

Safety Data Sheet According to Regulation (EC) No 1907/2006

Cif Professional Oven & Grill Cleaner

Revision: 2015-05-28

Version: 02.0

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

1.1 Product identifier

Trade name: Cif Professional Oven & Grill Cleaner Cif is a registered trade mark and is used under licence of Unilever

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

Identified uses: For professional use only. AISE-P310 - Oven/Grill cleaner. Manual process AISE-P311 - Oven/Grill cleaner. Spray and wipe 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 Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

Contact details

Unilever UK Ltd., Freepost ADM1000, London SW1A 2XX Tel: 0800 776647

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

1.4 Emergency telephone number

For medical or environmental emergency only: call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified and labelled in accordance with Regulation (EC) No 1272/2008.

Skin Corr. 1B (H314) EUH071

Classification in accordance with Directive 1999/45/EC and corresponding national legislation Indication of danger

Xi - Irritant

Risk phrases: R36/38 - Irritating to eyes and skin.

2.2 Label elements



Signal word: Danger.

Contains 2-aminoethanol (Ethanolamine).

Hazard statements:

H314 - Causes severe skin burns and eye damage. EUH071 - Corrosive to the respiratory tract.



Precautionary statements:

P260 - Do not breathe vapours or spray.

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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Ingredient(s)	EC number	CAS number	REACH number	Classification	Classification (1999/45/EC)	Notes	Weight percent
(2-methoxymethylethoxy)propa nol	252-104-2	34590-94-8	01-2119450011-60	Not classified	-		3-10
2-aminoethanol	205-483-3	141-43-5	01-2119486455-28	Skin Corr. 1B (H314) Acute Tox. 4 (H302) Acute Tox. 4 (H312) Acute Tox. 4 (H332) STOT SE 3 (H335) Aquatic Chronic 3 (H412)	Xn;R20/21/22 C;R34 Xi;R37		3-10
sodium hydroxide	215-185-5	1310-73-2	01-2119457892-27	Skin Corr. 1A (H314) Met. Corr. 1 (H290)	C;R35		0.1-1

* Polymer.

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

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

[1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.

[2] Exempted: included in Annex IV of Regulation (EC) No 1907/2006.
 [3] Exempted: Annex V of Regulation (EC) No 1907/2006.

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

SECTION 4: First aid measures

4.1 Description of first aid measures	
Inhalation	Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON
	CENTRE, doctor or physician.
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 re-use. Immediately call a POISON
	CENTRE, doctor or physician.
Eye contact:	Immediately rinse eyes cautiously with lukewarm water for several 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. 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 eff	ects, both acute and delayed
Inhalation:	Corrosive to the respiratory tract.
Skin contact:	Causes severe burns.
Eye contact:	Causes severe or permanent damage.

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

Ensure adequate ventilation. Do not breathe dust or vapour. 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.

6.3 Methods and material for containment and cleaning up

Use neutralising agent. Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust). Ensure adequate ventilation.

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 to prevent aerosol and dust generation:

Avoid formation of aerosol.

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 Sealed Air. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with skin and eyes. Do not breathe vapours or spray. Use only with adequate ventilation.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Keep only in original container. Store in a closed container. 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/m³	150 ppm 924 mg/m³
2-aminoethanol	1 ppm 2.5 mg/m³	3 ppm 7.6 mg/m ³
sodium hydroxide		2 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
(2-methoxymethylethoxy)propanol	-	-	-	1.67
2-aminoethanol	-	-	-	3.75
sodium hydroxide	-	-	-	-

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)
(2-methoxymethylethoxy)propanol	No data available	-	No data available	65
2-aminoethanol	No data available	-	No data available	1
sodium hydroxide	2 %	-	No data available	-

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)
(2-methoxymethylethoxy)propanol	No data available	-	No data available	15
2-aminoethanol	No data available	-	No data available	0.24
sodium hydroxide	2 %	-	No data available	-

DNEL inhalatory exposure - Worker (mg/m³)

Ingredient(s)	Short term - Local	Short term - Systemic	Long term - Local	Long term - Systemic
	effects	effects	effects	effects
(2-methoxymethylethoxy)propanol	-	-	-	310
2-aminoethanol	-	-	3.3	3.3
sodium hydroxide	-	-	1	-

DNEL inhalatory exposure - Consumer (mg/m³)

Ingredient(s)	Short term - Local effects	Short term - Systemic effects	Long term - Local effects	Long term - Systemic effects
(2-methoxymethylethoxy)propanol	-	-	-	37.2
2-aminoethanol	-	-	2	2
sodium hydroxide	-	-	1	-

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)
(2-methoxymethylethoxy)propanol	19	1.9	190	4168
2-aminoethanol	0.085	0.0085	0.025	100
sodium hydroxide	-	-	-	-

