

MATERIAL SAFETY DATA SHEET

In compliance with Regulation 1272/2008, 648/2004 and 453/2010 (Annex II),
and the European Directive 67/548/EEC

Printed: 10/07/17

Rev. Nr. 03 12/03/15



1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Trade name: **DODOMAT**
Use: Washing powder
Uses advised against: All uses not specifically listed on the label on the product packaging.
Company: Rösch Austria GmbH, Goethestrasse 5, 6850 Dornbirn
info@roesch-hoechst.at
Emergency Phone Numbers: 0043 5572 377 000
0041 78 898 8953

2. HAZARDS IDENTIFICATION

2.1. Classification of the mixture

EC regulation criteria 1272/2008 (CLP):

-  **Warning, Skin Irrit. 2, Causes skin irritation.**
-  **Warning, Eye Irrit. 2, Causes serious eye irritation.**

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof: see section 16.

2.2. Label elements

EC regulation criteria 1272/2008 (CLP):

SYMBOLS



Warning

Hazard statements:

- H315 Causes skin irritation.**
- H319 Causes serious eye irritation.**

Precautionary statements:

- P102: Keep out of reach of children.
- P280 Wear protective gloves /eye protection.
- P302+P352 IF ON SKIN: Wash with soap and water.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P332+P313: If skin irritation occurs: Get medical advice/attention.
- P310: Immediately call a POISON CENTER or doctor/physician.
- P501: Dispose of contents / container in accordance with national / local regulations.

Special Provisions:

None

Classification made with the help of DetNet.

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3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

N.A.

3.2 Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP Regulation and corresponding classification:

15% - 25% **Sodium carbonate**

REACH No.: 01-2119485498-19 CAS: 497-19-8 EC: 207-838-8


Xi; R36

 3.3/2 Eye Irrit. 2 H319

3% - 7% **Sodium percarbonate**

REACH No.: 01-2119457268-30 CAS: 15630-89-4 EC: 239-707-6

O, Xi; R36-8

 2.14/3 Ox. Sol. 3 H272

 3.3/2 Eye Irrit. 2 H319

3% - 7% **Sodium disilicate**

REACH No.: 01-2119448725-31 CAS: 1344-09-8, EC: 215-687-4

Xi; R36-37-38

 2.16/1 Met. Corr. 1 H290

 3.3/1 Eye Dam. 1 H318


 3.8/3 STOT SE 3 H335

 3.2/1B Skin Corr. 1B H314

1% - 5% **Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts**

REACH No.: 01-2119489428-22 CAS: 68411-30-3 EC: 270-115-0

Xn, Xi; R22-38-41

 3.1/4/Oral Acute Tox. 4 H302

4.1/C3 Aquatic Chronic 3 H412


 3.2/2 Skin Irrit. 2 H315

 3.3/1 Eye Dam. 1 H318

1% - 3% **Alcohols, C12-13-branched andlinear, ethoxylated**

REACH No.: Not relevant CAS: 160901-19-9 EC: 500-457-0

Xn, Xi; R22-41

 3.1/4/Oral Acute Tox. 4 H302

4.1/C3 Aquatic Chronic 3 H412

 3.3/1 Eye Dam. 1 H318

The full wording of the Risk (R) and hazard (H) phrases is given in section 16.

4. FIRST AID MEASURES

4.1. Descriptions of first aid measures.

In case of skin contact:

Rinse exposed area with water. If irritation persists, consult a physician.

In case of eyes contact:

Flush eyes thoroughly with lukewarm water for 15 minutes. If irritation persists, consult a physician.

In case of ingestion:

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Do not induce vomiting. Seek medical advice immediately, showing the safety data sheet. Administer anti-foaming agents (dimethicone). Contact a poison control center.

In case of inhalation:

Ventilate the area. Immediately remove the patient from the contaminated premises and made to rest in a well ventilated area. If you feel unwell seek medical advice.

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

Ingestion: nausea, vomiting, diarrhea (with possible imbalances hydroelectric ingestion of large quantities); sensation of pain against pharynx, stomach and abdomen. Possible respiratory failure by aspiration of foam from the airways (especially as a result of vomiting and ingestion of significant quantities).

