

EC 90

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

* 1.1 Product identifier

Trade name/designation EC 90

Unique Formula Identifier UFI: 1660-M0FP-1001-F84H

Hazard components

Sulfonic acids, C14-17-sec-alkane, sodium salts, Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl), Alcohols, secondary C11-15, ethoxylated, C10- fatty alcohol, ethoxylated

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

Sector of uses [SU]

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen) SU3 Industrial uses

Use of the substance/mixture

Ultrasonic cleaning concentrate for jewellery and watch components to remove polishing pastes and general contamination.

1.3 Details of the supplier of the safety data sheet

Supplier

Elma Schmidbauer GmbH Gottlieb-Daimler-Str. 17 D-78224 Singen (Htwl.) Telephone +49 7731 882-0 Telefax +49 7731 882-266 E-mail info@elma-ultrasonic.com Website www.elma-ultrasonic.com

Department responsible for information: Chemie/Labor: Email: chemlab@elma-ultrasonic.com

* 1.4 Emergency telephone number

Vergiftungs-Informations-Zentrale Freiburg (Sprache/Language: DE, +49 761 19240 EN)

* SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 Classification procedure

[CLP]

Skin Irrit. 2, H315 Calculation method. Calculation method. Eye Dam. 1, H318 Aquatic Chronic 3, H412 Calculation method.

Hazard statements for health hazards H315 Causes skin irritation.

H318 Causes serious eye damage.

Hazard statements for environmental hazards

H412 Harmful to aquatic life with long lasting effects.

2.2 Label elements

* Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms





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Signal word

Danger

Hazard statements

H315 Causes skin irritation.

H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

P280 Wear protective gloves/protective clothing and eye/face protection.
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 doctor.
P302 + P352 IF ON SKIN: Wash with plenty of water.

P332 + P313 If skin irritation occurs: Get medical advice/attention.
P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P301 + P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

Other labelling
Labelling for contents according to regulation (EC) No. 648/2004: 15 - 30% anionic surfactants
15 - 30% non-ionic surfactants

< 5% soap

< 5% phosphates

< 5% polycarboxylates

perfumes

2.3 Other hazards

Adverse human health effects and symptoms

Acute Tox. 5 (oral) H303: May be harmful if swallowed.

The product does not contain any substances with endocrine-disrupting properties >=0.1%.

Adverse environmental effects

Aquatic Acute 3 H402: Harmful to aquatic life.

The product does not contain any substances with endocrine-disrupting properties >=0.1%.

Results of PBT and vPvB assessment

The product does not contain any PBT-/vPvB-substances according to the recipe.

* SECTION 3: Composition / information on ingredients

3.1 Substances

not applicable

* 3.2 Mixtures

Hazardous ingredients

CAS No.	EC No.	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL/ M/ ATE
97489-15-1	307-055-2	Sulfonic acids, C14-17-sec- alkane, sodium salts	5 - 15 weight-%	Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 3; H412	Skin Irrit. 2;H315: C>10% Eye Dam. 1;H318: C>15% Eye Irrit. 2;H319: 10% <c=<15%< td=""></c=<15%<>

68155-07-7 931-329-6 Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hýdroxyethyl)

5 - 15 weight-%

Skin Irrit. 2; H315 Eye Dam. 1; H318 Aquatic Chronic 2; H411



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CAS No.	EC No.	Substance name	Concentration	Classification according to Regulation (EC) No 1272/2008 [CLP]	SCL/ M/ ATE		
68131-40-8		Alcohols, secondary C11-15, ethoxylated	< 5 weight-%	Acute Tox. 4; H302 Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Dam. 1; H318			
102-71-6	203-049-8	triethanolamine [2,2',2"- nitrilotriethanol]	< 5 weight-%				
15763-76-5	239-854-6	sodium cumenesulphonate	< 5 weight-%	Eye Irrit. 2; H319			
164524-02-1	629-764-9	potassium cumenesulphonate	< 5 weight-%	Eye Irrit. 2; H319			
160875-66-1		C10- fatty alcohol, ethoxylated	< 5 weight-%	Acute Tox. 4; H302 Eye Dam. 1; H318			
REACH No.		Substance name					
01-211948992		Sulfonic acids, C14-17-sec-alkane, sodium salts					
01-2119490100-53		Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl)					
Not relevant (polymer		Alcohols, secondary C11-15, ethoxylated					
01-2119486482-31		triethanolamine [2,2',2"-nitrilotriethanol]					
Not relevant (polymer		C10- fatty alcohol, ethoxylated	C10- fatty alcohol, ethoxylated				
01-2119489411-37		sodium cumenesulphonate					
01-2119489427-24		potassium cumenesulphonate					

