 - General purpose cleaner. Manual process

AISE-P303 - Kitchen cleaner. Manual process

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

1.3 Details of the supplier of the safety data sheet

Diversey Ltd, Weston Favell Centre, Northampton NN3 8PD, United Kingdom

Contact details

Zenith Hygiene Group
A1M Business Centre Dixons Hill Road Welham Green
Herts AL9 7JE
www.zhgplc.com
01707 270260
helpdesk@zhgplc.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

Skin Corr. 1B (H314)

Eye Dam. 1 (H318)

2.2 Label elements



Signal word: Danger.

Contains disodium metasilicate (Sodium Metasilicate)

Hazard statements:

H314 - Causes severe skin burns and eye damage.

Precautionary statements:

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.

2.3 Other hazards

No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

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SECTION 3: Composition/information on ingredients**3.2 Mixtures**

Ingredient(s)	EC number	CAS number	REACH number	Classification	Notes	Weight percent
Alcohols, C10-16, ethoxylated	[4]	68002-97-1	[4]	Acute Tox. 4 (H302) Skin Irrit. 2 (H315) Eye Dam. 1 (H318) Aquatic Acute 1 (H400)		3-10
disodium metasilicate	229-912-9	-	01-2119449811-37	Skin Corr. 1B (H314) STOT SE 3 (H335) Eye Dam. 1 (H318) Met. Corr. 1 (H290)		3-10
(2-methoxymethylethoxy)propanol	252-104-2	34590-94-8	01-2119450011-60	Not classified as hazardous		3-10

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

[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

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

ATE, if available, are listed in section 11.

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:

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. Take off immediately all contaminated clothing and wash it before reuse. Immediately call a POISON CENTRE, doctor or physician.

Eye contact:

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

Wear suitable protective clothing, gloves and eye/face protection.

6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water. Dilute with plenty of water.

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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:**

No special precautions required.

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. 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. Do not mix with other products. 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 closed container. Keep only in original packaging. For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

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)
(2-methoxymethylethoxy)propanol	50 ppm 308 mg/m ³	150 ppm 924 mg/m ³

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 oral exposure - Consumer (mg/kg bw)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
Alcohols, C10-16, ethoxylated	No data available	No data available	No data available	No data available
disodium metasilicate	-	-	-	0.74
(2-methoxymethylethoxy)propanol	-	-	-	36

DNEL 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)
Alcohols, C10-16, ethoxylated	No data available	No data available	No data available	No data available
disodium metasilicate	No data available	-	No data available	1.49
(2-methoxymethylethoxy)propanol	No data available	-	No data available	283

DNEL 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)
Alcohols, C10-16, ethoxylated	No data available	No data available	No data available	No data available
disodium metasilicate	No data available	-	No data available	0.74
(2-methoxymethylethoxy)propanol	No data available	-	No data available	15

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DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
Alcohols, C10-16, ethoxylated	No data available	No data available	No data available	No data available
disodium metasilicate	-	-	-	6.22
(2-methoxymethylethoxy)propanol	-	-	-	308

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
Alcohols, C10-16, ethoxylated	No data available	No data available	No data available	No data available
disodium metasilicate	-	-	-	1.55
(2-methoxymethylethoxy)propanol	-	-	-	37.2

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)
Alcohols, C10-16, ethoxylated	No data available	No data available	No data available	No data available
disodium metasilicate	7.5	1	7.5	1000
(2-methoxymethylethoxy)propanol	19	1.9	190	4168

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m ³)
Alcohols, C10-16, ethoxylated	No data available	No data available	No data available	No data available
disodium metasilicate	-	-	-	-
(2-methoxymethylethoxy)propanol	70.2	7.02	2.74	190

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 undiluted product:

Covering activities such as filling and transfer of product to application equipment, flasks or buckets

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.

Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

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: No special requirements under normal use conditions.

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

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (% w/w): 0.4

Appropriate engineering controls: Provide a good standard of general ventilation.

Appropriate organisational controls: No special requirements under normal use conditions. Users are advised to consider national Occupational Exposure Limits or other equivalent values, if available.

Personal protective equipment

Eye / face protection: No special requirements under normal use conditions.

Hand protection: No special requirements under normal use conditions.

Body protection: No special requirements under normal use conditions.

