

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

METAPEX 38

Version 2.0

Print Date 2017/06/29

Revision date / valid from 2017/06/29

MSDS code: MYYY032

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

1.1. Product identifier

Trade name : METAPEX 38

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

Use of the Substance/Mixture : At this time we do not yet have information on identified uses. They will be included in this safety data sheet when available.

Uses advised against : At this moment we have not identified any uses advised against

1.3. Details of the supplier of the safety data sheet

Company : Brenntag UK Limited
Alpha House, Lawnswood Business Park
GB LS16 6QY Leeds

Telephone : +44 (0) 113 3879 200
Telefax : +44 (0) 113 3879 280
E-mail address : msds@brenntag.co.uk

1.4. Emergency telephone number

Emergency telephone number : Emergency only telephone number (open 24 hours):
+44 (0) 1865 407333 (N.C.E.C. Culham)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

REGULATION (EC) No 1272/2008			
Hazard class	Hazard category	Target Organs	Hazard statements
Skin corrosion	Category 1C	---	H314
Chronic aquatic toxicity	Category 3	---	H412


For the full text of the H-Statements mentioned in this Section, see Section 16.

Most important adverse effects

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Human Health	:	See section 11 for toxicological information.
Physical and chemical hazards	:	See section 9/10 for physicochemical information.
Potential environmental effects	:	See section 12 for environmental information.

2.2. Label elements**Labelling according to Regulation (EC) No 1272/2008**

Hazard symbols	:	
Signal word	:	Danger
Hazard statements	:	H314 Causes severe skin burns and eye damage. H412 Harmful to aquatic life with long lasting effects.
Precautionary statements		
Prevention	:	P280 Wear protective gloves/ protective clothing/ eye protection/ face protection. P273 Avoid release to the environment.
Response	:	P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P310 Immediately call a POISON CENTER/doctor. P313 Get medical advice/ attention.
Disposal	:	P501 Dispose of contents/ container in accordance with the local/regional/international regulations.

Hazardous components which must be listed on the label:

- Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.

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2.3. Other hazards

For Results of PBT and vPvB assessment see section 12.5.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components	Amount [%]	Classification (REGULATION (EC) No 1272/2008)	
		Hazard class / Hazard category	Hazard statements
Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.			
CAS-No. : 85536-14-7	>= 5 - < 10	Acute Tox.4	H302
EC-No. : 287-494-3		Skin Corr.1C	H314
EU REACH- : 01-2119490234-40-xxxx		Eye Dam.1	H318
Reg. No.		Aquatic Chronic3	H412
Alcohols, C12-14 (even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts			
CAS-No. : 68891-38-3	>= 1 - < 3	Skin Irrit.2	H315
EC-No. : 500-234-8 (NLP)		Eye Dam.1	H318
EU REACH- : 01-2119488639-16-xxxx		Aquatic Chronic3	H412
Reg. No.			
Amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)			
CAS-No. : 68155-07-7	>= 1 - < 3	Skin Irrit.2	H315
EC-No. : 931-329-6		Eye Dam.1	H318
EU REACH- : 01-2119490100-53-xxxx		Aquatic Chronic2	H411
Reg. No.			

For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice	: Take off all contaminated clothing immediately.
If inhaled	: In case of accident by inhalation: remove casualty to fresh air and keep at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.
In case of skin contact	: Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Call a physician immediately.
In case of eye contact	: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible.
If swallowed	: Rinse mouth with water. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Call a physician

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immediately.

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

Symptoms	: See Section 11 for more detailed information on health effects and symptoms.
Effects	: Extremely corrosive and destructive to tissue. If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach. See Section 11 for more detailed information on health effects and symptoms.

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

Treatment	: Treat symptomatically.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Unsuitable extinguishing media	: High volume water jet

5.2. Special hazards arising from the substance or mixture

Specific hazards during firefighting	: Heating or fire can release toxic gas.
Hazardous combustion products	: Carbon monoxide, Carbon dioxide (CO ₂), The formation of caustic fumes is possible.