Eye contact: conjunctivitis.

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

See also 4.1.

5. FIRE-FIGHTING MEASURES

Product is not flammable.

5.1. Extinguishing media.

Suitable extinguishing media:

Carbon dioxide (CO₂), water, or dry chemical

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture.

Hazards due to exposure in the event of fire

Avoid breathing products of combustion.

5.3. Advice for fire-fighters.

General Information

Use suitable breathing apparatus. Collect extinguishing water. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

Equipment

Hardhat with visor, fireproof clothing, work gloves (fireproof, cut proof and dielectric), mask with facemask covering the whole of the face or breathing apparatus in case of large amount of smoke.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures.

Stave off people not involved in the intervention of emergency.

Keep away from sources of ignition.

Wear personal protective equipment: safety glasses, gloves and protective clothing, and pay attention to the slipperiness of the contaminated areas.

6.2. Environmental precautions.

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

6.3. Methods and material for containment and cleaning up.

Confine using earth or inert material. Collect as much material as possible and eliminate the rest using jets of water. Disposal of contaminated material must be done in accordance with the provisions of section 13.

6.4. Reference to other sections.

Any information on personal protection and disposal is given in sections 8 and 13.

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7. HANDLING AND STORAGE

7.1. Precautions for safe handling.

Store in closed, labeled containers. Avoid contact with eyes and skin. When using do not eat or drink. Provide accurate ventilation / exhaustion at the workplace.

7.2. Conditions for safe storage, including any incompatibilities.

Normal storage conditions without particular incompatibilities.

7.3. Specific end use(s).

All of the uses expressly indicated on the label applied to the product packaging.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS NATIONAL OCCUPATIONAL EXPOSURE LIMITS:

Sodium percarbonate DERIVED NO EFFECT LEVEL (DNEL)

End Use	Exposure routes	Value	Note
Workers	Dermal (acute effects)	12.8 mg/cm ²	
Workers	Inhalation (system. Effects)	5 mg/m ³	
Consumers	Dermal (acute effects)	6.4 mg/cm ²	

PREDICTED NO EFFECT CONCENTRATION (PNEC) PNEC aquatic 35 µg/l (Algae)

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts DERIVED NO EFFECT LEVEL (DNEL)

End Use	Exposure routes	Value	Note
Workers	<i>Dermal, Acute/short-term exposure - systemic effects</i>	--	<i>Not relevant / not applicable</i>
Workers	<i>Inhalation, Acute/short-term exposure - systemic effects</i>	--	<i>Not relevant / not applicable</i>
Workers	<i>Dermal, Acute/short-term exposure - local effects</i>	--	<i>Not relevant / not applicable</i>
Workers	<i>Inhalation, Acute/short-term exposure - local effects</i>	--	<i>Not relevant / not applicable</i>
Workers	<i>Dermal, long-term exposure - systemic effects</i>	170 mg/kg	<i>based on body weight and day</i>
Workers	<i>Inhalation, long-term exposure - systemic effects</i>	12 mg/m³	
Workers	<i>Dermal, long-term exposure - local effects</i>	--	<i>Not relevant / not applicable</i>
Workers	<i>Inhalation, long-term exposure - local effects</i>	12 mg/m³	
Consumers	<i>Dermal, Acute/short-term exposure - systemic effects</i>	--	<i>Not relevant / not applicable</i>
Consumers	<i>Inhalation, Acute/short-term exposure - systemic effects</i>	--	<i>Not relevant / not applicable</i>
Consumers	<i>Oral, Acute/short-term exposure - systemic effects</i>	--	<i>Not relevant / not applicable</i>
Consumers	<i>Dermal, Acute/short-term exposure - local effects</i>	--	<i>Not relevant / not applicable</i>
Consumers	<i>Inhalation, Acute/short-term exposure - local effects</i>	--	<i>Not relevant / not applicable</i>

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Consumers	<i>Dermal, long-term exposure - systemic effects</i>	85 mg/kg	<i>based on body weight and day</i>
Consumers	<i>Inhalation, long-term exposure - systemic effects</i>	3 mg/m³	
Consumers	<i>Oral, long-term exposure - systemic effects</i>	0,85 mg/kg	<i>based on body weight and day</i>
Consumers	<i>Dermal, long-term exposure - local effects</i>	--	<i>Not relevant / not applicable</i>
Consumers	<i>Inhalation, long-term exposure - local effects</i>	3 mg/m³	

