



## Safety Data Sheet

according to UK REACH Regulation

### Tornado

Revision date: 12.12.2022

Product code: j2501\_sd

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#### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)			
97489-15-1	Sodium C14-17 Sec Alkyl Sulfonate			1 - < 5 %
	307-055-2		01-2119489924-20	
	Acute Tox. 4, Skin Irrit. 2, Eye Dam. 1, Aquatic Chronic 3; H302 H315 H318 H412			

Full text of H and EUH statements: see section 16.

#### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
97489-15-1	307-055-2	Sodium C14-17 Sec Alkyl Sulfonate	1 - < 5 %
	oral: ATE = 500 mg/kg Skin Irrit. 2; H315: >= 10 - 100 Eye Dam. 1; H318: >= 15 - 100 Eye Irrit. 2; H319: >= 10 - < 15		

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

No hazards which require special first aid measures.

##### After inhalation

not hazardous by inhalation

##### After contact with skin

Wash off with plenty of water.

##### After contact with eyes

Rinse thoroughly with plenty of water, also under the eyelids.

##### After ingestion

Clean mouth with water and drink afterwards plenty of water. Prevent vomiting if possible.

Consult a physician if necessary.

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

This information is not available.

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

Show this safety data sheet to the doctor in attendance.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

##### Suitable extinguishing media

Any extinguishing means and measures are acceptable.

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

This information is not available.

#### 5.3. Advice for firefighters

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. The product itself does not burn.

### SECTION 6: Accidental release measures

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

##### General advice

Not required

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#### For non-emergency personnel

No special measures are necessary.

#### For emergency responders

No special measures are necessary.

#### **6.2. Environmental precautions**

Do not flush into surface water.

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

##### For containment

Prevent spread over a wide area (e.g. by containment or oil barriers).

##### For cleaning up

Wipe up with absorbent material (e.g. cloth, fleece).

Clean contaminated articles and floor according to the environmental legislation.

##### Other information

Never return spills in original containers for re-use.

#### **6.4. Reference to other sections**

Refer to protective measures listed in sections 7 and 8.

## SECTION 7: Handling and storage

### **7.1. Precautions for safe handling**

#### Advice on safe handling

No special precautions required.

#### Advice on protection against fire and explosion

No special protective measures against fire required.

#### Advice on general occupational hygiene

General industrial hygiene practice. No special protective equipment required.

### **7.2. Conditions for safe storage, including any incompatibilities**

#### Requirements for storage rooms and vessels

Store at room temperature in the original container. Store in a place accessible by authorized persons only.

#### Further information on storage conditions

Keep container tightly closed.

Never return unused material to storage receptacle.

### **7.3. Specific end use(s)**

This information is not available.

## SECTION 8: Exposure controls/personal protection

### **8.1. Control parameters**

#### Additional advice on limit values

To date, no national critical limit values exist.

### **8.2. Exposure controls**

#### Appropriate engineering controls

Not required.

#### Individual protection measures, such as personal protective equipment

##### Skin protection

Not required

##### Respiratory protection

Not required

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#### Environmental exposure controls

Handle in accordance with good industrial hygiene and safety practice.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state: liquid  
Colour: greenish-blue  
Odour: pleasant

#### Test method

Melting point/freezing point:	<-2 °C	
Boiling point or initial boiling point and boiling range:	>90 °C	
Flammability:	not applicable	
Lower explosion limits:	not applicable	
Upper explosion limits:	not applicable	
Flash point:	>100 °C	
Auto-ignition temperature:	>300 °C	
Decomposition temperature:	not determined	
pH-Value (at 20 °C):	approx. 10,5	K-QP1012C
Viscosity / kinematic:	not determined	
Water solubility: (at 20 °C)	completely miscible	
Solubility in other solvents not determined		
Partition coefficient n-octanol/water:	not determined	
Vapour pressure:	not determined	
Density (at 20 °C):	1,02 g/cm <sup>3</sup>	K-QP1012E
Relative vapour density:	not determined	
Particle characteristics:	not applicable	

### 9.2. Other information

#### Information with regard to physical hazard classes

Explosive properties  
not relevant

Self-ignition temperature

Solid:

not applicable

Gas:

not applicable

Oxidizing properties

not relevant

#### Other safety characteristics

Evaporation rate:

not determined

Solid content:

not determined

Sublimation point:

not applicable

Softening point:

not applicable

Pour point:

not applicable

Viscosity / dynamic:

not determined

Flow time:

not determined

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

This information is not available.