5.3. Advice for firefighters

Special protective equipment for firefighters	: In the event of fire, wear self-contained breathing apparatus. Wear appropriate body protection (full protective suit)
Specific extinguishing methods	: Control smoke with water spray.
Further advice	: Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	: Keep away unprotected persons. Use personal protective equipment. Ensure adequate ventilation. Avoid contact with
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skin, eyes and clothing. Do not breathe vapours or spray mist.

6.2. Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. If the product contaminates rivers and lakes or drains inform respective authorities. If material reaches soil inform authorities responsible for such cases.

6.3. Methods and materials for containment and cleaning up

Methods and materials for containment and cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

Further information : Treat recovered material as described in the section "Disposal considerations".

6.4. Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on personal protective equipment.
See Section 13 for waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling : Keep container tightly closed. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Use respirator with appropriate filter if vapours or aerosol are released. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity.

Hygiene measures : Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Further information on storage conditions : Keep tightly closed in a dry and cool place. Keep in a well-ventilated place.

Advice on common storage : Keep away from food, drink and animal feedingstuffs. Incompatible with strong acids and oxidizing agents.

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7.3. Specific end use(s)

Specific use(s) : No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Other Occupational Exposure Limit Values

(Additional) Information : Contains no substances with occupational exposure limit values.

Component:	Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.	CAS-No. 85536-14-7
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Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL	Workers, Long-term - systemic effects, Skin contact	: 170 mg/kg bw/day
DNEL	Workers, Long-term - systemic effects, Inhalation	: 12 mg/m ³
DNEL	Workers, Long-term - local effects, Inhalation	: 12 mg/m ³
DNEL	Consumers, Long-term - systemic effects, Skin contact	: 85 mg/kg bw/day
DNEL	Consumers, Long-term - systemic effects, Inhalation	: 3 mg/m ³
DNEL	Consumers, Long-term - systemic effects, Ingestion	: 0.85 mg/kg bw/day
DNEL	Consumers, Long-term - local effects, Inhalation	: 3 mg/m ³

Predicted No Effect Concentration (PNEC)

Fresh water	: 0.287 mg/l
Marine water	: 0.0287 mg/l
Intermittent releases	: 0.0167 mg/l
Fresh water sediment Related to, dry weight	: 0.287 mg/kg

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Marine sediment Related to, dry weight	:	0.287 mg/kg
Soil	:	35 mg/kg
Sewage treatment plant (STP)	:	3.43 mg/l

Component:	Alcohols, C12-14 (even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts	CAS-No. 68891-38-3
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Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

DNEL Workers, Long-term - systemic effects, Skin contact	:	2750 mg/kg bw/day
DNEL Workers, Long-term - systemic effects, Inhalation	:	175 mg/m ³
DNEL Consumers, Long-term - systemic effects, Skin contact	:	1650 mg/kg bw/day
DNEL Consumers, Long-term - systemic effects, Inhalation	:	52 mg/m ³
DNEL Consumers, Long-term - systemic effects, Ingestion	:	15 mg/kg bw/day

Predicted No Effect Concentration (PNEC)

Fresh water	:	0.24 mg/l
Marine water	:	0.024 mg/l
Intermittent releases	:	0.071 mg/l
Sewage treatment plant (STP)	:	1000 mg/l
Fresh water sediment	:	5.45 mg/kg dry weight (d.w.)
Marine sediment	:	0.545 mg/kg dry weight (d.w.)
Soil	:	0.946 mg/kg dry weight (d.w.)