Environmental exposure - PNEC, continued

Ingredient(s)	Sediment, freshwater (mg/kg)	Sediment, marine (mg/kg)	Soil (mg/kg)	Air (mg/m³)
(2-methoxymethylethoxy)propanol	70.2	7.02	2.74	190
2-aminoethanol	0.425	0.0425	0.035	0.025
sodium hydroxide	-	-	-	-

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2. 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: Appropriate organisational controls:	Use only in well ventilated areas. Avoid direct contact and/or splashes where possible. Train personnel.
Personal protective equipment Eye / face protection: Hand 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. 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:	Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur.
Respiratory protection:	Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or aerosols should be avoided.
Environmental exposure controls:	Should not reach sewage water or drainage ditch undiluted or unneutralised.

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,
 Brown

 Odour:
 Product specific

 Odour threshold:
 Not applicable

 pH: > 12 (neat)

 Melting point/freezing point (°C):
 Not determined

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

Substance data, boiling point

Ingredient(s)	Value	Method	Atmospheric pressure
	(°C)		(hPa)
(2-methoxymethylethoxy)propanol	189.6	Method not given	1013
2-aminoethanol	169-171	Method not given	1013
sodium hydroxide	> 990	Method not given	

Method / remark

Flash point (°C): Not applicable. Sustained combustion: Not determined Evaporation rate: Not determined Flammability (solid, gas): Not determined Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

Ingredient(s)	Lower limit (% vol)	Upper limit (% vol)
(2-methoxymethylethoxy)propanol	1.1	14
2-aminoethanol	3.4	27

Method / remark

Method / remark

Vapour pressure: Not determined

Substance data, vapour pressure

Ingredient(s)	Value (Pa)	Method	Temperature (°C)
(2-methoxymethylethoxy)propanol	5500	Method not given	20
2-aminoethanol	50	Method not given	20
sodium hydroxide	< 1330	Method not given	20

Vapour density: Not determined Relative density: 1.02 g/cm³ (20 °C) Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

Ingredient(s)	Value	Method	Temperature
	(g/l)		(°C)
(2-methoxymethylethoxy)propanol	Soluble	Method not given	20
2-aminoethanol	1000	Method not given	20
sodium hydroxide	1000	Method not given	20

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

Autoignition temperature: Not determined Decomposition temperature: Not determined Viscosity: ≈ 40 mPa.s (20 °C) Explosive properties: Not explosive. Oxidising properties: Not oxidising

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

Method / remark

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

ATE - Dermal (mg/kg): >2000 ATE - Inhalatory, vapours (mg/l): >20

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)
(2-methoxymethylethoxy)propanol	LD 50	> 4000	Rat	Method not given	
2-aminoethanol	LD 50	1515	Rat	OECD 401 (EU B.1)	-
sodium hydroxide		No data available			

Acute dermal toxicity

Ingredient(s)	Endpoint	Value (mg/kg)	Species	Method	Exposure time (h)
(2-methoxymethylethoxy)propanol	LD 50	9510	Rabbit	Method not given	
2-aminoethanol	LD 50	1025	Rabbit	Method not given	-
sodium hydroxide		No data available			

Acute inhalative toxicity

Ingredient(s)	Endpoint	Value	Species	Method	Exposure
		(mg/l)			time (h)
(2-methoxymethylethoxy)propanol		No data			
		available			
2-aminoethanol		No mortality	Rat	Non guideline test	6
		observed			
sodium hydroxide		No data			
		available			

Irritation and corrosivity Skin irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
(2-methoxymethylethoxy)propanol	Not irritant		Method not given	
2-aminoethanol	Corrosive	Rabbit	OECD 404 (EU B.4)	
sodium hydroxide	Corrosive	Rabbit	Method not given	

Eye irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
(2-methoxymethylethoxy)propanol	Not corrosive or irritant		Method not given	
2-aminoethanol	Severe damage	Rabbit	OECD 405 (EU B.5)	
sodium hydroxide	Corrosive	Rabbit	Method not given	

Respiratory tract irritation and corrosivity

Ingredient(s)	Result	Species	Method	Exposure time
(2-methoxymethylethoxy)propanol	No data available			
2-aminoethanol	Irritating to		Method not given	
	respiratory tract			

sodium hydroxide No data available

Sensitisation

Sensitisation by skin contact				
Ingredient(s)	Result	Species	Method	Exposure time (h)
(2-methoxymethylethoxy)propanol	Not sensitising		Method not given	
2-aminoethanol	Not sensitising	Guinea pig	OECD 406 (EU B.6) / GPMT	-
sodium hydroxide	Not sensitising		Human repeated patch test	