Additional information

Aqueous neutral mixture from anionic and non-ionic surfactants, phosphates, complexing agent, corrosion inhibitors, dye and perfumes.

* SECTION 4: First aid measures

* 4.1 Description of first aid measures

General information

In the event of persistent symptoms receive medical treatment.

Following skin contact

In case of contact with skin wash off immediately with plenty of water.

In case of skin irritation, consult a physician.

After eye contactAfter contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Following ingestion

Do NOT induce vomiting.

If swallowed seek medical advice immediately and show the doctor packing or label.

Rinse mouth immediately and drink plenty of water.

Medical treatment necessary.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms

No further informations available.



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4.3 Indication of any immediate medical attention and special treatment needed

Notes for the doctor

No further informations available.

* SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

alcohol resistant foam Extinguishing powder Carbon dioxide (CO2) Water spray jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products
In case of fire formation of dangerous gases possible.
In the event of fire the following can be released: Pyrolysis products, toxic Nitrogen oxides (NOx) Carbon monoxide Phosphorus oxides Sulphur dioxide (SO2)

* 5.3 Advice for firefighters

Special protective equipment for firefighters

Do not inhale explosion and combustion gases.

* Additional information

Co-ordinate fire-fighting measures to the fire surroundings. The product itself does not burn.

* SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Use personal protection equipment.

Special danger of slipping by leaking/spilling product.

For emergency responders

Personal protection equipment Use personal protection.

Forms slippery surfaces with water.

Special danger of slipping by leaking/spilling product.

6.2 Environmental precautions

Do not allow to enter into surface water or drains.

Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up

For containment

Suitable material for taking up:

Sand

Sawdust

Universal binder

Kieselguhr

Flush away residues with water.

After taking up the material dispose according to regulation.



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6.4 Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

* SECTION 7: Handling and storage

7.1 Precautions for safe handling

Protective measures

Handle and open container with care. Avoid: generation/formation of aerosols Do not inhale aerosols Avoid contact with eyes and skin. The product is not combustible.

Advices on general occupational hygiene Make available sufficient washing facilities Keep separated from food and feed.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels Keep only in unopened original container.

Keep container tightly closed.

Storage class

12 non-combustible liquids that cannot be assigned to any of the above storage classes

Materials to avoid

Do not store together with:

Oxidising agent

Further information on storage conditions

Keep locked up and out of reach of children. Protect from heat and direct solar radiation. Do not keep at temperatures below 5°C Do not keep at temperatures above 30°C.

Storage time: 24 months.

7.3 Specific end use(s)

Recommendation

Care for thoroughly room ventilation for higher bath temperatures. see section 8.

* SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values

CAS No.	EC No.	Substance name	occupational exposure limit value
102-71-6	203-049-8	Triethanolamine	5 [mg/m³] (IF)

DNEL worker

CAS No.	Substance name	DNEL value	DNEL type	Remark
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts	, 5 mg/kg bw/day	long-term dermal (systemic	e) Assessment factor 40
68155-07-7	Amides, C8-18 (even numbered) and C18-unsatd., N,N- bis(hydroxyethyl)	4.16 mg/kg bw/day	long-term dermal (systemic	e) Assessment factor 12
102-71-6	triethanolamine [2,2',2"-nitrilotriethanol]	1 mg/m³	long-term inhalative (local)	