Component:	Amides, C8-18 (even numbered) and C18- unsatd., N, N-bis(hydroxyethyl)	CAS-No. 68155-07-7
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Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL)

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DNEL		
Workers, Long-term - systemic effects, Skin contact	:	4.16 mg/kg bw/day
DNEL		
Workers, Long-term - systemic effects, Inhalation	:	73.4 mg/m ³
DNEL		
Workers, Long-term - local effects, Skin contact	:	0.09 mg/cm ²
DNEL		
Consumers, Long-term - systemic effects, Skin contact	:	2.5 mg/kg bw/day
DNEL		
Consumers, Long-term - systemic effects, Inhalation	:	21.73 mg/m ³
DNEL		
Consumers, Long-term - systemic effects, Ingestion	:	6.25 mg/kg bw/day
DNEL		
Consumers, Long-term - local effects, Skin contact	:	0.056 mg/cm ²

Predicted No Effect Concentration (PNEC)

Fresh water	:	0.0024 mg/l
Marine water	:	0.00024 mg/l
Intermittent releases	:	0.024 mg/l
Sewage treatment plant (STP)	:	0.83 mg/l
Soil	:	0.00648 mg/kg dry weight (d.w.)
Fresh water sediment	:	0.0145 mg/kg

8.2. Exposure controls

Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Provide sufficient air exchange and/or exhaust in work rooms.

Personal protective equipment

Respiratory protection

Advice : If ventilation is insufficient, suitable respiratory protection must be provided
Required, if exposure limit is exceeded (e.g. OEL).
In the case of vapour formation use a respirator with an approved

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Filter Type : filter.
Respiratory protection complying with EN 141.
Organic vapour type

Hand protection

Advice : Protective gloves complying with EN 374.
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.
Protective gloves should be replaced at first signs of wear.

Material : butyl-rubber
Break through time : ≥ 480 min
Glove thickness : ≥ 0.4 mm

Material : Nitrile rubber
Break through time : ≥ 480 min
Glove thickness : ≥ 0.4 mm

Eye protection

Advice : Tightly fitting safety goggles
Face-shield
Ensure that eyewash stations and safety showers are close to the workstation location.

Skin and body protection

Advice : Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific workplace.
Wear appropriate chemical resistant clothing and boots.

Environmental exposure controls

General advice : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
If the product contaminates rivers and lakes or drains inform respective authorities.
If material reaches soil inform authorities responsible for such cases.

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

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Form	:	clear liquid
Colour	:	Pale yellow
Odour	:	no data available
Odour Threshold	:	no data available
pH	:	6 - 9
Freezing point	:	no data available
Boiling point	:	no data available
Flash point	:	no data available
Evaporation rate	:	no data available
Flammability (solid, gas)	:	no data available
Upper explosion limit	:	no data available
Lower explosion limit	:	no data available
Vapour pressure	:	no data available
Relative vapour density	:	no data available
Relative density	:	no data available
Solubility/qualitative	:	no data available
Partition coefficient: n-octanol/water	:	no data available
Auto-ignition temperature	:	no data available
Thermal decomposition	:	no data available
Viscosity, dynamic	:	no data available
Explosivity	:	no data available
Oxidizing properties	:	no data available

9.2. Other information

No further information available.

SECTION 10: Stability and reactivity**10.1. Reactivity**

Advice : No decomposition if stored and applied as directed.

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10.2. Chemical stability

Advice : Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid

Conditions to avoid : Keep away from heat and sources of ignition.

10.5. Incompatible materials

Materials to avoid : Incompatible with oxidizing agents. Acids

10.6. Hazardous decomposition products

Hazardous decomposition products : Carbon oxides

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Data for the product

Acute toxicity

Oral

Acute toxicity estimate : > 2000 mg/kg) (Calculation method) Please find this information in the listing of the component/components below in this section.

Inhalation

no data available

Dermal

no data available

Irritation

Skin

Result : Causes severe skin burns and eye damage.

Eyes

Result : Causes eye burns.