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#### 10.2. Chemical stability

This information is not available.

#### 10.3. Possibility of hazardous reactions

This information is not available.

#### 10.4. Conditions to avoid

Do not expose to temperatures above 35 °C.

#### 10.5. Incompatible materials

This information is not available.

#### 10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.

#### **Further information**

Do not mix with other detergents or chemicals.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in GB CLP Regulation

#### **Acute toxicity**

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

#### **ATEmix calculated**

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
97489-15-1	Sodium C14-17 Sec Alkyl Sulfonate				
	oral	ATE 500 mg/kg			

#### **Irritation and corrosivity**

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

#### **Sensitising effects**

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

#### **Carcinogenic/mutagenic/toxic effects for reproduction**

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

#### **STOT-single exposure**

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

#### **STOT-repeated exposure**

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

#### **Aspiration hazard**

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

### 11.2. Information on other hazards

#### **Endocrine disrupting properties**

This information is not available.

#### **Further information**

Health injuries are not known or expected under normal use.

## SECTION 12: Ecological information

### 12.1. Toxicity

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

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#### **12.2. Persistence and degradability**

Contains no substances known to be hazardous to the environment or not degradable in waste water treatment plants. The surfactants in the product meet all requirements of the detergents regulation 648/2004/EC.

#### **12.3. Bioaccumulative potential**

This information is not available.

#### **12.4. Mobility in soil**

This information is not available.

#### **12.5. Results of PBT and vPvB assessment**

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

#### **12.6. Endocrine disrupting properties**

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### **12.7. Other adverse effects**

This information is not available.

#### **Further information**

Chemical Oxygen Demand (COD) 120 mg O<sub>2</sub>/g.

### SECTION 13: Disposal considerations

#### **13.1. Waste treatment methods**

##### **Disposal recommendations**

Container should be emptied thoroughly. Do not pour remains of product in large quantities into the sewage.

##### **List of Wastes Code - residues/unused products**

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

##### **List of Wastes Code - used product**

070699 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of fats, grease, soaps, detergents, disinfectants and cosmetics; wastes not otherwise specified

##### **Contaminated packaging**

Clean container with water. Return cleaned containers to the company for recycling.

Offer rinsed packaging material to local recycling facilities.

### SECTION 14: Transport information

#### **Land transport (ADR/RID)**

**14.1. UN number or ID number:** not applicable

**14.2. UN proper shipping name:** not applicable

**14.3. Transport hazard class(es):** not applicable

**14.4. Packing group:** not applicable

#### **14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

#### **14.6. Special precautions for user**

Not required

#### **14.7. Maritime transport in bulk according to IMO instruments**

not applicable

#### **Other applicable information**

Not classified as dangerous in the meaning of transport regulations.

### SECTION 15: Regulatory information

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

##### National regulatory information

Water hazard class (D): 2 - obviously hazardous to water

#### 15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

### SECTION 16: Other information

#### Changes

This data sheet contains changes from the previous version in section(s): 3 / 6 / 7 / 8 / 12

#### Abbreviations and acronyms

ADR: Accord européen sur le transport des marchandises dangereuses par Route  
(European Agreement concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service  
LC50: Lethal concentration, 50%  
LD50: Lethal dose, 50%  
CLP: Classification, labelling and Packaging  
REACH: Registration, Evaluation and Authorization of Chemicals  
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals  
UN: United Nations  
DNEL: Derived No Effect Level  
DMEL: Derived Minimal Effect Level  
PNEC: Predicted No Effect Concentration  
ATE: Acute toxicity estimate  
LL50: Lethal loading, 50%  
EL50: Effect loading, 50%  
EC50: Effective Concentration 50%  
ErC50: Effective Concentration 50%, growth rate  
NOEC: No Observed Effect Concentration  
BCF: Bio-concentration factor  
PBT: persistent, bioaccumulative, toxic  
vPvB: very persistent, very bioaccumulative  
RID: Regulations concerning the international carriage of dangerous goods by rail  
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways  
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)  
EmS: Emergency Schedules  
MFIAG: Medical First Aid Guide  
MARPOL: International Convention for the Prevention of Marine Pollution from Ships  
IBC: Intermediate Bulk Container  
SVHC: Substance of Very High Concern

For abbreviations and acronyms, see table at <http://abbrev.esdscom.eu>

Acute Tox: Acute toxicity

Skin Irrit: Skin irritation

Eye Dam: Eye damage

Aquatic Chronic: Chronic aquatic hazard

#### Relevant H and EUH statements (number and full text)

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

*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*