PREDICTED NO EFFECT CONCENTRATION (PNEC)

Environmental Compartment	Value	Note
Fresh water	0,268 mg/l	
Marine water	0,0268 mg/l	
Intermittent release	0,0167 mg/l	
Treatment plant	3,43 mg/l	
Fresh water sediment	8,1 mg/kg	<i>Based on dry weight</i>
Marine sediment	8,1 mg/kg	<i>Based on dry weight</i>
Soil	35 mg/kg	<i>Based on dry weight</i>
Food		<i>Not relevant / not applicable</i>

8.2. Control parameters.

Information for home use:

Product is not dangerous for normal use. The information in this section refers to the manipulation of large amounts of loose material.

Personal protective equipment:

Eye Protection: safety glasses.

Skin Protection: No special protection must be adopted for normal use.

Hand Protection: Wear protective gloves.

Respiratory Protection: None required for normal use.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	White powder with colored blue speckles
Odor	Flowery note
PH value (solution 1%)	10.7 +/- 0.5
Water solubility (at 20°C)	Miscible

10. STABILITY AND REACTIVITY

10.1. Reactivity.

Stable under normal conditions.

10.2 Chemical stability.

Stable under normal conditions.

10.3 Possibility of hazardous reactions.

Under conditions of normal use and storage of hazardous reactions are not expected.

10.4 Conditions to avoid.

None in particular. Follow the usual precautions against chemical products.

10.5 Incompatible materials.

Information not available.

10.6 Hazardous decompositions products.

In the event of fire may release gases and vapors which are dangerous to health.

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11. TOXICOLOGICAL INFORMATION

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.
Hazardous effects to health from exposure to the mixture: see sections 2 and 4.

11.1. Information on toxicological effects.

Sodium carbonate CAS: 497-19-8

Acute oral toxicity (ingestion): LD₅₀, rat = 2800 mg / kg

Acute inhalation toxicity: LC₅₀, rat = 2300 mg / m³; LC₅₀, rat = 1200 mg / m³

Inhalation of product may cause irritation of the mucous membranes of the upper respiratory tract.

Acute dermal LD₅₀, guinea pig = 800 mg / kg

Eye Irritation: In contact with eyes may cause severe irritation, tearing, redness and visual disturbances. The repeated and prolonged exposure can cause conjunctivitis.

Sodium percarbonate CAS: 15630-89-4

LD/LC₅₀ Values relevant for classification:

Oral LD₅₀: 2200 mg/kg (mouse female); 2050 mg/kg (mouse male) (Moma et al.)

1034 mg/kg (rat) (Glaza)

Dermal LD₅₀: > 2000 mg/kg (rabbit)

CRM effects: none.

Sodium disilicate CAS: 1344-09-8

Primary irritant effect:

on the skin: Irritant to skin and mucous membranes.

on the eye: Strong irritant with the danger of severe eye injury.

Ingestion: May be harmful if swallowed.

Inhalation: Harmful if inhaled. May cause respiratory tract irritation.

Sensitization: No sensitizing effects known.

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts CAS: 68411-30-3

Acute toxicity

Acute oral toxicity

LD₅₀ Oral rat: > 2,000 mg/kg; OECD Test Guideline 401

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: LD₅₀ rat: > 300 - 2,000 mg/kg; OECD Test Guideline 401 Target Organs: Gastrointestinal tract Symptoms: Drowsiness, Diarrhoea, Breathing difficulties Test substance: Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts, ≥ 65%

Harmful if swallowed.

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: LD₅₀ rat: > 2,000 mg/kg; OECD Test Guideline 401 Target Organs: Gastrointestinal tract Symptoms: Drowsiness, Diarrhoea, Breathing difficulties Test substance: Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts, < 65% Based on available data, the classification criteria are not met.

Acute inhalation toxicity

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: No study necessary. Justification: Negligible or unlikely exposure pathways.