Sensitisation

no data available

METAPEX 38**CMR effects****CMR Properties**

Carcinogenicity : no data available

Mutagenicity : no data available

Reproductive toxicity : no data available

Specific Target Organ Toxicity**Single exposure**

no data available

Repeated exposure

no data available

Other toxic properties**Repeated dose toxicity**

no data available

Aspiration hazard

no data available

Component:**Water****CAS-No. 7732-18-5****Acute toxicity****Oral**

LD50 : > 89800 mg/kg (Rat)

Inhalation

no data available

Dermal

no data available

Other routes

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LD50 : 25000 mg/kg (intravenous;Mouse)
LD50 : 190000 mg/kg (intraperitoneal;Mouse)

Irritation**Skin**

Result : No skin irritation

Eyes

Result : No eye irritation

Sensitisation

Result : not sensitizing

CMR effects**CMR Properties**

Carcinogenicity : Not expected to be carcinogenic.
Mutagenicity : Not expected to be mutagenic.
Teratogenicity : No known significant effects or critical hazards.
Reproductive toxicity : No toxicity to reproduction

Specific Target Organ Toxicity**Single exposure**

Remarks : The substance or mixture is not classified as specific target organ toxicant, single exposure.

Repeated exposure

Remarks : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties**Aspiration hazard**

Not applicable,

Component: Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. CAS-No. 85536-14-7

Acute toxicity

METAPEX 38**Oral**

LD50 Oral : 1470 mg/kg (Rat, male and female) (OECD Test Guideline 401)

Inhalation

no data available

Dermal

LD50 Dermal : > 2000 mg/kg (Rat, male and female) (OECD Test Guideline 402)

Irritation**Skin**

Result : Corrosive (Rabbit) (OECD Test Guideline 404)

Eyes

Result : Eye Irritation Test: Corrosive (Rabbit) (OECD Test Guideline 405) May cause irreversible eye damage.

Sensitisation

Result : not sensitizing (Maximisation Test; Guinea pig) (OECD Test Guideline 406)

CMR effects**CMR Properties**

Carcinogenicity : It is not considered carcinogenic.
Mutagenicity : In vitro tests did not show mutagenic effects
In vivo tests did not show mutagenic effects
Based on available data, the classification criteria are not met.
Teratogenicity : Based on available data, the classification criteria are not met.
Reproductive toxicity : Based on available data, the classification criteria are not met.

Genotoxicity in vitro

Result : negative (Bacterial Reverse Mutation Test)
negative (In vitro gene mutation study in mammalian cells) (OECD Test Guideline 476)
negative (Chromosome aberration test in vitro) (OECD Test Guideline 473)

METAPEX 38**Genotoxicity in vivo**

Result : negative (In vivo micronucleus test; Mammalian-Animal) (OECD Test Guideline 474)

Teratogenicity

NOAEL : 300 mg/kg bw/day
Maternal
NOAEL : 300 mg/kg bw/day
Teratog.
(Rat)(Oral; 20 d)Information given is based on data obtained from similar substances.

Reproductive toxicity

NOAEL : 350 mg/kg bw/day
Parent
NOAEL : 350 mg/kg bw/day
F1
(Rat)(Oral; 2 y)Information given is based on data obtained from similar substances.

Specific Target Organ Toxicity**Single exposure**

Remarks : The substance or mixture is not classified as specific target organ toxicant, single exposure.

Repeated exposure

Remarks : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties**Repeated dose toxicity**

NOAEL : 85 mg/kg bw/day
LOAEL : 145 mg/kg bw/day(Rat)(Oral; 9 Months) Target Organs: Blood;
Symptoms: Depression of body weightInformation given is based on data obtained from similar substances.

Aspiration hazard

Not applicable,

Further information

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Other relevant toxicity information : Can be absorbed through the skin.

