

# DETABINOX DETERGENT TABLETS

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## SAFETY DATA SHEET

### 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY /UNDERTAKING\*

#### 1.1. Identification of the substance

Code: M30.2.0100  
Denomination: **DETABINOX TABS**  
Chemical name and synonyms

**1.2. Relevant identified uses of the substance or mixture and uses advised against**  
**Use of the substance/preparation :** oven detergent, professional use.  
**Registration number:** N.A. as mixture.

#### 1.3. Information about manufacturer of Safety data sheet

Company name	Inoxtrend S.r.l.
Address	Via Serenissima n. 1
City and Country	31025 S. Lucia di Piave (TV) - ITALIA
Telephone	Tel. 0438 456990 - Fax 0438 451710
e-mail of the safety responsible person responsible of material data sheet	<a href="mailto:info@inoxtrend.com">info@inoxtrend.com</a>

#### 1.4. Emergency telephone number

For urgent safety information call Centro Antiveleni Ospedale Niguarda di Milano 0039 02 66101029

(\*) revised section.  
N.D. = Not available  
N.A. = Not applicable  
[ ] = Literature

## 2. HAZARD IDENTIFICATION.\*

### 2.1. Classification of the preparation or mixture.

The mixture is classified as dangerous according to Directive 67/548/EEC and Regulation 1999/45/EC and/or Regulation 1272/2008 (CLP) (and following amendments or revision). For this reason the products requires a safety data sheet conform to directive of regulations (CE) 1907/2006 and modifications. Further information on human health and/or environmental risk is detailed in section 11 and 12 of this document.

#### Classification and symbol:

Danger Symbol: C  
R-phrase: 35, 37

Full test of R-phrase and Hazard is detailed in section 16 of this document

### 2.2. Data on Label.

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Danger labeling according to Directive 67/548/EEC and Directive 1999/45/EC (and following revision and amendments)

Symbol:

C



**CORROSIVE**

**Danger:**

**R35** Causes severe burns

**S phrase:**

**S24/25** Avoid contact with skin and eyes.

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

**S28** After contact with skin, wash immediately with plenty of water and soap and seek medical advice

**S36/37/39** Wear suitable protective clothing, gloves and eye/face protection.

**S45** In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

**Contains:** SODIUM HYDROXIDE, SODIUM METASILICATE.

## 2.3. Other hazards.

Informations not available.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS.\*

### 3.1. Substances

Not applicable.

### 3.2. Mixture.

Contains

Identification	Conc. %.	Classification according to 67/548/CEE.	Classification according to 1272/2008 (CLP).
DISODIUM METASILICATE CAS. 6834-92-0 CE. 229-912-9 INDEX. 014-010-00-8 N° REGISTRAZ. 01-2119449811-37	38 – 41 %	C R34, Xi R37	Skin Corr. 1A H314, STOT SE 3 H335
SODIUM HYDROXIDE CAS. 1310-73-2 CE. 215-185-5 INDEX. 011- 002-00-6 N° REGISTRAZ. 01-2119457892-27	20 – 25 %	C R35	Skin Corr. 1A H314, Met. Corr. 1 H290
SODIUM CARBONATE CAS. 497-19-8 CE. 207-838-8	2-4%	Xi R36	Eye Irrit. 3 H319

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<i>INDEX. 011-005-00-2</i> <i>N° REGISTR. 01-2119485498-19-XXXX</i>			
EDTA CAS. 64-02-8 CE. 200-573-9 INDEX. 607-428-00-2 N° REGISTR. 01-2119486762-27-0000	2 – 3 %	Xn R20/22, Xi R41	Acute Tox. 4 H332, Acute Tox. 4 H302, Eye Dam. 1 H318, Met. Corr. 1 H290
SULFONIC ACIDS, C14-16-ALKANE HYDROXY AND C14-16-ALKENE, SODIUM SALTS CAS. 68439-57-6 CE. 270-407-8 INDEX. – N° REGISTR. 01-2119513401-57	5 -8%	Xi R38, R41	Eye Dam. 1 H318, Skin Irrit. 2 H315