Acute dermal toxicity

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: LD₅₀ rat: > 2,000 mg/kg; OECD Test Guideline 402 Symptoms: Local effects, Crusting (literature value) Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Skin irritation

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: rabbit: irritating; OECD Test Guideline 404 (literature value)
Causes skin irritation.

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Serious eye damage/eye irritation	
Eye irritation	Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: rabbit: May cause irreversible eye damage.; OECD Test Guideline 405 (literature value) Causes serious eye damage.
Respiratory or skin sensitisation	
Sensitisation	Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: Maximisation Test guinea pig: not sensitizing; OECD Test Guideline 406 Based on available data, the classification criteria are not met.
Germ cell mutagenicity	
Genotoxicity in vitro	Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: In vitro tests did not show mutagenic effects (literature value)
Genotoxicity in vivo	Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: In vivo tests did not show mutagenic effects (literature value)
Remarks	Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: Based on available data, the classification criteria are not met.
Carcinogenicity	Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: The substance has been shown to be not genotoxic, therefore it is not expected to have a c
Reproductive toxicity	Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: rat; Oral; 2 years NOAEL ((parents)): 350 mg/kg (based on body weight and day) NOAEL (F1): 350 mg/kg (based on body weight and day) NOAEL (F2): 350 mg/kg (based on body weight and day) (literature value) Category approach
RemarksReproductive toxicity	Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: Based on available data, the classification criteria are not met.
Teratogenicity	Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: rat; Oral; 20 days NOAEL: 300 mg/kg (based on body weight and day) NOAEL (dam): 300 mg/kg (based on body weight and day) (literature value) Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: mouse; Oral; 20 days NOAEL: 300 mg/kg (based on body weight and day) NOAEL (dam): 2 mg/kg (based on body weight and day) (literature value)
Remarks-Teratogenicity	Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: Based on available data, the classification criteria are not met.
STOT - single exposure	
Remarks	Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	
Remarks	Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Repeated dose toxicity	rat; Oral; 28-day NOAEL: 125 mg/kg (based on body weight and day) LOAEL: 250 mg/kg (based on body weight and day) Target Organs: Blood, Liver, Heart, Thymus Symptoms: reduced body weight gain, Diarrhoea (literature value) rat; feeding study; 6 months NOAEL: 40 mg/kg (based on body weight and day) LOAEL: 115 mg/kg (based on body weight and day) Target Organs: Blood, Kidney, caecum Symptoms: reduced body weight gain, Diarrhoea (literature value) rat; drinking water; 9 months NOAEL: 85 mg/kg (based on body weight and day) LOAEL: 145 mg/kg (based on body weight and day)

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Aspiration hazard

Aspiration toxicity

applicable

Toxicological information

Target Organs: Blood Symptoms: reduced body weight gain

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: not

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts:
Toxicokinetics The substance is predicted to be bioavailable via the oral route. The substance is metabolised and excreted. The substance is poorly absorbed via skin.

Alcohols, C12-13-branched and linear, ethoxylated CAS: 160901-19-9

Acute toxicity

Acute oral toxicity

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): LD50 rat: > 300 - 2.000 mg/kg Category approach own test results/literature values Harmful if swallowed.

Acute inhalation toxicity

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): no data available

Acute dermal toxicity

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): LD50 rabbit: > 2.000 mg/kg; Category approach (literature value) Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Skin irritation

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): rabbit: not irritating Category approach own test results/literature values Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Eye irritation

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): rabbit: Irreversible effects on the eye own test results/literature values Category approach Causes serious eye damage.

Respiratory or skin sensitisation

Sensitisation

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): Maximisation Test guinea pig: not sensitizing Category approach (literature value) Based on available data, the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity in vitro

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): In vitro tests did not show mutagenic effects Category approach own test results/literature values

Genotoxicity in vivo

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): In vivo tests did not show mutagenic effects Category approach (literature value)

Remarks - Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): Based on available data, the classification criteria are not met.

Carcinogenicity

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): The substance has been shown to be not genotoxic, therefore it is not expected to have a carcinogenic potential. Category approach (literature value)

Remarks - Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): Based on available data, the classification criteria are not met.

