

SAFETY DATA SHEET

In compliance with Regulations 1272/2008 (CLP), 1907/2006 (REACH), 648/2004 and 830/2015

Review nr. 02 del 16/10/15

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Trade name: **LINDOR**

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

Use: Washing powder.
Uses advised against: All uses not specifically listed on the label on the product packaging.

1.3. Details of the supplier of the safety data sheet

AR-CO CHIMICA S.R.L.
Via Canalazzo , 22/24
41036 MEDOLLA (MO)
ITALY
Tel. 0535-58890
Fax 0535-58898

Competent person responsible for the safety data sheet:
laboratorio@arcochimica.it

1.4. Emergency telephone number

Centro Antiveneni Ospedale Niguarda Milano T. +39 02 66101029

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.**

Adverse physicochemical, human health and environmental effects: No other hazards.

2.2. Label elements.

EC regulation criteria 1272/2008 (CLP):

AISE classification logging number: DetNet/354

SYMBOLS



Warning

Hazard statements:

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

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Precautionary statements:

P102: Keep out of reach of children.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

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 the regulations.

Special Provisions:

None

Contents:

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2.3. Other hazards.

This mixture does not meet the PBT criteria of REACH regulation, annex XIII.

This mixture does not meet the vPvB criteria of REACH regulation, annex XIII.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances.

N.A.

3.2. Mixtures.

Hazardous components within the meaning of CLP Regulation and corresponding classification:

15% - 20% **Sodium carbonate**

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

 3.3/2 Eye Irrit. 2 H319

5% - 7% **Sodium percarbonate**

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

 2.14/3 Ox. Sol. 3 H272

 3.3/2 Eye Irrit. 2 H319

5% - 7% **Sodium disilicate**

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

 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

3% - 5% **Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts**

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

 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

 3.1/4/Oral Acute Tox. 4 H302

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4.1/C3 Aquatic Chronic 3 H412



3.3/1 Eye Dam. 1 H318

The full wording of the hazard 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:

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 section 4.1.

5. FIRE-FIGHTING MEASURES

Product is not flammable.

5.1. Extinguishing media.

Suitable extinguishing media

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.

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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.

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>

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Workers	Inhalation, long-term exposure - systemic effects	12 mg/m ³	
Workers	Dermal, long-term exposure - local effects	--	Not relevant / not applicable
Workers	Inhalation, long-term exposure - local effects	12 mg/m ³	
Consumers	Dermal, Acute/short-term exposure - systemic effects	--	Not relevant / not applicable
Consumers	Inhalation, Acute/short-term exposure - systemic effects	--	Not relevant / not applicable
Consumers	Oral, Acute/short-term exposure - systemic effects	--	Not relevant / not applicable
Consumers	Dermal, Acute/short-term exposure - local effects	--	Not relevant / not applicable
Consumers	Inhalation, Acute/short-term exposure - local effects	--	Not relevant / not applicable
Consumers	Dermal, long-term exposure - systemic effects	85 mg/kg	based on body weight and day
Consumers	Inhalation, long-term exposure - systemic effects	3 mg/m ³	
Consumers	Oral, long-term exposure - systemic effects	0,85 mg/kg	based on body weight and day
Consumers	Dermal, long-term exposure - local effects	--	Not relevant / not applicable
Consumers	Inhalation, long-term exposure - local effects	3 mg/m ³	

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	Based on dry weight
Marine sediment	8,1 mg/kg	Based on dry weight
Soil	35 mg/kg	Based on dry weight
Food		Not relevant / not applicable

8.2. Exposure controls.

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.

8.2.1. Engineering controls.

If there are no applicable exposure limit requirements or guidelines, général ventilation should be sufficient for most operations.

8.2.2. Individual protection measures:

a) Eye/face protection: Use safety glasses (with side shields) should be consistent with EN 166:2001, EN172:1994, EN ISO 4007:2012.

b) Skin protection:

i) Hand protection: Chemical protective gloves be needed when handling this material (compliant with standards EN 420:2003+A1:2009)

ii) Other protection: normal working clothes (EN ISO 13688:2013).

c) Respiratory protection: not necessary for normal use.

d) Thermal hazards: none.