T+ = Very toxic(T+), T = Toxic (T), Xn = Harmful(Xn), C = Corrosive (C), Xi = Irritant(Xi), O = Oxidising (o), E = Explosive(E), F+ = Extremely Flammable (F+), F = Easily Flammable (F)

Full test of R-phrase and H phrase is detailed in section 16 of this document

## COMPONENTS CONFORM TO REGULATION CE N.648/2004

Contains: phosphates 15-30%, anionic surfactants 5-15%, EDTA < 5%,

### 4. FIRST AID MEASURES.\*

Take off immediately all contaminated clothing. If unconsciousness may be possible move away to fresh air, give oxygen or artificial respiration if needed. Personal protective equipment for first aid responders is recommended. Assure that emergency showers and eyes washing are next to area.

#### 4.1. First aid instructions.

EYES: Wash immediately, thoroughly with plenty of water for at least 15 minutes. After protect eyes with sterile and dry gauze or cotton. Remove contact lenses if possible. Consult an ophthalmologist.

SKIN: Wash off immediately with plenty of water. Take off immediately all contaminated clothing. If irritation persist, seek medical advice. Wash contaminated clothing before using.

INHALATION: Take the affected person away from contaminated area to fresh air. High concentration may cause asphyxia. Symptoms may include immobility or unconsciousness. Move to fresh air and keep warm and rest. First aid responder have to wear self-contained breathing apparatus. Artificial respiration only if breath is ceased. Seek immediately medical advice.

INGESTION: rinse immediately the mouth. Seek immediately medical advice. Induce vomiting only on medical supervision. Do not give anything to the person if unconscious and without medical authorization

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

For related symptom due to contained substance please refer to section 11.

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

If incident occur, seek medical advice immediately and following instructions. If possible show Safety information.

### 5. FIREFIGHTING MEASURES.\*

#### 5.1. Extinguishing media

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## SUITABLE EXTINGUISHING MEDIA:

Are the traditional ones: alcohol resistant foam, powder and water sprayed. For spilling of product not burning, air and water vaporized with fire sprinklers to dilute the concentration of flammable vapors.

## UNSUITABLE EXTINGUISHING MEDIA:

Do not use water jet and CO<sub>2</sub>.

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

### DANGERS DUE TO EXPOSURE IN CASE OF FIRE.

Avoid inhalation of gas spread from explosion or fires. They can contain CO<sub>2</sub>, carbon monoxide, sodium oxide, metallic oxides and other toxic products. Refer to section 10.

## 5.3. Advice for fire-fighter.

### GENERAL INFORMATION

Delimit area and flush water from protected site. The product is flammable: cool other container, or product from a well-protected position to avoid heating and overheating. Act in security. Wear always the complete protective fire-fighting equipment.

Dispose the contaminated water in accordance with local and national regulations.

### PROTECTIVE EQUIPMENT

Helmet with visor, fireproof clothing (jacket and trousers with straps around the arms, legs and waist), intervention gloves (fire fighting, cut-proof and dielectric), and overpressure mask with a face shield covering the entire face of the operator or use the self-respirator (self-protector) in the case of large amounts of smoke.

## 6. ACCIDENTAL RELEASE MEASURES.\*

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

Do not handle damaged containers or spilled product without adequate protective equipment. Individuals without appropriate protective equipment should be excluded from area of spill until clean-up has been completed. For further information about risk on human health, environment and protective equipment, refer to other section of this document.

### 6.2. Environmental precautions.

Avoid release into sewerage, surface water, groundwater.  
Advise immediately authorities in case of loss or spilling.

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

Contain and collect liquid with an inert absorbent (sand, earth, Kieselguhr, etc.) and place in a container for disposal. Clean spill area thoroughly with water.  
Disposal of contaminated materials according to section 13.

### 6.4. Reference to other sections.

Information regarding personal protective equipment and its disposal (if needed) is given in sections 8 and 13.

