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

1.1. Product identifier

Chemical name	Benzenosulfonic acid, 4-C10-13-sec-alkyl derive
EC number	287-494-3
CAS number	85536-14-7
INCI Name	dodecylobenzene Sulfonic Acid
REACH Registration number	01-2119490234-40

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

Identified uses
Formulation with Substance (powders and granules)
Use in Washing and Cleaning Products (liquids)
Use in Washing and Cleaning Products (powders and granules)
Use in Plant Protection Products
Use in Oilfield Chemicals
Use in Textile and Leather Finishing Products
Use as Processing Aid in Emulsion in Polymerisation
Use in Glues
Formulation with Substance (liquids)
Formulation with Substance (powder and granules)
Use in Washing and Cleaning Products (liquids)
Use in Washing and Cleaning Products (powder and granules)
Use in Glues
Use in Textile and Leather Finishing Products
Use in Biocidal Products
Use in Plant Protection Products
Use in Washing and Cleaning Products (liquids)
Use in Washing and Cleaning Products (powders and granules)
Use in Washing and Cleaning Products (liquids, powders, granules)
Use in Cosmetic and Personal Care Products
Use in Glues
Use in Textile and Leather Finishing Products
Use in Metalworking
Use in Concrete Industry

Uses advised against
No further relevant information available.

1.3. Details of the supplier of the safety data sheet

Company
SysKem Chemie GmbH
Brucknerweg 26
D-42289 Wuppertal

Telephone	+49 (0) 202/30999510
Telefax	+49 (0) 202/87088403
E-mail address	info@syskem.de

Prepared by / E-mail address of person responsible for the SDS
info@syskem.de

1.4. Emergency telephone number

Vergiftungs-Informations-Zentrale Freiburg, Tel. +49 761 19240.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Product definition
UVCB

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]
Acute Tox. 4, H302
Skin Corr. 1C, H314
Eye Dam. 1, H318
Aquatic Chronic 3, H412

See Section 16 for the full text of the H statements declared above.
See Section 11 for more detailed information on health effects and symptoms.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008
The substance is classified and labelled according to the CLP regulation.

Hazard pictograms (CLP)

Signal word (CLP)
Danger

Hazard statements (CLP)
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements (CLP)
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P303+P361+P353 IF ON SKIN (or hair):Take off immediately all contaminated clothing. Rinse skin with water/shower.
P301+P310 IF SWALLOWED: Immediately call a POISON CENTER / doctor.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405 Store locked up.
P501 Dispose of contents/container to hazardous or special waste collection point.

2.3. Other hazards

Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
No.

Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
Not available.

Other hazards which do not result in classification
None known.

SECTION 3: Composition/information on ingredients

3.1. Substance

Substance UVCB

Substance	Identifiers	%	Classification Regulation (EC) No. 1272/2008 [CLP/GHS]	Type
benzenesulfonic acid, 4-C 10-13-sec alkyl derive	REACH #: 01-2119490234-40 EC: 287-494-3 CAS: 85536-14-7	100	Acute Tox. 4, H302 Skin Corr. 1C, H314 Eye Dam. 1, H318 Aquatic Chronic 3, H412	[*]

See Section 16 for the full text of the H statements declared above.

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

Type
[*] Substance [A] Constituent [B] Impurity [C] Stabilising additive
Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1. Description of first aid measures

Eye contact
Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation
Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact
Get medical attention immediately. Call a poison center or physician. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion
Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Protection of first-aiders
No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

Potential acute health effects

Eye contact	Causes serious eye damage.
Inhalation	No known significant effects or critical hazards.
Skin contact	Causes severe burns.
Ingestion	Harmful if swallowed.

Over-exposure signs/symptoms

Eye contact	Adverse symptoms may include the following: pain, watering, redness
Inhalation	No specific data.
Skin contact	Adverse symptoms may include the following: pain or irritation, redness, blistering may occur
Ingestion	Adverse symptoms may include the following: stomach pains

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

Notes to physician
Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments
No specific treatment.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media
None known.

5.2. Special hazards arising from the substance or mixture

Hazards from the substance or mixture
In a fire or if heated, a pressure increase will occur and the container may burst. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Hazardous combustion products
COx, SOx

5.3. Advice for firefighters

Special precautions for fire-fighters
Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel
No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders
If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2. Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3. Methods and material for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. The spilled material may be neutralized with sodium carbonate, sodium bicarbonate or sodium hydroxide. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4. Reference to other sections

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

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

7.1. Precautions for safe handling

Protective measures
Put on appropriate personal protective equipment (see Section 8). Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment.
If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep away from alkalis. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2. Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 5 to 50°C (41 to 122°F). Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Separate from alkalis. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

7.3. Specific end use(s)

Recommendations	Not available.
Industrial sector specific solutions	Not available.