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Respiratory protection: Trigger spray bottle application: No special requirements under normal use conditions. Apply technical measures to comply with the occupational exposure limits, if available

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

Physical State: Liquid	Method / remark
Colour: Clear , from Yellow to Orange	
Odour: Product specific	
Odour threshold: Not applicable	
pH > 11 (neat)	ISO 4316
Dilution pH: > 11 (0.4 %)	ISO 4316
Melting point/freezing point (°C): 99	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)
Alcohols, C10-16, ethoxylated	No data available		
disodium metasilicate	No data available		
(2-methoxymethylethoxy)propanol	189.6	Method not given	1013

Method / remark

Flammability (liquid): Not flammable.
Flash point (°C): Not applicable.
Sustained combustion: Not applicable.
 (UN Manual of Tests and Criteria, section 32, L.2)

Evaporation rate: Not determined	Not relevant to classification of this product
Flammability (solid, gas): Not applicable to liquids	
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)
(2-methoxymethylethoxy)propanol	1.1	14

Method / remark

Vapour pressure: Not determined
See substance data

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
Alcohols, C10-16, ethoxylated	No data available		
disodium metasilicate	No data available		
(2-methoxymethylethoxy)propanol	5500	Method not given	20

Method / remark

Vapour density: Not determined	Not relevant to classification of this product
Relative density: ≈ 1.05 (20 °C)	OECD 109 (EU A.3)
Solubility in / Miscibility with Water: Fully miscible	

Substance data, solubility in water

Ingredient(s)	Value (g/l)	Method	Temperature (°C)
Alcohols, C10-16, ethoxylated	No data available		
disodium metasilicate	350	Method not given	20
(2-methoxymethylethoxy)propanol	Soluble	Method not given	20

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

Method / remark

Autoignition temperature: 99
Decomposition temperature: Not applicable.
Viscosity: Not determined
Explosive properties: Not explosive.
Oxidising properties: Not oxidising.

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9.2 Other information**Surface tension (N/m):** Not determined

Not relevant to classification of this product

Corrosion to metals: Not corrosive

Substance data, dissociation constant, if 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

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

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)
Alcohols, C10-16, ethoxylated	LD ₅₀	1700	Rat	Method not given		13000
disodium metasilicate	LD ₅₀	770 - 820	Mouse	Method not given	ECHA Dossier 2020	Not established
(2-methoxymethylethoxy)propanol	LD ₅₀	> 5000	Rat	OECD 401 (EU B.1)		Not established

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)	ATE (mg/kg)
Alcohols, C10-16, ethoxylated	LD ₅₀	> 2000	Rat	Method not given		Not established
disodium metasilicate	LD ₅₀	> 5000	Rat Guinea pig	Method not given		Not established
(2-methoxymethylethoxy)propanol	LD ₅₀	9510	Rabbit	Method not given		Not established

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Alcohols, C10-16, ethoxylated		No data available			
disodium metasilicate	LC ₅₀	> 2.06	Rat	Method not given	
(2-methoxymethylethoxy)propanol	LC ₀	> 1.667 (vapour) No mortality observed	Rat		7

Acute inhalative toxicity, continued

Ingredient(s)	ATE - inhalation, dust	ATE - inhalation, mist	ATE - inhalation,	ATE - inhalation, gas

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	(mg/l)	(mg/l)	vapour (mg/l)	(mg/l)
Alcohols, C10-16, ethoxylated	Not established	Not established	Not established	Not established
disodium metasilicate	Not established	Not established	Not established	Not established
(2-methoxymethylethoxy)propanol	Not established	Not established	Not established	Not established

Irritation and corrosivity

Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Alcohols, C10-16, ethoxylated	Mild irritant	Rabbit	OECD 404 (EU B.4)	
disodium metasilicate	Corrosive		Method not given	
(2-methoxymethylethoxy)propanol	Not irritant		Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Alcohols, C10-16, ethoxylated	No data available			
disodium metasilicate	Corrosive		Method not given	
(2-methoxymethylethoxy)propanol	Not corrosive or irritant		Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
Alcohols, C10-16, ethoxylated	No data available			
disodium metasilicate	Irritating to respiratory tract		Method not given	
(2-methoxymethylethoxy)propanol	No data available			