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CAS No.	Substance name	DNEL value	DNEL type	Remark
102-71-6	triethanolamine [2,2',2"- nitrilotriethanol]	7.5 mg/kg bw/day	long-term dermal (systemic)	Assessment factor 50
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts	35 mg/m³	long-term inhalative (systemic)	Assessment factor 10
15763-76-5	sodium cumenesulphonate	37.4 mg/m³	long-term inhalative (systemic)	Assessment factor 25
15763-76-5	sodium cumenesulphonate	191 mg/kg bw/day	long-term dermal (systemic)	Assessment factor 100
164524-02-1	potassium cumenesulphonate	37.4 mg/m³	long-term inhalative (systemic)	Assessment factor 25
164524-02-1	potassium cumenesulphonate	191 mg/kg bw/day	long-term dermal (systemic)	Assessment factor 100

PNEC

CAS No.	Substance name	PNEC Value	PNEC type	Remark
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts	0.06 mg/L	aquatic, freshwater	Assessment factor 10
97489-15-1	Sulfonic acids, C14-17-sec-alkane, sodium salts	600 mg/L	sewage treatment plant (STP)	Assessment factor 1
68155-07-7	Amides, C8-18 (even numbered) and C18-unsatd., N,N- bis(hydroxyethyl)	0.007 mg/L	aquatic, freshwater	Assessment factor 10
68155-07-7	Amides, C8-18 (even numbered) and C18-unsatd., N,N- bis(hydroxyethyl)	830 mg/L	sewage treatment plant (STP)	Assessment factor 1
102-71-6	triethanolamine [2,2',2"- nitrilotriethanol]	0.32 mg/L	aquatic, freshwater	Assessment factor 50
102-71-6	triethanolamine [2,2',2"- nitrilotriethanol]	10 mg/L	sewage treatment plant (STP)	Assessment factor 100
15763-76-5	sodium cumenesulphonate	0.1 mg/L	aquatic, freshwater	Assessment factor 1000
15763-76-5	sodium cumenesulphonate	100 mg/L	sewage treatment plant (STP)	Assessment factor 10
164524-02-1	potassium cumenesulphonate	0.1 mg/L	sediment, freshwater	Assessment factor 1000
164524-02-1	potassium cumenesulphonate	100 μg/kg	sewage treatment plant (STP)	Assessment factor 10

8.2 Exposure controls

Appropriate engineering controls

Technical measures to prevent exposureTechnical exhaustion for long-term expositions or higher bath temperatures.

Personal protection equipment

Eye/face protection tightly fitting goggles

Hand protection

chemical-resistant gloves

Glove material specification [make/type, thickness]: FKM, 0.4mm. Glove material specification [make/type, thickness]: NBR, 0.35mm. Glove material specification [make/type, thickness]: Butyl, 0.5mm.

Environmental exposure controls

Technical measures to prevent exposure

Avoid penetration into the subsoil/soil. Do not discharge into surface waters.

Additional information

Occupational exposure limits for triethanolamine.



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* SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state liquid

Colour

blue-green

Odour

mild

Safety relevant basis data

	Value	Method	Source, Remark
Odour threshold:			not determined
Melting point/freezing point	Solidifying point		not determined
Boiling point or initial boiling point and boiling range	≥ 100 °C		
flammability	solid		not applicable
flammability	gaseous		not applicable
Lower and upper explosion limit	Upper explosion limit		not relevant
Lower and upper explosion limit	Lower explosion limit		not relevant
Flash point			No flash point up to 100 °C.
Auto-ignition temperature	> 100 °C		CAS No.160875-66-1 C10- fatty alcohol, ethoxylated
Decomposition temperature	≥ 100 °C		
pH	in delivery state 8.8 (20°C)		
Viscosity			not determined
Solubility(ies)	Water solubility		miscible
Partition coefficient n-octanol/water (log value)	3.5- 4.2		Value of Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl).
Vapour pressure	approx.23- 24 hPa (20°C)		
Density and/or relative density	1.08 g/cm³ (20°C)		
Relative vapour density	5.13		Value of triethanolamine.
particle characteristics			not applicable (liquid).