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance.

8.1 Control parameters

Occupational exposure limits
Not established exposure limit value.

Recommended monitoring procedures
If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived effect levels

Product/ingredient name	Type	Exposure	Value	Population	Effects
4-C 10-13-sec alkyl derive benzenesulfonic acid,	DNEL	Long term Dermal	170 mg/kg bw/day	Workers	-
	DNEL	Long term Inhalation	12 mg/m3	Workers	-
	DNEL	Long term Oral	0,85 mg/kg bw/day	Consumers	-
	DNEL	Long term Dermal	85 mg/kg bw/day	Consumers	-
	DNEL	Long term Inhalation	3 mg/m3	Consumers	-

Predicted effect concentrations

Product/ingredient name	Type	Compartment Detail	Value	Method Detail
4-C 10-13-sec alkyl derive benzenesulfonic acid,	PNEC	Fresh water	0,268 mg/l	Assessment Factors
	PNEC	Marine	0,0268 mg/l	Assessment Factors
	PNEC	Sediment	8,1 mg/kg	Assessment Factors
	PNEC	Sewage Treatment Plant	3,43 mg/l	Assessment Factors

8.2. Exposure controls

Appropriate engineering controls
If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures
Hygiene measures
Wash hands, forearms and face thoroughly after handling chemical product, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection
If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield.

Skin protection
Hand protection
Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Wear suitable gloves tested to EN374.
It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers.
In case of a long-term direct exposure, butyl rubber>0,7 mm thick, of minimum time of penetration 480 min should be used.
In case of a short-term direct exposure nitrile rubber/nitrile latex >0,4 mm thick, of minimum time of penetration 30 min should be used.

Body protection
Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Wear suitable protective clothing and gloves.

Other skin protection
Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Recommended: Suitable protective footwear.

Respiratory protection
Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Possible: Under normal conditions of storage does not emit hazardous fumes.

Environmental exposure controls
Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	: Liquid.
Colour	: Light brown. to Dark.Brown. [Dark]
Odour	: Characteristic. [Strong]
Odour threshold	: Not available.
PH	: 1 approx. [20°C]
Melting point/freezing point	: <-5°C
Initial boiling point and boiling range	: Not available.
Flash point	: Open cup: 200°C

Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Upper/lower flammability or explosive limits	: Not available.
Vapour pressure	: Not available.
Vapour density	: Not available.
Density	: 1,06 g/cm3 [20°C] approx.
Relative density	: Not available.
Solubility(ies)	: Easily soluble in the following materials: cold water.
Solubility in water at room temperature (g/l)	: Not available.
Partition coefficient: n-octanol/water :	: >1
Auto-ignition temperature	: 380 to 410°C
Decomposition temperature	: 200°C
Viscosity	: Dynamic (room temperature): 1400 mPa·s
Explosive properties	: Not available.
Oxidising properties	: Not available.
Additional information	: pKa < 1

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1. Reactivity

This substance reacts with strong oxidizing agents and bases

10.2. Chemical stability

Under normal conditions the product is not reactive.

10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid

During storage avoid temperatures outside the range specified in section 7.2.

10.5. Incompatible materials

Strong oxidiser

10.6. Hazardous decomposition products

Sulfur oxides

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
benzenesulfonic acid, 4-C 10-13-sec alkyl derive	LD50 Dermal	Rat – Male, Female	>2000 mg/kg	-
		Rat – Male, Female	1470 mg/kg	-

Conclusion/Summary Harmful if swallowed.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
benzenesulfonic acid, 4-C 10-13-sec alkyl derive	Skin - Severe irritant	Rabbit	-	4 hours 0.5 ml	14 days
	Eyes - Visible necrosis	Rabbit	-	72 hours 0.1 ml	6 days

Conclusion/Summary

Skin Severe irritant

Eyes Causes serious eye damage.

Sensitiser

Product/ingredient name	Route of exposure	Species	Result
benzenesulfonic acid, 4-C 10-13-sec alkyl derive	skin	Guinea pig	Not sensitizing

Conclusion/Summary

Skin No sensitisation effect

Mutagenicity

Product/ingredient name	Test	Experiment	Result
benzenesulfonic acid, 4-C 10-13-sec alkyl derive	OECD 471 471 Bacterial Reverse Mutation Test	Experiment: In vitro Subject: Bacteria	Negative
	OECD 476 476 In vitro Mammalian Cell Gene Mutation Test	Experiment: In vitro Subject: Mammalian-Animal	Negative
	OECD 474 474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo Subject: Mammalian-Animal	Negative
	OECD 474 474 Mammalian Erythrocyte Micronucleus Test	Experiment: In vivo Subject: Mammalian-Animal	Negative

Conclusion/Summary No mutagenic effect.