Sensitisation

Sensitisation by skin contact

Ingredient(s)	Result	Species	Method	Exposure time (h)
Alcohols, C10-16, ethoxylated	Not sensitising	Guinea pig	Method not given	
disodium metasilicate	Not sensitising	Mouse	OECD 429 (EU B.42)	
(2-methoxymethylethoxy)propanol	Not sensitising		Method not given	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
Alcohols, C10-16, ethoxylated	No data available			
disodium metasilicate	No data available			
(2-methoxymethylethoxy)propanol	No data available			

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Mutagenicity

Ingredient(s)	Result (in-vitro)	Method (in-vitro)	Result (in-vivo)	Method (in-vivo)
Alcohols, C10-16, ethoxylated	No data available		No data available	
disodium metasilicate	No data available		No data available	
(2-methoxymethylethoxy)propanol	No evidence for mutagenicity, negative test results	Method not given	No data available	

Carcinogenicity

Ingredient(s)	Effect
Alcohols, C10-16, ethoxylated	No data available
disodium metasilicate	No data available
(2-methoxymethylethoxy)propanol	No evidence for carcinogenicity, negative test results

Toxicity for reproduction

Ingredient(s)	Endpoint	Specific effect	Value (mg/kg bw/d)	Species	Method	Exposure time	Remarks and other effects reported
Alcohols, C10-16, ethoxylated			No data available				
disodium metasilicate			No data available				
(2-methoxymethylethoxy)propanol			No data available				No evidence for reproductive toxicity

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
Alcohols, C10-16, ethoxylated		No data				

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		available			
disodium metasilicate	NOAEL	> 227 - 237	Rat	Method not given	
(2-methoxymethylethoxy)propanol		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
Alcohols, C10-16, ethoxylated		No data available				
disodium metasilicate		No data available				
(2-methoxymethylethoxy)propanol		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
Alcohols, C10-16, ethoxylated		No data available				
disodium metasilicate		No data available				
(2-methoxymethylethoxy)propanol		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
Alcohols, C10-16, ethoxylated			No data available					
disodium metasilicate			No data available					
(2-methoxymethylethoxy)propanol			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
Alcohols, C10-16, ethoxylated	No data available
disodium metasilicate	No data available
(2-methoxymethylethoxy)propanol	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
Alcohols, C10-16, ethoxylated	No data available
disodium metasilicate	No data available
(2-methoxymethylethoxy)propanol	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.

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)
Alcohols, C10-16, ethoxylated		No data available			
disodium metasilicate	LC ₅₀	210	<i>Brachydanio rerio</i>	Method not given	96
(2-methoxymethylethoxy)propanol	LC ₅₀	> 1000	<i>Poecilia reticulata</i>	Method not given	96

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Aquatic short-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Alcohols, C10-16, ethoxylated		No data available			
disodium metasilicate	EC ₅₀	1700	<i>Daphnia</i>	Method not given	48
(2-methoxymethylethoxy)propanol	EC ₅₀	1919	<i>Daphnia magna Straus</i>	Method not given	48

Aquatic short-term toxicity - algae

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
Alcohols, C10-16, ethoxylated		No data available			
disodium metasilicate	EC ₅₀	207	<i>Chlorella pyrenoidosa</i>	Method not given	72
(2-methoxymethylethoxy)propanol	EC ₅₀	> 969	<i>Selenastrum capricornutum</i>	Method not given	72

Aquatic short-term toxicity - marine species

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
Alcohols, C10-16, ethoxylated		No data available			
disodium metasilicate		No data available			-
(2-methoxymethylethoxy)propanol		No data available			-

Impact on sewage plants - toxicity to bacteria

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
Alcohols, C10-16, ethoxylated		No data available			
disodium metasilicate	EC ₅₀	> 100	<i>Activated sludge</i>	Method not given	3 hour(s)
(2-methoxymethylethoxy)propanol	EC ₁₀	4168	<i>Pseudomonas putida</i>	Method not given	

Aquatic long-term toxicity

Aquatic long-term toxicity - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
Alcohols, C10-16, ethoxylated		No data available				
disodium metasilicate		No data available				
(2-methoxymethylethoxy)propanol		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
Alcohols, C10-16, ethoxylated		No data available				
disodium metasilicate		No data available				
(2-methoxymethylethoxy)propanol	NOEC	> 0.5	<i>Daphnia magna</i>	Method not given	22 day(s)	