Component:	Alcohols, C12-14 (even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts	CAS-No. 68891-38-3
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Acute toxicity
Oral

LD50 Oral : > 2000 mg/kg (Rat) (OECD Test Guideline 401)

Inhalation

no data available

Dermal

LD50 Dermal : > 2000 mg/kg (Rat) (OECD Test Guideline 402)Literature value

Irritation
Skin

Result : (Rabbit; Causes skin irritation.) (OECD Test Guideline 404)

Eyes

Result : Causes serious eye damage. (Rabbit) (OECD Test Guideline 405)

Sensitisation

Result : not sensitizing (Guinea pig) (OECD Test Guideline 406)

CMR effects
CMR Properties

Carcinogenicity : In accordance with column 2 of Annex VII - X of Regulation (EC) No 1907/2006, the test for this property of the substance does not need to be conducted.

Mutagenicity : In vitro tests did not show mutagenic effects
In vivo tests did not show mutagenic effects

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

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

Genotoxicity in vitro

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Result : negative (Bacterial Reverse Mutation Test) (OECD Test Guideline 471)
negative (In vitro gene mutation study in mammalian cells) (OECD Test Guideline 476)

Genotoxicity in vivo

Result : negative (Mammalian Bone Marrow Chromosomal Aberration Test) (OECD Test Guideline 475)

Teratogenicity

NOAEL Teratog. : 1,000 mg/kg bw/day
(Prenatal Developmental Toxicity Study; Rat)(Oral; 10 Days)(OECD Test Guideline 414)Based on available data, the classification criteria are not met.

Reproductive toxicity

NOAEL Parent : > 300 mg/kg bw/day
NOAEL F1 : > 300 mg/kg bw/day
(Two-generation reproductive toxicity; Rat)(Oral)(OECD Test Guideline 416)Based on available data, the classification criteria are not met.

Specific Target Organ Toxicity

Single exposure

Remarks : The substance or mixture is not classified as specific target organ toxicant, single exposure.

Repeated exposure

Remarks : The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Other toxic properties

Repeated dose toxicity

NOAEL : > 225 mg/kg/day
(Rat)(Oral; 90-day) (OECD Test Guideline 408)Target Organs: Liver, Gastro-intestinal systemLiterature value

Aspiration hazard

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No aspiration toxicity classification,

Component:	Amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	CAS-No. 68155-07-7
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Acute toxicity**Oral**

LC50 : > 2000 mg/kg (Rat) (OECD Test Guideline 401)

Inhalation

no data available

Dermal

LD50 : > 2000 mg/kg (Rabbit) (No guideline followed)

Irritation**Skin**

Result : Irritating to skin. (Rabbit) (OECD Test Guideline 404)

Eyes

Result : Risk of serious damage to eyes. (Rabbit) (OECD Test Guideline 405)

Sensitisation

Result : Does not cause skin sensitisation. (Guinea pig) (OECD Test Guideline 406)

CMR effects**CMR Properties**

Carcinogenicity : It is not considered carcinogenic.
 Mutagenicity : It is not considered mutagenic.
 Teratogenicity : no data available
 Reproductive toxicity : It is not considered toxic for reproduction.

Genotoxicity in vivo

Result : negative (In vivo micronucleus test; Mammalian-Animal) (OECD Test Guideline 474)

METAPEX 38**Teratogenicity**

NOAEL : > 1,000 mg/kg
 Maternal (Rat)(Oral)(OECD Test Guideline 414)

Specific Target Organ Toxicity**Single exposure**

Remarks : no data available

Repeated exposure

Remarks : no data available

Other toxic properties**Repeated dose toxicity**

NOAEL : 750 mg/kg
 (Rat, wistar, male and female)(Oral; 28-day; 5 days/week) (OECD Test Guideline 407)Subacute toxicity
 NOAEL : 50 mg/kg
 (Rat, Fischer F344, male and female)(Dermal; 90-day; 5 days/week) (No guideline available)Subchronic toxicity

Aspiration hazard

no data available,

SECTION 12: Ecological information**12.1. Toxicity****Data for the product****Chronic toxicity****Chronic aquatic toxicity**

Result : Harmful to aquatic life with long lasting effects.