8.2.3. Environmental exposure controls

See SECTION 7: Handling and storage and SECTION 13: Disposal considerations for measures to prevent excessive environmental exposure during use and waste disposal.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

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Appearance	White powder with colored blue speckles
Odor	Flowery note
Odor threshold	No data available
PH value	10,8 +/- 0,3 (20°C; solution 1%)
Auto-ignition temperature	No data available
Melting point/range	Not applicable
Freezing point	Not applicable
Viscosity	No data available
Density	800 +/- 30 g/l
Water solubility (at 20°C)	Miscible
Explosive properties	Not explosive
Oxidizing properties	No oxidising properties

10. STABILITY AND REACTIVITY

10.1. Reactivity.

Under normal conditions of use there are no particular risks of reaction with other substances.

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.

11. TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects.

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.

a) Acute toxicity

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

b) Skin corrosion/irritation

The product causes skin irritation.

c) Serious eye damage/eye irritation

The product causes serious eye irritation.

d) Sensitization

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

e) Mutagenicity

No relevant data found.

f) Carcinogenicity

No relevant data found.

g) Reproductive toxicity

No relevant data found.

h) Specific Target Organ Systemic Toxicity (Single Exposure)

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

i) Specific Target Organ Systemic Toxicity (Repeated Exposure)

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Additives are encapsulated in the product and are not expected to be released under normal processing conditions or foreseeable emergency.

j) Aspiration Hazard

Based on physical properties, not likely to be an aspiration hazard.

Toxicological information on main components of the mixture:

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.

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

necessary. Justification: Negligible or unlikely exposure pathways.

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.

Acute inhalation toxicity

Acute dermal toxicity

Skin corrosion/irritation

Skin irritation

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: rabbit: irritating;

OECD Test Guideline 404 (literature value)

Causes skin irritation.

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)

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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) Target Organs: Blood Symptoms: reduced body weight gain
Aspiration hazard Aspiration toxicity Toxicological information	Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts: not applicable 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	

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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)

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

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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 reaches waterways or sewers or contaminates soil or vegetation.

11.1. Information on toxicological effects.

Sodium carbonate CAS: 497-19-8

Aquatic toxicity:

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

Crosteacei *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

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

SAFETY DATA SHEET

In compliance with Regulations 1272/2008 (CLP), 1907/2006 (REACH), 648/2004 and 830/2015

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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 be in accordance with local and national regulations.

Disposal of uncleaned packages:

Contaminated packaging must be recovered or disposed of in compliance with national waste management 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

SAFETY DATA SHEET

In compliance with Regulations 1272/2008 (CLP), 1907/2006 (REACH), 648/2004 and 830/2015

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LAW AND GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 of the European Parliament (REACH).
2. Regulation (EC) 1272/2008 of the European Parliament (CLP).
3. Regulation (EC) 830/2015 of the European Parliament.
4. The Merck Index 10th Ed.
5. Handling Chemical Safety.
6. NIOSH - Registry of Toxic Effects of Chemical Substances
7. INRS - Fiche Toxicologique
8. Patty - Industrial Hygiene and Toxicology
9. N.I. Sax - Dangerous properties of Industrial Materials - 7, 1989 Edition

Ingredients according to EC Regulation no. 648/2004:

5 to 15%: Oxygen-based bleaching agents, zeolites
 Under 5%: Anionic surfactants, nonionic surfactants, soap.
 Optical brighteners.
 Perfume

15.2 Chemical Safety Assessment.

No additional information available.

16. OTHER INFORMATION

Text of phrases referred to under heading 3:

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.

Revision:

Nr. 02 - Issue date 16/10/2015 - Changes to the previous edition:
 Compliance with regulations 215/830

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

ACGIH - Threshold Limit Values - 2004 edition

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.