## 7. HANDLING AND STORAGE.\*

### 7.1. Precautions for safe handling.

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Keep away from food and drinks. Do not swallow the product. Use appropriate grounding and bonding practices. Operate in well-ventilated area. Handle with care. Avoid contact with skin, eyes and do not inhale dusts. Wear adequate individual protective apparatus (consult section 8)

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

Store in a cool, well-ventilated area and away from direct sunlight. Keep containers well closed and labelled. Store in well-ventilated area.

Store away from incompatible materials like acids, halogenated organic substances, mostly from trichloroethylene, aluminium and other very reactive metals, aldehyde, anhydrous, nitriles, acrylonitrile, alcohols and phenols, cyaniding, hydroquinone, organic nitro-compounds, phosphor, tetrahydrofuran, water, amphoteric metals, light metals, aluminium, zinc, tin, copper and alloys, oxidizing agents. If needed consult section 10. Store at temperature between 0°C and 40°C.

## 7.3. Specific end use.

Oven detergent

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION.\*

Description	Parameters	Country	TWA/8h mg/m <sup>3</sup>	ppm	STEL/15min mg/m <sup>3</sup>	ppm	Note
SODIUM CARBONATE	TLV-ACGIH		10				
SODIUM HYDROXIDE	TLV-ACGIH				2 (C)		
DISODIUM METASILICATE	OEL		3				Respirable fraction
	OEL		10				inhalable fraction

(C) = CEILING

### SODIUM CARBONATE

Specific: DNEL (GLOB)

Parameter: local effects Long term Inhalation workers

Value: 10 mg/m<sup>3</sup>

Parameter: local effects Long term Inhalation Population

Value: 10 mg/m<sup>3</sup>

### EDTA –DNEL value

Worker: long term exposure – systemic and local effects, inhalation: 2,5 mg/m<sup>3</sup>

Worker: short term exposure - systemic and local effects, inhalation: 2,5 mg/m<sup>3</sup>

Consumer: long term exposure – systemic and local effects, inhalation: 1,5 mg/m<sup>3</sup>

Consumer: short term exposure - systemic and local effects, inhalation: 1,5 mg/m<sup>3</sup>

Consumer: long term exposure – systemic effects, oral: 25 mg/kg/day (body weight).

## 8.1. Exposure controls

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As the use of appropriate technical measures should always take priority over personal protective equipment, ensure good ventilation in the workplace through effective local exhaust ventilation or by removing stale air.

If you exceed the threshold value or one or more of the substances in the preparation due to daily exposure in the work environment or a fraction determined by the corporate prevention and security service, wear an appropriate breathing mask. Refer to the product label for further details. Request further information to chemicals supplier about proper protective equipment. Protective equipment must fulfill Legislation requirement.



## HANDS PROTECTION

Protect your hands with work gloves, category II (Directive 89/686/EEC and EN 374) such as PVC, PVA, neoprene, nitrile, PTFE Viton latex, or equivalent. For the definitive selection of the material used for the work gloves, the following factors should be considered: degradation, breakage time and permeation. In the case of preparations, glove resistance should be tested before use because it is not foreseeable. The gloves have a durability that depends on the duration of exposure.



## EYES PROTECTION

Wear goggles that adhere to the skin (see standard EN 166) or complete mask EN 402. Do not use eye lens. It is recommended an emergency eyes washing system.

## SKIN PROTECTION

Wear work clothes with long sleeves and safety footwear for professional use in category II (refer to Directive 89/686/EEC and standard EN 344). After removing protective clothing, wash affected skin with soap and water. It is recommended an emergency shower.

## RESPIRATORY PROTECTION

If you exceed the threshold value of one or more of the substances in the preparation due to daily exposure in the work environment or a fraction determined by the corporate prevention and security service, wear half face filter type FFP2 of universal type which class (1,2 or 3) must be chosen according the the final concentration of use. (re. EN 141)

The use of respiratory protective equipment such as masks fitted with an organic vapours filter and dust/mist, is necessary in the absence of technical measures to limit worker exposure. Nonetheless, the masks provide limited protection.

In the case where the substance in question is odourless or its olfactory threshold is higher than the relative exposure limit and in case of emergency, or when exposure levels are unknown or the concentration of oxygen in the workplace is less than 17% in volume, where an open circuit compressed-air self-respirator (Standard EN 137) or an external air- uptake respirator to be used with full face mask, half face mask or mouthpiece (ref. Standard EN 138).