Component: Water CAS-No. 7732-18-5

Acute toxicity**Fish**

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: no data available

Toxicity to daphnia and other aquatic invertebrates

: no data available

algae

: no data available

Acute aquatic toxicity

Result : The product is not classified as dangerous for the environment.
Study scientifically unjustified.

Chronic toxicity

Component:	Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.	CAS-No. 85536-14-7
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Acute toxicity**Fish**

LC50 : > 1 - 10 mg/l (Lepomis macrochirus (Bluegill sunfish); 96 h) (static test; US-EPA) Information given is based on data obtained from similar substances.

Toxicity to daphnia and other aquatic invertebrates

EC50 : > 1 - 10 mg/l (Daphnia magna (Water flea); 48 h) (static test; OECD Test Guideline 202) Information given is based on data obtained from similar substances.

algae

NOEC : > 4 mg/l (Elodea canadensis (Canadian Waterweed); 28 d) Information given is based on data obtained from similar substances.

Chronic toxicity**Fish**

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NOEC : 1 mg/l (Lepomis macrochirus (Bluegill sunfish); 28 d) (End point: Growth rate) Information given is based on data obtained from similar substances.

Aquatic invertebrates

NOEC > 1 - 10 mg/l (invertebrates; 32 d) Information given is based on data obtained from similar substances.

Component: Alcohols, C12-14 (even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts **CAS-No. 68891-38-3**

Acute toxicity

Fish

LC50 : 7.1 mg/l (Danio rerio (zebra fish); 96 h) (flow-through test; OECD Test Guideline 203)

LC50 > 1 - 10 mg/l (Brachydanio rerio) (semi-static test; OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

EC50 : 7.4 mg/l (Daphnia (water flea); 48 h) (static test; OECD Test Guideline 202)

algae

EC50 : 27.7 mg/l (algae; 72 h) (Growth inhibition; OECD Test Guideline 201)

EC50 > 10 - 100 mg/l (Desmodesmus subspicatus (green algae); 72 h) (static test; OECD Test Guideline 201)

Bacteria

EC10 : > 10000 mg/l (Pseudomonas putida; 16 h) (Cell multiplication inhibition test)

Chronic toxicity

Chronic aquatic toxicity

Result : Harmful to aquatic life with long lasting effects.

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Fish

NOEC : 1 mg/l (fish; 45 d)

Aquatic invertebrates

NOEC > 0.1 - 1 mg/l (Daphnia magna (Water flea); 21 d) (Reproductive toxicity; OECD Test Guideline 211) Literature value

Component:	Amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	CAS-No. 68155-07-7
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Acute toxicity

Fish

LC50 : 2.4 mg/l (Oncorhynchus mykiss (rainbow trout); 96 h) (semi-static test; OECD Test Guideline 203)

Toxicity to daphnia and other aquatic invertebrates

EC50 : 3.2 mg/l (Daphnia magna (Water flea); 48 h) (static test; OECD Test Guideline 202)

algae

ErC50 : 18.6 mg/l (Desmodesmus subspicatus (green algae); 24 h) (static test; End point: Growth rate; Directive 67/548/EEC, Annex V, C.3.)
EbC50 : 23.4 mg/l (Desmodesmus subspicatus (green algae); 72 h) (static test; End point: Biomass; Directive 67/548/EEC, Annex V, C.3.)

Bacteria

EC50 : 6000 mg/l (Pseudomonas putida; 16 h) (static test; End point: Growth rate; DIN 38412)

12.2. Persistence and degradability

Component:	Water	CAS-No. 7732-18-5
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Persistence and degradability

Persistence

Result : no data available

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Biodegradability

Result : The methods for determining the biological degradability are not applicable to inorganic substances.

Component: Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs. **CAS-No.** 85536-14-7

Persistence and degradability

Persistence

Result : no data available

Biodegradability

Result : > 70 % (aerobic; Exposure Time: 28 d)(OECD Test Guideline 301A)Readily biodegradable.