Carcinogenicity

Conclusion/Summary No carcinogenic effect.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
benzenesulfonic acid, 4-C 10-13-sec alkyl derive	-	-	Negative	Rat – Female	Oral: 600 mg/kg	15 days During
	Negative	Negative	-	Rat	Oral 350 mg/kg	84 days

Conclusion/Summary No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Potential acute health effects

Inhalation : No known significant effects or critical hazards.

Ingestion : Harmful if swallowed.

Skin contact : Causes severe burns.

Eye contact : Causes serious eye damage.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation : No specific data.

Ingestion : Adverse symptoms may include the following:
stomach pains

Skin contact : Adverse symptoms may include the following:
pain or irritation, redness, blistering may occur

Eye contact : Adverse symptoms may include the following:
pain, watering, redness

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
benzenesulfonic acid, 4-C 10-13-sec alkyl derive	Sub-chronic LOAEL Oral	Rat - Male, Female	250 mg/kg Repeated dose	28 days
	Sub-chronic NOAEL Oral	Rat - Male, Female	125 mg/kg Repeated dose	28 days
	Sub-chronic LOAEL Oral	Rat	115 mg/kg Repeated dose	6 months
	Sub-chronic NOAEL Oral	Rat - Male, Female	40 mg/kg	6 months
	Sub-chronic LOAEL Oral	Rat - Male, Female	145 mg/kg Repeated dose	9 months
	Sub-chronic NOAEL Oral	Rat	85 mg/kg Repeated dose	9 months

Conclusion/Summary : Not considered to be toxic to humans.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
benzenesulfonic acid, 4-C 10-13-sec alkyl derive	Acute EC50 29 mg/l	Algae - Pseudokircheneriella sub.	96 hours
	Acute EC50 2,9 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 24 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 1,67 mg/l	Fish - Lepomis macrochirus	96 hours
	Acute NOEC 35 mg/l	Algae - Microcystis aeruginosa	96 hours
	Acute NOEC 24 mg/l	Algae - sScenedesmus subspicatus	72 hours
	Chronic NOEC 3,1 mg/l	Algae - Chlorella kessleri	15 days
	Chronic NOEC 4 mg/l	Aquatic plants - Elodea canadensis	28 days
	Chronic NOEC 0,59 mg/l	Daphnia – Ceriodaphnia	7 days
	Chronic NOEC 1,41 mg/l	Daphnia - Daphnia magna	21 days
	Chronic NOEC 0,23 mg/l	Fish - Oncorhynchus mykiss	72 days
	Chronic NOEC 0,63 mg/l	Fish - Pimephales promelas	196 days
	Chronic NOEC 3,2 mg/l	Fish - Poecilia reticolata	28 days
	Chronic NOEC 0,25 mg/l	Fish - Tilapia mossambica	90 days
	Chronic NOEC 2,87 mg/l	Micro-organism – Chironomus ripariu	24 days
	Chronic NOEC 4,15 mg/l	Micro-organism - Elimina Hyalella azteca	32 days
	Chronic NOEC 2,8 mg/l	Micro-organism - P. Parthenogenica	28 days

Conclusion/Summary Toxic to aquatic life with long lasting effects.

2.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
benzenesulfonic acid, 4-C 10-13-sec alkyl derive	OECD DOC Die-Away test	94 % Readily - 28 days	11,3 mg/l DOC	-

Conclusion/Summary Biodegradable

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
benzenesulfonic acid, 4-C 10-13-sec alkyl derive	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP ow	BCF	Potential
benzenesulfonic acid, 4-C 10-13-sec alkyl derive	>1	-	low

12.4 Mobility in soil

Soil/water partition coefficient (K OC)
3,4

Mobility
Not available.

12.5 Results of PBT and vPvB assessment

PBT : No.
P: Not available. B: Not available. T: No.

VpvB : Not available.
vP: Not available. vB: Not available.