* 9.2 Other information

Information with regard to physical hazard classes

Explosives

Assessment/classification

The mixture does not contain any explosive substances (CLP I 2.1.4.3 a).

CLP I 2.1.4.3 a: The classification procedure needs not to be applied because there are no chemical groups present in the molecule which are associated with explosive properties.



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flammable gases

* Assessment/classification

not applicable (liquid).

* Aerosols

Assessment/classification

not relevant - no aerosol.

The classification criteria for this hazard class are not met by definition.

Oxidising gas

Assessment/classification

not applicable (liquid).

* Gases under pressure

* Assessment/classification

not applicable (liquid - no dissolved gas).

* flammable liquids

Assessment/classification

not flammable, not combustible (No flash point below 100°C).

flammable solids

* Assessment/classification

not applicable (liquid).

* Self-reactive substances and mixtures

* Assessment/classification

The mixture does not contain any self-reactive substances (CLP I 2.8.4.2 a).

CLP I 2.8.4.2 a: There are no chemical groups present in the molecule associated with explosive or self reactive properties.

Pyrophoric liquids

* Assessment/classification

The mixture does not contain any pyrophoric substances - not spontaneously flammable (CLP I 2.9.4.1). CLP I 2.9.4.1: The classification procedure for pyrophoric liquids need not be applied when experience in manufacture or handling shows that the substance or mixture does not ignite spontaneously on coming into contact with air at normal temperatures (i.e. the substance is known to be stable at room temperature for prolonged periods of time (days)).

* Pyrophoric solids

* Assessment/classification

not applicable (liquid).

* self-heating substances and mixtures

Assessment/classification

The mixture does not contain any self-heating substances.

* Substances or mixtures which, in contact with water, emit flammable gases

* Assessment/classification

not relevant - in contact with water releases no flammable gases (CLP I 2.12.4.1).

CLP I 2.12.4.1: The classification procedure for this class need not be applied if: (a) the chemical structure of the substance or mixture does not contain metals or metalloids; or (b) experience in production or handling shows that the substance or mixture does not react with water, e.g. the substance is manufactured with water or washed with water; or (c) the substance or mixture is known to be soluble in water to form a stable mixture.

Oxidising liquids

Assessment/classification

The mixture does not contain any oxidising substances.



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Oxidising solids

Assessment/classification not applicable (liquid).

Organic peroxides

Assessment/classificationThe mixture does not contain any organic peroxides.

Corrosive to metals

Safety characteristics

	Value	Method, Result	Source, Remark
Corrosion rate (mm aluminium/year)	0.1 mm/a	UN Test, Part III of subsection 37.4	
Corrosion rate (mm steel/year)	< 6.25 mm/a	Expert judgement and weight of evidence determination.	

Assessment/classification
The mixture does not contain any substances corrosive to metals. Based on available data, the classification criteria are not met.

Desensitised explosives

Assessment/classificationThe mixture does not contain any desensitised explosive substances.

Other safety characteristics

	Value	Method	Source, Remark
Evaporation rate			Water: 0.36 (ASTM D3539).
Solvent content	0 %		
Explosive properties			none
Oxidising properties			none

Other information

No further relevant informations available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazardous reactions known if used as directed.

10.2 Chemical stability

Stable at ambient temperature.

10.3 Possibility of hazardous reactions

Reactions with oxidising agents. Reaction with nitric acid

10.4 Conditions to avoid

Heat and direct solar radiation.

10.5 Incompatible materials

Oxidising agent Nitric acid Acid chlorides, inorganic



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10.6 Hazardous decomposition products

No decomposition if used as directed.