Reproductive toxicity

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): Two-generation reproductive toxicity: rat

NOAEL ((parents)): > 250 mg/kg (based on body weight and day)

NOAEL (F1): > 250 mg/kg (based on body weight and day)

NOAEL (F2): > 250 mg/kg (based on body weight and day) Category approach (literature value)

Remarks - Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): Based on available data, the classification criteria are not met.

Teratogenicity

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): rat; Oral

NOAEL: > 50 mg/kg (based on body weight and day)

NOAEL (dam): 50 mg/kg (based on body weight and day); Two-generation reproductive toxicity Category approach (literature value)

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): rat; Dermal

NOAEL: > 250 mg/kg (based on body weight and day)

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NOAEL (dam): 250 mg/kg (based on body weight and day); Two-generation reproductive toxicity Category approach (literature value)

Remarks - Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): Based on available data, the classification criteria are not met.

STOT - single exposure

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): rat; Oral; 2 years

NOAEL: 50 mg/kg (based on body weight and day) Target Organs: Heart, Liver, Kidney Symptoms: reduced body weight gain, increased relative organ weights Category approach (literature value)

Aspiration hazard - Aspiration toxicity

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): not applicable

Toxicological information

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): Toxicokinetics Category approach The substance is expected to be rapidly absorbed and excreted. (literature value)

12. ECOLOGICAL INFORMATION

Use according to good working practices, avoiding dispersion in the environment (see also sections 6, 7, 13, 14 and 15).

Inform the relevant authorities if the product reach waterways or sewers or contaminate soil or vegetation.

12.1. Toxicity

Sodium carbonate CAS: 497-19-8

Aquatic toxicity:

Pesci lepomis macrochirus, LC₅₀/96h, 300 mg/l

Crostacei ceriodaphnia-dubia, EC₅₀/48h, 200-227 mg/l

Sodium percarbonate CAS: 15630-89-4

Aquatic toxicity:

EC₅₀/48h 4,9 mg/l (Daphnia pulex)

LC₅₀/96h 70,7 mg/l (Pimephales promelas)

NOEC/48h 2 mg/l (Daphnia pulex)

NOEC/96h 7,4 mg/l (Pimephales promelas)

Sodium disilicate CAS: 1344-09-8

Aquatic Environment - Invertebrate Species

Short-term toxicity: Species Daphnia Magna - EC 50 (48h): 1700 mg / l.

Long term toxicity: NA - Annex IX, column 2 9.1 Regulation 1907/2006 - REACH.

Aquatic Environment - Algae and aquatic plants.

EC₅₀ (72 h, biomasse – Scenedesmus subspicatus): 207 mg/l

EC₅₀ (72 h, growth rate – Scenedesmus subspicatus): > 345.4 mg/l

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts CAS: 68411-30-3

Toxicity to fish: Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: LC50 (96 h) Lepomis macrochirus (Bluegill sunfish): > 1 - 10 mg/l; static test; US EPA 1975 (literature value)

Toxicity to fish - Chronic toxicity: Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: NOEC (28 d) Lepomis macrochirus (Bluegill sunfish): 1 mg/l; Growth rate; model ecosystem (literature value)

Toxicity to daphnia and other aquatic invertebrates

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: EC50 (48 h) Daphnia magna (Water flea): > 1 - 10 mg/l; static test; OECD Test Guideline 202 (literature value)

Toxicity to daphnia and other aquatic invertebrates - Chronic toxicity

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Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: NOEC (32 d) Elimia: > 1 - 10 mg/l; mortality; model ecosystem; (literature value)

Toxicity to aquatic plants

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: NOEC (28 d) Elodea canadensis: > 4 mg/l; ; model ecosystem; (literature value)

Alcohols, C12-13-branched and linear, ethoxylated CAS: 160901-19-9

Toxicity to fish

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): LC50 (96 h) Cyprinus carpio (Carp): > 1 - 10 mg/l; flow-through test; OECD Test Guideline 203 own test results/literature values

Category approach

Toxicity to fish - Chronic toxicity

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): EC10 Pimephales promelas (fathead minnow): 0,21 mg/l; mortality (literature value)

Category approach

Toxicity to daphnia and other aquatic invertebrates

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): EC50 (48 h) Daphnia magna (Water flea): > 1 - 10 mg/l; static test; OECD Test Guideline 202 own test results/literature values