Sensitisation by inhalation

Ingredient(s)	Result	Species	Method	Exposure time
(2-methoxymethylethoxy)propanol	No data available			
2-aminoethanol	No data available			-
sodium hydroxide	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)
(2-methoxymethylethoxy)propanol	No evidence for mutagenicity, negative test results	Method not given	No data available	
2-aminoethanol	No evidence for mutagenicity, negative test results	OECD 471 (EU B.12/13) OECD 473 OECD 476 (Mouse lymphoma)	test results	OECD 474 (EU B.12)
sodium hydroxide	No evidence for mutagenicity, negative test results	1 1	No evidence for mutagenicity, negative test results	OECD 474 (EU B.12) OECD 475 (EU B.11)

Carcinogenicity

Ingredient(s)	Effect
(2-methoxymethylethoxy)propanol	No evidence for carcinogenicity, negative test results
2-aminoethanol	No evidence for carcinogenicity, weight-of-evidence
sodium hydroxide	No evidence for carcinogenicity, weight-of-evidence

Toxicity for reproduction Specific effect Value Remarks and other effects Ingredient(s) Endpoint Species Method Exposure (mg/kg bw/d) time reported (2-methoxymethylethox No evidence for reproductive Developmental toxicity No data available toxicity y)propanol NOAEL OECD 414 6 - 15 day(s) No evidence for developmental 2-aminoethanol Developmental toxicity > 75 Rabbit (EU B.31), toxicity No evidence for oral reproductive toxicity sodium hydroxide No data No evidence for developmental available toxicity No evidence for reproductive toxicity

Repeated dose toxicity

vicity

Ingredient(s)	Endpoint	Value (mg/kg bw/d)	Species	Method	Exposure time (days)	Specific effects and organs affected
(2-methoxymethylethoxy)propanol		No data available				
2-aminoethanol	NOAEL	300	Rat		75	
sodium hydroxide		No data available				

Sub-chronic dermal toxicity

Ingredient(s)	Endpoint	Value	Species	Method		Specific effects and organs
		(mg/kg bw/d)			time (days)	affected
(2-methoxymethylethoxy)propanol		No data				
		available				
2-aminoethanol		No data			-	
		available				
sodium hydroxide		No data				
		available				

Sub-chronic inhalation toxicity

Ingredient(s)	Endpoint	Value	Species	Method		Specific effects and organs
		(mg/kg bw/d)			time (days)	affected
(2-methoxymethylethoxy)propanol		No data				
		available				
2-aminoethanol		No data			-	
		available				
sodium hydroxide		No data				
		available				

Chronic toxicity

Ingredient(s)	Exposure	Endpoint	Value	Species	Method	Exposure	Specific effects and	Remark
	route		(mg/kg bw/d)			time	organs affected	
(2-methoxymethylethox y)propanol			No data available					
2-aminoethanol			No data available					
sodium hydroxide			No data available					

STOT-single exposure

Ingredient(s)	Affected organ(s)
(2-methoxymethylethoxy)propanol	No data available
2-aminoethanol	No data available
sodium hydroxide	No data available

STOT-repeated exposure

Ingredient(s)	Affected organ(s)
(2-methoxymethylethoxy)propanol	No data available
2-aminoethanol	No data available
sodium hydroxide	No data available

Aspiration hazard

Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

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 - fish

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
(2-methoxymethylethoxy)propanol	LC 50	> 1000	Poecilia reticulata	Method not given	96
2-aminoethanol	LC 50	349	Cyprinus carpio	(EC) 440/2008, C.1	96
sodium hydroxide	LC 50	35	Various species	Method not given	96

Aquatic short-term toxicity - crustacea					
Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (h)
(2-methoxymethylethoxy)propanol	EC 50	1919	Daphnia magna Straus	Method not given	48
2-aminoethanol	EC 50	65	Daphnia magna Straus	OECD 202, static	48
sodium hydroxide	EC 50	40.4	Ceriodaphnia sp.	Method not given	48

Aquatic short-term toxicity - algae Value Ingredient(s) Endpoint Species Method Exposure (mg/l) time (h) (2-methoxymethylethoxy)propanol EC 50 Selenastrum Method not given 72 > 969 capricornutum 2-aminoethanol NOEC Pseudokirchner **OECD 201** 72 1 iella subcapitata sodium hydroxide EC 50 0.25 22 Photobacteriu Method not given т phosphoreum

Aquatic short-term toxicity - marine species					
Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time (days)
(2-methoxymethylethoxy)propanol		No data available			-
2-aminoethanol		No data available			-
sodium hydroxide		No data available			-