* SECTION 11: Toxicological information

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

Acute toxicity

Animal data

	Effective dose	Method,Evaluation	Source, Remark
Acute oral toxicity	4199 mg/kg	ATE: Acute Toxicity Estimate	The acute oral toxicity is corresponding to GHS-category 5.
	CAS No.97489-15-1 Sulfonic acids, C14-17-sec- alkane, sodium salts LD50: approx. 1250 mg/kg Species Rat		
	CAS No.68131-40-8 Alcohols, secondary C11- 15, ethoxylated LD50: > 412 mg/kg Species Rat		
	CAS No.160875-66-1 C10- fatty alcohol, ethoxylated 500 mg/kg	ATE: Acute Toxicity Estimate	
Acute dermal toxicity	> 5000 mg/kg	ATE: Acute Toxicity Estimate	
Acute inhalation toxicity	Acute inhalation toxicity (vapour) > 50 mg/L	ATE: Acute Toxicity Estimate	
	CAS No.68131-40-8 Alcohols, secondary C11- 15, ethoxylated Acute inhalation toxicity (dust/mist) LC50: 1.06 mg/L Species Rat Exposure time 4 h		

Assessment/classification May be harmful if swallowed.

Skin corrosion/irritation

Animal data

Result / Evaluation Method Source, Remark

Irritant. Calculation method.

Serious eye damage/irritation

Animal data

Result / Evaluation Method Source, Remark
Causes serious eye damage. Calculation method.

* Sensitisation to the respiratory tract

* Assessment/classification

Based on available data, the classification criteria are not met.



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Skin sensitisation

Animal data

Result / Evaluation Dose / Concentration Method Source, Remark

The mixture is not classified as skin sensitiser.

Calculation method.

Germ cell mutagenicity

Assessment/classification

Based on available data, the classification criteria are not met.

Carcinogenicity

Assessment/classification

Based on available data, the classification criteria are not met.

Reproductive toxicity

Assessment/classification

Based on available data, the classification criteria are not met.

Overall Assessment on CMR properties

The mixture is not classified as mutagen / not classified as carcinogen / not classified as reproductive toxicant.

STOT-single exposure

STOT SE 1 and 2

Assessment/classification

The mixture is not classified as specific target organ toxicant (single exposure). Based on available data, the classification criteria are not met.

STOT SE 3

Irritation to respiratory tract

Assessment/classification

Based on available data, the classification criteria are not met.

Narcotic effects

Assessment/classification

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Assessment/classificationThe mixture is not classified as specific target organ toxicant (repeated exposure). Based on available data, the classification criteria are not met.

Aspiration hazard

Assessment/classificationThe mixture is not classified as aspiration hazardous.

Based on available data, the classification criteria are not met.

11.2 Information on other hazards

Symptoms related to the physical, chemical and toxicological characteristics

Effective dose Method, Evaluation Source, Remark The product does not Endocrine disrupting properties contain any substances with endocrine-disrupting properties >=0.1%.



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Other information

Has degreasing effect on the skin.