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
Alcohols, C10-16, ethoxylated		No data available				
disodium metasilicate		No data available			-	
(2-methoxymethylethoxy)propanol		No data available			-	

Terrestrial toxicity

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

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
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		(mg/kg dw soil)			time (days)	
disodium metasilicate		No data available			-	
(2-methoxymethylethoxy)propanol		No data available			-	

Terrestrial toxicity - plants, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
disodium metasilicate		No data available			-	
(2-methoxymethylethoxy)propanol		No data available			-	

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure time (days)	Effects observed
disodium metasilicate		No data available			-	
(2-methoxymethylethoxy)propanol		No data available			-	

Terrestrial toxicity - beneficial insects, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
disodium metasilicate		No data available			-	
(2-methoxymethylethoxy)propanol		No data available			-	

Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
disodium metasilicate		No data available			-	
(2-methoxymethylethoxy)propanol		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
(2-methoxymethylethoxy)propanol	< 1 day(s)	Method not given	Rapidly photodegradable	

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ready biodegradability - aerobic conditions

Ingredient(s)	Inoculum	Analytical method	DT ₅₀	Method	Evaluation
Alcohols, C10-16, ethoxylated	Activated sludge, aerobe	Oxygen depletion	83% in 28 day(s)	OECD 301D	Readily biodegradable
disodium metasilicate					Not applicable (inorganic substance)
(2-methoxymethylethoxy)propanol		Oxygen depletion	75 % in 28 day(s)	OECD 301F	Readily biodegradable

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential

Partition coefficient n-octanol/water (log Kow)

Ingredient(s)	Value	Method	Evaluation	Remark
Alcohols, C10-16, ethoxylated	3.55-6.79			
disodium metasilicate	No data available			
(2-methoxymethylethoxy)propanol	1.01	Method not given	Low potential for bioaccumulation	

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Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
Alcohols, C10-16, ethoxylated	< 500				
disodium metasilicate	No data available				
(2-methoxymethylethoxy)propanol	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
Alcohols, C10-16, ethoxylated	No data available				
disodium metasilicate	No data available				
(2-methoxymethylethoxy)propanol	No data available				High potential for mobility in soil

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 Other adverse effects

No other adverse effects known.

SECTION 13: Disposal considerations**13.1 Waste treatment methods****Waste from residues / unused 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.

European Waste Catalogue:**Empty packaging****Recommendation:**

Dispose of observing national or local regulations.

Suitable cleaning agents:

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:** 1760**14.2 UN proper shipping name:**

Corrosive liquid, n.o.s. (disodium trioxosilicate)

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 8

14.4 Packing group: III**14.5 Environmental hazards:**

Environmentally hazardous: No

Marine pollutant: No

14.6 Special precautions for user: None known.**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code:** The product is not transported in bulk tankers.**Other relevant information:****ADR**

Classification code: C9

Tunnel restriction code: E

Hazard identification number: 80

IMO/IMDG

EmS: F-A, S-B

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The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

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

EU regulations:

- Regulation (EC) No. 1907/2006 - REACH
- Regulation (EC) No 1272/2008 - CLP
- Regulation (EC) No. 648/2004 - Detergents regulation

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

UFI: GG0G-71NT-J00D-ADFQ

Ingredients according to EC Detergents Regulation 648/2004

non-ionic surfactants, phosphonates < 5 %

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

Seveso - Classification: Not classified

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: MS1005019

Version: 01.0

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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:

- 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.
- H335 - May cause respiratory irritation.
- H400 - Very toxic to aquatic life.

Abbreviations and acronyms:

- AISE - The international Association for Soaps, Detergents and Maintenance Products
- DNEL - Derived No Effect Limit
- EUH - CLP Specific hazard statement
- PBT - Persistent, Bioaccumulative and Toxic
- PNEC - Predicted No Effect Concentration
- REACH number - REACH registration number, without supplier specific part
- vPvB - very Persistent and very Bioaccumulative
- ATE - Acute Toxicity Estimate
- LD50 - Lethal Dose, 50% / Median Lethal dose
- LC50 - Lethal Concentration, 50% / Median Lethal Concentration
- EC50 - effective concentration, 50%
- NOEL - No observed effect level
- NOAEL - No observed adverse effect level
- OECD - Organization for Economic Cooperation and Development

End of Safety Data Sheet