Ingredient(s)	Endpoint	Value (mg/l)	Inoculum	Method	Exposure time
(2-methoxymethylethoxy)propanol	EC 10	4168	Pseudomonas putida	Method not given	
2-aminoethanol	EC 50	> 1000	Activated sludge	DIN EN ISO 8192-OECD 209-88/302/EEC	3 hour(s)
sodium hydroxide		No data available			

Aquatic long-term toxicity

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
(2-methoxymethylethoxy)propanol		No data available				
2-aminoethanol	NOEC	1.2	Oryzias latipes	OECD 210	30 day(s)	
sodium hydroxide		No data available				

Aquatic long-term toxicity - crustacea

Ingredient(s)	Endpoint	Value (mg/l)	Species	Method	Exposure time	Effects observed
(2-methoxymethylethoxy)propanol	NOEC	> 0.5	Daphnia magna	Method not given	22 day(s)	
2-aminoethanol	NOEC	0.85	Daphnia magna	OECD 211	21 day(s)	
sodium hydroxide		No data available				

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
(2-methoxymethylethoxy)propanol		No data available			-	
2-aminoethanol		No data available			-	
sodium hydroxide		No data available			-	

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

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

Terrestrial toxicity - plants, if available:

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

Terrestrial toxicity - birds, if available:

Ingredient(s)	Endpoint	Value	Species	Method	Exposure	Effects observed
					time (days)	
(2-methoxymethylethoxy)propanol		No data			-	
		available				
2-aminoethanol		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
(2-methoxymethylethoxy)propanol		No data available			-	
2-aminoethanol		No data available			-	
sodium hydroxide		No data Page 9 / 1	2		-	

ava	available		
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Terrestrial toxicity - soil bacteria, if available:

Ingredient(s)	Endpoint	Value (mg/kg dw soil)	Species	Method	Exposure time (days)	Effects observed
(2-methoxymethylethoxy)propanol		No data available			-	
2-aminoethanol		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
(2-methoxymethylethoxy)propanol	< 1 day(s)	Method not given	Rapidly photodegradable	
sodium hydroxide	13 second(s)	Method not given	Rapidly photodegradable	

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

Biodegradation

Ingredient(s)	Inoculum	Analytical method	DT 50	Method	Evaluation
(2-methoxymethylethoxy)propanol		Oxygen depletion	75 % in 28 day(s)	OECD 301F	Readily biodegradable
2-aminoethanol		DOC reduction	> 90 % in 21 day(s)	OECD 301A	Readily biodegradable
sodium hydroxide					Not applicable (inorganic substance)

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

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.

12.3 Bioaccumulative potential

Partition coefficient n-octanoi/water (log l	(010)			
Ingredient(s)	Value	Method	Evaluation	Remark
(2-methoxymethylethoxy)propanol	1.01	Method not given	Low potential for bioaccumulation	
2-aminoethanol	- 1.91	OECD 107	No bioaccumulation expected	
sodium hydroxide	No data available		Not relevant, does not bioaccumulate	

Bioconcentration factor (BCF)

Ingredient(s)	Value	Species	Method	Evaluation	Remark
(2-methoxymethylethox	No data available				
y)propanol					
2-aminoethanol	No data available				
sodium hydroxide	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
(2-methoxymethylethoxy)propanol	No data available				High potential for mobility in soil
2-aminoethanol	0.067		Model calculation		Potential for mobility in soil, soluble in water Adsorption to solid soil phase is not expected
sodium hydroxide	No data available				Mobile 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:

European Waste Catalogue:

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



ADR, RID, ADN, IMO/IMDG, ICAO/IATA 14.1 UN number: 1760 14.2 UN proper shipping name: Corrosive liquid, n.o.s. (ethanolamine, sodium hydroxide) 14.3 Transport hazard class(es): Class: 8 Label(s): 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 73/78 and the IBC Code: The product is not transported in bulk tankers. Other relevant information: ADR Classification code: C9

Tunnel restriction code: C9 Tunnel restriction code: E Hazard identification number: 80 IMO/IMDG EmS: F-A, S-B

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

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

Ingredients according to EC Detergents Regulation 648/2004 anionic surfactants

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

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< 5%

Reason for revision:

Overall design adjusted in accordance with Amendment 453/2010, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 3, 8, 13

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 R, H and EUH phrases mentioned in section 3:

- H290 May be corrosive to metals.
 H302 Harmful if swallowed.
 H312 Harmful in contact with skin.

- H314 Causes severe skin burns and eye damage.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
 H412 Harmful to aquatic life with long lasting effects.
- R20 Harmful by inhalation. R21 Harmful in contact with skin. R22 Harmful if swallowed.
- R34 Causes burns.
- R35 Causes severe burns.
- R37 Irritating to respiratory system.

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

End of Safety Data Sheet