Component: Alcohols, C12-14 (even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts **CAS-No.** 68891-38-3

Persistence and degradability

Persistence

Result : no data available

Biodegradability

Result : 100 % (Exposure Time: 28 d)Readily biodegradable.This surfactant complies 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.

Component: Amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl) **CAS-No.** 68155-07-7

Persistence and degradability

Persistence

Result : (Related to: Air) Half-life in air < 1 day

Biodegradability

Result : 71.1 % (Exposure Time: 28 d)(OECD Test Guideline 301F)Readily biodegradable.

Result : 76 % (TOD (OECD 301D))

12.3. Bioaccumulative potential

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Component:	Water	CAS-No. 7732-18-5
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Bioaccumulation

Result : Not applicable

Component:	Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.	CAS-No. 85536-14-7
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Bioaccumulation

Result : log Kow 3.2 - 3.32
: The product has low potential bioaccumulation.

Component:	Alcohols, C12-14 (even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts	CAS-No. 68891-38-3
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Bioaccumulation

Result : log Kow 0.3
: BCF: < 3 The product has low potential bioaccumulation.

Component:	Amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	CAS-No. 68155-07-7
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Bioaccumulation

Result : BCF: 65.36 The product has low potential bioaccumulation.

12.4. Mobility in soil

Component:	Water	CAS-No. 7732-18-5
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Mobility

Result : The product will be dispersed amongst the various environmental compartments (soil/ water/ air).

Component:	Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.	CAS-No. 85536-14-7
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Mobility

Soil : Moderately mobile in soils

Component:	Alcohols, C12-14 (even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts	CAS-No. 68891-38-3
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Mobility

: Moderately mobile in soils

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Component:	Amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	CAS-No. 68155-07-7
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Mobility

: no data available

12.5. Results of PBT and vPvB assessment

Data for the product

Results of PBT and vPvB assessment

Result : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Component:	Water	CAS-No. 7732-18-5
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Results of PBT and vPvB assessment

Result : The PBT or vPvB criteria of Annex XIII to the REACH Regulation does not apply to inorganic substances.

Component:	Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.	CAS-No. 85536-14-7
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Results of PBT and vPvB assessment

Result : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent and very bioaccumulating (vPvB).

Component:	Alcohols, C12-14 (even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts	CAS-No. 68891-38-3
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Results of PBT and vPvB assessment

Result : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

Component:	Amides, C8-18 (even numbered) and C18-unsatd., N, N-bis(hydroxyethyl)	CAS-No. 68155-07-7
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Results of PBT and vPvB assessment

Result : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT)., This substance is not considered to be very persistent and very bioaccumulating (vPvB).

12.6. Other adverse effects

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Data for the product

Additional ecological information

Result : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.
Harmful effects to aquatic organisms due to pH-shift.

Result :

Component:	Water	CAS-No. 7732-18-5
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Additional ecological information

Result : no data available

Component:	Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.	CAS-No. 85536-14-7
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Additional ecological information

Result : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

Component:	Alcohols, C12-14 (even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts	CAS-No. 68891-38-3
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Additional ecological information

Result : no data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Product : Disposal together with normal waste is not allowed. Special disposal required according to local regulations. Do not let product enter drains. Contact waste disposal services.
- Contaminated packaging : Dispose of contaminated packaging in the same way as the product. In accordance with local and national regulations.
- European Waste Catalogue Number : No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer.

SECTION 14: Transport information

14.1. UN number

1760

14.2. UN proper shipping name

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ADR : CORROSIVE LIQUID, N.O.S.
 (Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.)
RID : CORROSIVE LIQUID, N.O.S.
 (Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.)
IMDG : CORROSIVE LIQUID, N.O.S.
 (Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.)