* SECTION 12: Ecological information

* 12.1 Toxicity

* Aquatic toxicity

Effective dose	Method,Evaluation	Source, Remark
LC50: 11.5 mg/L	calculated.	
CAS No.97489-15-1 Sulfonic acids, C14-17-sec- alkane, sodium salts LC50: 2.8 mg/L		
CAS No.68155-07-7 Amides, C8-18 (even numbered) and C18- unsatd., N,N- bis(hydroxyethyl) LC50: 2.4 mg/L Species Oncorhynchus mykiss (Rainbow trout) Test duration 96 h	OECD 203	
CAS No.97489-15-1 Sulfonic acids, C14-17-sec- alkane, sodium salts NOEC 0.85 mg/L Species Oncorhynchus mykiss (Rainbow trout) Test duration 28 d	OECD 204	
CAS No.68155-07-7 Amides, C8-18 (even numbered) and C18- unsatd., N,N- bis(hydroxyethyl) NOEC 0.32 mg/L Species Oncorhynchus mykiss (Rainbow trout) Test duration 28 d	OECD 215	
EC50 12.5 mg/L	calculated.	
CAS No.97489-15-1 Sulfonic acids, C14-17-sec- alkane, sodium salts EC50 9.2 mg/L Species Daphnia magna (Big water flea) Test duration 48 h	OECD 202	
CAS No.68155-07-7 Amides, C8-18 (even numbered) and C18- unsatd., N,N- bis(hydroxyethyl) EC50 2.25 mg/L Species Ceriodaphnia spec Test duration 48 h		
CAS No.97489-15-1 Sulfonic acids, C14-17-sec- alkane, sodium salts NOEC 0.36 mg/L Species Daphnia magna (Big water flea) Test duration 22 d		
	CAS No.97489-15-1 Sulfonic acids, C14-17-secalkane, sodium salts LC50: 2.8 mg/L CAS No.68155-07-7 Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl) LC50: 2.4 mg/L Species Oncorhynchus mykiss (Rainbow trout) Test duration 96 h CAS No.97489-15-1 Sulfonic acids, C14-17-secalkane, sodium salts NOEC 0.85 mg/L Species Oncorhynchus mykiss (Rainbow trout) Test duration 28 d CAS No.68155-07-7 Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl) NOEC 0.32 mg/L Species Oncorhynchus mykiss (Rainbow trout) Test duration 28 d EC50 12.5 mg/L CAS No.97489-15-1 Sulfonic acids, C14-17-secalkane, sodium salts EC50 9.2 mg/L Species Daphnia magna (Big water flea) Test duration 48 h CAS No.68155-07-7 Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl) EC50 2.25 mg/L Species Daphnia magna (Big water flea) Test duration 48 h CAS No.97489-15-1 Sulfonic acids, C14-17-secalkane, sodium salts EC50 9.2 mg/L Species Ceriodaphnia spec Test duration 48 h CAS No.97489-15-1 Sulfonic acids, C14-17-secalkane, sodium salts NOEC 0.36 mg/L Species Daphnia magna (Big water flea)	LC50: 11.5 mg/L CAS No.97489-15-1 Sulfonic acids, C14-17-sec- alkane, sodium salts LC50: 2.8 mg/L CAS No.68155-07-7 Amides, C8-18 (even numbered) and C18- unsatd., N,N- bis(hydroxyethyl) LC50: 2.4 mg/L Species Oncorhynchus mykiss (Rainbow trout) Test duration 96 h CAS No.97489-15-1 Sulfonic acids, C14-17-sec- alkane, sodium salts NOEC 0.85 mg/L Species Oncorhynchus mykiss (Rainbow trout) Test duration 28 d CAS No.68155-07-7 Amides, C8-18 (even numbered) and C18- unsatd., N,N- bis(hydroxyethyl) NOEC 0.32 mg/L Species Oncorhynchus mykiss (Rainbow trout) Test duration 28 d EC50 12.5 mg/L CAS No.97489-15-1 Sulfonic acids, C14-17-sec- alkane, sodium salts EC50 9.2 mg/L Species Daphnia magna (Big water flea) Test duration 48 h CAS No.68155-07-7 Amides, C8-18 (even numbered) and C18- unsatd., N,N- bis(hydroxyethyl) DEC50 2.25 mg/L Species Daphnia magna (Big water flea) Test duration 48 h CAS No.97489-15-1 Sulfonic acids, C14-17-sec- alkane, sodium salts CC50 2.25 mg/L Species Ceriodaphnia spec Test duration 48 h CAS No.97489-15-1 Sulfonic acids, C14-17-sec- alkane, sodium salts NOEC 0.36 mg/L Species Daphnia magna (Big water flea)



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	Effective dose	Method,Evaluation	Source, Remark
	CAS No.68155-07-7 Amides, C8-18 (even numbered) and C18- unsatd., N,N- bis(hydroxyethyl) NOEC 0.07 mg/L Species Daphnia magna (Big water flea) Test duration 21 d	OECD 211	
Acute (short-term) toxicity to algae and cyanobacteria	EC50 12.5 mg/L	calculated.	
	CAS No.97489-15-1 Sulfonic acids, C14-17-sec- alkane, sodium salts EC50 62.1 mg/L Species Scenedesmus subspicatus Test duration 72 h		
	CAS No.68155-07-7 Amides, C8-18 (even numbered) and C18- unsatd., N,N- bis(hydroxyethyl) EC50 2.2 mg/L Species Scenedesmus subspicatus Test duration 96 h		
Chronic (long-term) toxicity to aquatic algae and cyanobacteria	CAS No.68155-07-7 Amides, C8-18 (even numbered) and C18- unsatd., N,N- bis(hydroxyethyl) NOEC: 0.32 mg/L Species Desmodesmus subspicatus Test duration 72 h	OECD 201	
Toxicity to other aquatic plants/organisms	not determined		
Toxicity to microorganisms	not determined		

Ass

Harmful to aquatic life.