12.6 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product
Methods of disposal
The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional or local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

European waste catalogue (EWC)

Waste code	Waste designation
16 03 05*	Organic wastes containing hazardous substances

Packaging
Methods of disposal
The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Type of packaging	European waste catalogue (EWC)	
Barrel	15 01 10*	packaging containing residues of or contaminated by hazardous substances
Container	15 01 10*	packaging containing residues of or contaminated by hazardous substances
Tank	15 01 10*	packaging containing residues of or contaminated by hazardous substances

Special precautions
This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

14.1. UN-Number

ADR, IMDG, IATA 2586

14.2. UN proper shipping name

ADR ARYLSULPHONIC ACIDS, LIQUID
IMDG ARYLSULPHONIC ACIDS, LIQUID
IATA Arylsulphonic acids, liquid

14.3. Transport hazard class(es)

ADR, IMDG, IATA Class 8

14.4. Packing group

ADR, IMDG, IATA III

14.5. Environmental hazards:

Marine pollutant: No
Special marking (ADR): No
Special marking (IATA): No

14.6. Special precautions for user

Transport within user's premises:
Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable.

Transport/Additional information:
ADR
Hazard identification number 80
Limited quantity 5 L
Tunnel code (E)

IMDG
Emergency schedules (EmS) F-A, S-B

IATA
Passenger and Cargo Aircraft
Quantity limitation: 5 L
Packaging instructions: 852
Cargo Aircraft Only Quantity
limitation: 60 L
Packaging instructions: 856
Limited Quantities - Passenger
Aircraft Quantity limitation: 1 L
Packaging instructions: Y841

SECTION 15: Regulatory information

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

REGULATION (EC) NO 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006
The European Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)
Regulations concerning the International Carriage of Dangerous Goods by Rail (RID) constituting Appendix C to the Convention concerning International Carriage by Rail (COTIF)
International Maritime Dangerous Goods Code (IMDG CODE)
IATA /International Air Transport Association/ Dangerous Goods Regulations (IATA DGR)
Ordinance of the Minister of Labour and Social Policy of 06 June 2014 concerning maximum permissible concentrations and intensities of agents harmful to health in a work environment (Journal of Laws 2014 item 817).
Act on Waste of 14 December 2012 (Dz. U. /Journal of Laws/ of 2013, No. 0, item 21)
Act on Packaging and Packaging Waste Management of 13 June 2013 (Dz. U. /Journal of Laws/ of 2013, No. 0, item 888)
Act on Chemical Substances and Their Mixtures of 25 February 2011 (Dz. U. /Journal of Laws/ No. 63, item 322)
Regulation of the Minister of Labour and Social Policy on the general occupational health and safety regulations of 26 September 1997 (Dz. U. /Journal of Laws/ of 2003, No. 169, item 1650 as amended)

Annex XIV - List of substances subject to authorisation
Annex XIV
None of the components are listed.
Substances of very high concern
None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles
Not applicable.

Other EU regulations
Europe inventory : All components are listed or exempted.
Priority List Chemicals : Not determined

Seveso Directive
This product is not controlled under the Seveso Directive.

15.2 Chemical safety assessment:

A Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Training advice
Ensure operatives are trained to minimise exposures.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Acute Tox. 4, H302	Expert judgment
Skin Corr. 1C, H314	Expert judgment
Eye Dam. 1, H318	Expert judgment
Aquatic Chronic 3, H412	Expert judgment

Full text of abbreviated H statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 4, H302	ACUTE TOXICITY (oral) - Category 4
Aquatic Chronic 3, H412	LONG-TERM AQUATIC HAZARD - Category 3
Eye Dam. 1, H318	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Skin Corr. 1C, H314	SKIN CORROSION/IRRITATION - Category 1C

Notice to reader
The information contained herein is accurate to the latest knowledge and describes the product from the point of view of help and environmental protection as well as safe handling. The information presented in this SDS refers to the technical product only and will not apply to any processed product. Final determination of the suitability of any materials for the chosen application(s) is the sole responsibility of the user"

Abbreviations and acronyms
ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway
ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
CMR = Carcinogen, Mutagen or Reproductive toxicant
CSA = Chemical Safety Assessment
CSR = Chemical Safety Report
DNEL = Derived No Effect Level
EC number = EINECS or ELINCS number
EC50 = Half maximal effective concentration
ES = Exposure Scenario
EUH statement = CLP-specific Hazard statement
EWC = European Waste Catalogue
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
H statement = CLP/GHS Hazard statement
IATA = International Air Transport Association
IC50 = Half maximal inhibitory concentration
IMDG = International Maritime Dangerous Goods
LC50 = Median lethal concentration
LD50 = Median lethal dose
LogPow = logarithm of the octanol/water partition coefficient
MARPOL= International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
OECD = Organisation for Economic Co-operation and Development
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail
RRN = REACH Registration Number
STOT = Specific Target Organ Toxicity
SVHC = Substances of Very High Concern
VOC = Volatile Organic Compound
vPvB = Very Persistent and Very Bioaccumulative