14.3. Transport hazard class(es)

ADR-Class	: 8
(Labels; Classification Code; Hazard identification No; Tunnel restriction code)	8; C9; 80; (E)
RID-Class	: 8
(Labels; Classification Code; Hazard identification No)	8; C9; 80
IMDG-Class	: 8
(Labels; EmS)	8; F-A, S-B

14.4. Packaging group

ADR	: III
RID	: III
IMDG	: III

14.5. Environmental hazards

Environmentally hazardous according to ADR	: no
Environmentally hazardous according to RID	: no
Marine Pollutant according to IMDG-Code	: no

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

IMDG : Not applicable.

SECTION 15: Regulatory information

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

Component:	Water	CAS-No. 7732-18-5
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EU. Regulation EU No. : ; The substance/mixture does not fall under this legislation.
 649/2012 concerning the
 export and import of
 dangerous chemicals

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EU. REACH, Annex XVII, : ; The substance/mixture does not fall under this legislation.
Marketing and Use
Restrictions (Regulation
1907/2006/EC)

EU. Directive : ; The substance/mixture does not fall under this legislation.
2012/18/EU (SEVESO
III) Annex I

Component:	Benzenesulfonic acid, 4-C10-13-sec-alkyl derivs.	CAS-No. 85536-14-7
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EU. Regulation EU No. : ; The substance/mixture does not fall under this legislation.
649/2012 concerning the
export and import of
dangerous chemicals

EU. REACH, Annex XVII, : Point Nos.: , 3; Listed
Marketing and Use
Restrictions (Regulation
1907/2006/EC)

EU. Regulation No : EC Number: , 287-494-3; Listed
1451/2007 [Biocides],
Annex I, OJ (L 325)

EU. Directive : ; The substance/mixture does not fall under this legislation.
2012/18/EU (SEVESO
III) Annex I

Component:	Alcohols, C12-14 (even numbered), ethoxylated < 2.5 EO, sulfates, sodium salts	CAS-No. 68891-38-3
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EU. Directive : ; The substance/mixture does not fall under this legislation.
2012/18/EU (SEVESO
III) Annex I

Component:	Amides, C8-18 (even numbered) and C18- unsatd., N, N-bis(hydroxyethyl)	CAS-No. 68155-07-7
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EU. Directive : Lower-tier requirements: 200 tonnes; Part 1: Categories of
2012/18/EU (SEVESO dangerous substances; E2: Hazardous to the Aquatic
III) Annex I Environment in Category Chronic 2
Upper-tier requirements: 500 tonnes; Part 1: Categories of
dangerous substances; E2: Hazardous to the Aquatic

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Environment in Category Chronic 2

15.2. Chemical safety assessment

no data available

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3.

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Abbreviations and Acronyms

BCF	bioconcentration factor
BOD	biochemical oxygen demand
CAS	Chemical Abstracts Service
CLP	Classification, Labelling and Packaging
CMR	carcinogenic, mutagenic or toxic to reproduction
COD	chemical oxygen demand
DNEL	derived no-effect level
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
GHS	Globally Harmonized System of Classification and Labelling of Chemicals
LC50	median lethal concentration
LOAEC	lowest observed adverse effect concentration
LOAEL	lowest observed adverse effect level
LOEL	lowest observed effect level
NLP	no-longer polymer
NOAEC	no observed adverse effect concentration
NOAEL	no observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
OECD	Organisation for Economic Cooperation and Development
OEL	occupational exposure limit
PBT	persistent, bioaccumulative and toxic
PNEC	predicted no-effect concentration
STOT	specific target organ toxicity

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SVHC	substance of very high concern
UVCB	substance of unknown or variable composition, complex reaction products or biological materials
vPvB	very persistent and very bioaccumulative
Further information	
Key literature references and sources for data	: Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet.
Methods used for product classification	: The classification for human health, physical and chemical hazards and environmental hazards were derived from a combination of calculation methods and if available test data.
Hints for trainings	: The workers have to be trained regularly on the safe handling of the products based on the information provided in the Safety Data Sheet and the local conditions of the workplace. National regulations for the training of workers in the handling of hazardous materials must be adhered to.
Other information	: The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

|| Indicates updated section.