* 12.2 Persistence and degradability

	Value	Method	Source, Remark
Biodegradation	Degradation rate ≥ 85 %	calculated.	DOC reduction Biodegradable.
Biodegradation	Degradation rate 96 % Test duration 19 d	OECD 301E/ EEC 92/69/V, C.4-B	CAS No.102-71-6 triethanolamine [2,2',2"- nitrilotriethanol]
Biodegradation	Degradation rate 89 % Test duration 28 d	OECD 301E/ EEC 92/69/V, C.4-B	CAS No.97489-15-1 Sulfonic acids, C14-17-sec- alkane, sodium salts
Biodegradation	Degradation rate 78 % Test duration 28 d	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	CAS No.97489-15-1 Sulfonic acids, C14-17-sec- alkane, sodium salts
Biodegradation	Degradation rate 99 % Test duration 28 d	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	CAS No.15763-76-5 sodium cumenesulphonate
Biodegradation	Degradation rate > 60 % Test duration 28 d	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	CAS No.164524-02-1 potassium cumenesulphonate



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	Value	Method	Source, Remark
Biodegradation	Degradation rate 84 % Test duration 28 d	OECD 301D/ EEC 92/69/V, C.4-E	CAS No.68155-07-7 Amides, C8-18 (even numbered) and C18- unsatd., N,N- bis(hydroxyethyl)
Biodegradation	Degradation rate 92.5 % Test duration 28 d	OECD 301B/ ISO 9439/ EEC 92/69/V, C.4-C	CAS No.68155-07-7 Amides, C8-18 (even numbered) and C18- unsatd., N,N- bis(hydroxyethyl)
Biodegradation	Degradation rate > 60 % Test duration 28 d	OECD 301F/ ISO 9408/ EEC 92/69/V, C.4-D	CAS No.68131-40-8 Alcohols, secondary C11- 15, ethoxylated
Biodegradation	Degradation rate > 60 % Test duration 28 d	OECD 301D/ EEC 92/69/V, C.4-E	CAS No.160875-66-1 C10- fatty alcohol, ethoxylated

12.3 Bioaccumulative potential

Assessment/classification
Sulfonic acids, C14-17-sec-alkane, sodium salts: Accumulation in organisms is not expected (log Pow: 0.24).
Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl): Because of the n-octanol/water partition coefficient accumulation in organisms is possible (log Pow >3).
Alcohols, secondary C11-15, ethoxylated: Significant accumulation in organisms is not expected (log Pow: 2.72).

triethanolamine: Accumulation in organisms is not expected (BCF: <0,4). sodium cumenesulphonate: Bioaccumulation is improbable.

potassium cumenesulphonate: Bioaccumulation is improbable.
C10- fatty alcohol, ethoxylated: Accumulation in organisms is not expected.

12.4 Mobility in soil

Assessment/classification

Sulfonic acids, C14-17-sec-alkane, sodium salts: Moderate adsorption on soil.

Amides, C8-18 (even numbered) and C18-unsatd., N,N-bis(hydroxyethyl): Koc: 243, moderately mobile in soil.

Alcohols, secondary C11-15, ethoxylated: not available. triethanolamine: Adsorption on soil is not expected (Koc: 10).

sodium cumenesulphonate: Adsorption on soil is not expected. potassium cumenesulphonate: Adsorption on soil is not expected.

C10- fatty alcohol, ethoxylated: Adsorption on soil is possible.

12.5 Results of PBT and vPvB assessment

Chemical oyxgen demand (COD)

The product does not contain any PBT-/vPvB-substances according to the recipe.