Category approach

Toxicity to daphnia and other aquatic invertebrates - Chronic toxicity

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): EC10 Daphnia magna (Water flea): 0,36 mg/l; Reproduction Test; OECD Test Guideline 211; (literature value)

Category approach

Toxicity to aquatic plants

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): EC50 (72 h) Desmodesmus subspicatus (green algae): > 1 - 10 mg/l; static test; OECD Test Guideline 201; own test results/literature values

Category approach

Toxicity to bacteria

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): EC50 activated sludge: 140 mg/l; Respiration inhibition

Category approach (literature value)

Toxicity to terrestrial flora

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): emergence, growth; NOEC: 10 mg/kg; Lepidium sativum (cress); OECD Test Guideline 208 own test results/literature values

Category approach

Toxicity for other terrestrial non-mammalian fauna

Alcohols, C12-13- branched and linear, ethoxylated (>5 - <15 EO): study scientifically unjustified Justification: Readily biodegradable.

12.2. Persistence and degradability.

The surfactants contained in the product are biodegradable in compliance with Annexes no. 2 and 3 of EC Regulation 648/2004 for detergents.

12.3. Bioaccumulative potential.

N.A.

12.4. Mobility in soil.

N.A.

12.5. Results of PBT and vPvB assessment.

The components of the mixture does not meet the criteria vPvB and PBT.

12.6. Other adverse effects.

None.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Disposal of the product: The elimination of the product shall comply with local and national regulations.

Disposal of uncleaned packages:

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Contaminated packaging must be recovered or disposed of in accordance with local and national regulations.

14. TRANSPORT INFORMATION

14.1 UN Number

Not classified as dangerous in the meaning of transport regulations.

14.2 UN proper shipping name

N.A.

14.3 Transport hazard class(es)

N.A.

14.4 Packing Group

N.A.

14.5 Environmental hazards

N.A.

14.6 Special Precautions for User

N.A.

14.7 Transport in bulk according to Annex II of Marpol 73/78 and the IBC Code Environmental Pollutant

N.A.

15. REGULATORY INFORMATION

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

Seveso Category: None

Restrictions concerning the product or to substances according to Annex XVII Regulation (EC) 1907/2006:

none

Candidate List substances (Article 59 REACH):

none

Substances subject to authorization (Annex XIV REACH):

none

LAW AND GENERAL BIBLIOGRAPHY

1. Directive 1999/45/EC, as amended.
2. Directive 67/548/EEC and subsequent amendments
3. Regulation (EC) 1907/2006 of the European Parliament (REACH)
4. Regulation (EC) 1272/2008 of the European Parliament (CLP)
5. Regulation (EC) No 790/2009 of the European Parliament (The ATP. CLP)
6. Regulation (EC) 453/2010 of the European Parliament
7. The Merck Index 10th Ed
8. Handling Chemical Safety
9. NIOSH - Registry of Toxic Effects of Chemical Substances
10. INRS - Fiche Toxicologique
11. Patty - Industrial Hygiene and Toxicology
12. N.I. Sax - Dangerous properties of Industrial Materials - 7, 1989 Edition
13. ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities
14. SAX'S DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold
15. ACGIH - Threshold Limit Values - 2004 edition

15.2 Chemical Safety Assessment

None.

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16. OTHER INFORMATION

Text of phrases referred to under heading 3:

R8 Contact with combustible material may cause fire.

R22 Harmful if swallowed.

R36 Irritating to eyes.

R37 Irritating to respiratory system.

R38 Irritating to skin.

R41 Risk of serious damage to eyes.

H319 Causes serious eye irritation.

H272 May intensify fire; oxidiser.

H302 Harmful if swallowed.

H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

H315 Causes skin irritation.

H290 May be corrosive to metals.

H335 May cause respiratory irritation.

H314 Causes severe skin burns and eye damage.

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:

Properties / Symbols:

Xi Irritant

R Phrases:

R41 Risk of serious damage to eyes.

Safety Phrases (S):

S2 Keep out of the reach of children.

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S46 If swallowed, seek medical advice immediately and show this container or label.

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.