822 mgO2/g

12.6 Endocrine disrupting properties

	Effective dose	Method,Evaluation	Source, Remark
Endocrine disrupting properties			The product does not contain any substances with endocrine-disrupting properties >=0.1%.
2.7 Other adverse effects			
	Value	Method	Source, Remark
Ozone depletion potential (ODP):			Based on available data, the classification criteria are not met.
Additional ecotoxicological informati	on		
	Value	Method	Source, Remark

calculated.



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Value Method Source, Remark AOX

The product does not contain any organically

bound halogens according

to the recipe.

Additional information

The surfactants in our product meet the criteria for biodegradation as laid down in Annex III of the Regulation (EC) No 648/2004 on detergents.

Acute aquatic environmental hazards: Aquatic Acute 3 H402: Harmful to aquatic life.

Chronic aquatic environmental hazards: Aquatic Chronic 3 H412: Harmful to aquatic life with long lasting effects.

Do not allow uncontrolled discharge of product into the environment.

No further relevant informations available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste codes/waste designations according to EWC/AVV

Waste code product Waste name 200129 * detergents containing hazardous substances

Appropriate disposal / Product Do not dispose with household waste.

Product is allowed to discharge into sewage treatment plants, but in accordance with official regulations.

Appropriate disposal / Package

Non-contaminated packages may be recycled.

SECTION 14: Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA- DGR)
14.1 UN number or ID number	-	-	-
14.2 UN proper shipping name	-	-	-
14.3 Transport hazard class(es)	-	-	-
14.4 Packing group	-	-	-
14.5 Environmental hazards	No	No	No

14.6 Special precautions for user

14.7 Maritime transport in bulk according to IMO instruments

not relevant

Land transport (ADR/RID)

Remark

Not classified for this transport carrier.

Sea transport (IMDG)

Remark

No hazardous material as defined by the prescriptions.

Air transport (ICAO-TI / IATA-DGR)

Remark

No hazardous material as defined by the prescriptions.



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* SECTION 15: Regulatory information

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

EU legislation

Authorisations

not relevant

Restrictions on use

Regulation (EC) No 1907/2006 (REACH), Annex XVII No 3 - not relevant if used as directed. Regulation (EC) No 1907/2006 (REACH), Annex XVII No 75 - not relevant if used as directed.

Restrictions of occupation

Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

Other regulations (EU)

To follow:

Regulation (EC) No. 648/2004 (Detergents regulation) Directive 2012/18/EU, Annex I: not mentioned.

Directive 2010/75/EU on industrial emissions [Industrial Emissions Directive] VOC

VOC content, delivery state < 0.1 %

15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment were not carried out.

SECTION 16: Other information

Abbreviations and acronyms

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road ASTM: American Society for Testing and Materials

ATE: Acute Toxicity Estimate

AVV: Waste Shipment Ordinance (DE)

DGR: Dangerous Goods Regulations (IATA)

DNEL: derived no-effect level

DOC: Dissolved Organic Carbon
IATA: International Air Transport Association

ICAO: International Civil Aviation Organization

IMDG: International Maritime Dangerous Goods

IMO: International Maritime Organization

JArbSchG: Youth Labor Protection Act (DE)
OECD: Organisation for Economic Cooperation and Development

PBT: persistent and bioaccumulative and toxic PNEC: Predicted No Effect Concentration

RID: Dangerous goods regulations for transport by rail

SCL: Specific concentration limit

TI: Technical Instruction

TRGS: Technical Rules for Hazardous Substances

VOC: Volatile organic compounds

vPvB: very persistent, very bioaccumulative

Key literature references and sources for data

Own measurements

European Chemicals Agency, http://echa.europa.eu/.

Informations from our suppliers.

Additional information

National and local regulations concerning chemicals shall be observed.

These data are given according to our actual knowledge about this product. This data sheet does not correspond to an assurance by virtue of a contract for properties of the product.



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Relevant H- and EUH-phrases (Number and full text)

H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Indication of changes
* Data changed compared with the previous version