## 9. PHYSICAL AND CHEMICAL PROPERTIES.\*

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

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Appareance	White
Colour	White
Odour	Odourless
pH sol. 1:100 in water	12,3
Melting point/freezing point	ND (not available)
Melting point	ND (not available)
Evaporation rate	ND (not available)
Flammability (solid, gas);	ND (not available)
Self flammability	ND (not available)
Explosive limits	Not explosive
Decomposition temperature	ND (not available)
Relative density at 20°C	Appearant 1,6/1,7
Solubility in water	Soluble
Liposolubility	ND (not available)
Partition coefficient: n-octanol/water	ND (not available)
Vapour pressure	ND (not available)
Vapours density	ND (not available)
Oxydizing property	Not oxidizer

## 9.2. Other information.

Information not available.

## 10. STABILITY AND REACTIVITY.\*

### 10.1. Reactivity.

No particular danger reactions with other substances in normal condition of use. Anyhow contact with strong acids may cause strong reactions and explosions. Many exothermic reactions appeared. Corrosive power towards metals.

### 10.2. Chemical stability

Product is stable in normal condition and storage. Hygroscopic product: contact with water and moisture may cause conglomeration and solidification.

### 10.3. Possibility of hazardous reactions.

No hazardous reactions for normal storage and use. Avoid contact with incompatible materials.

DISODIUM METASILICATE: water based solutions react with aluminum, zinc, tin, copper, and alloys spreading hydrogen that may form explosive mixture in contact with air. Exothermic reactions in contact with acids.

### 10.4. Conditions to avoid.

Avoid heating and overheating

### 10.5. Incompatible materials.

EDTA SOLUTION: amphoteric metals, light metals

SODIUM HYDROXIDE: may react strongly with: acids, halogenated organic substances, mostly with ethylene trichloride, aluminum and other very reactive metals, aldehydes, anhydrous, nitriles in particular acrylonitrile, alcohols and phenols, cyanohydrin, hydroquinone, nitro-compounds organics, phosphor, tetrahydrofuran, water.

DISODIUM METASILICATE: aluminum, zinc, tin, copper and alloys. Avoid contact with oxidizing agents.

### 10.6. Hazardous decomposition products.

In case of fire or decomposition may spread gas and vapors potentially harmful for health as

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CO<sub>2</sub>, carbon mono-oxide, sodium oxide, metallic oxides and other compounds dangerous to health.

## 11. TOXICOLOGICAL INFORMATION.\*

### 11.1. Information on toxicological effects.

Product is corrosive and causes severe burns and skin vesicle that may appear also after exposure. Burns cause skin burn and pain. Contact with eyes causes severe damages to eyes and may cause corneal opacity, iris damage, irreversible pigment lost.

Vapors are caustic for respiratory system and may cause pulmonary edema, which symptoms may appear sometimes after some hours.

Symptoms of exposure may include: burn sensation, cough, respiratory difficulty, dizziness, headache, nausea and vomit. Swallowing cause burns to mouth, gorge and gullet; vomit, diarrhea, edema, blowing up of larynx. May happen the perforation of gastro-intestinal tract.

#### EDTA

DL50 rat (oral): 1.780 - 2.000 mg/kg (supplier test for solid product)

DL50 rat (oral): > 2.000 mg/kg (supplier test for product in solution about 40%)

CL50 rat (inhalation): 1000 - 5000 mg/m<sup>3</sup>/6 h (OCSE – guideline 403; statement resulted from similar chemical products).

Irritation –Valuation of irritant effect (solid product): not irritating to skin. Risk of serious damage to eyes.

Experimental data/calculated (solid product):

- Corrosion/irritation rabbit skin: not irritating. (supplier test)
- Severe damage to eyes/irritation eyes rabbit: irreversible damages (supplier test)

Experimental data/calculated (liquid product-sol.35-40%):

- Corrosion/irritation rabbit skin: not irritating. (supplier test)
- Severe damage to eyes/irritation eyes rabbit: Irritant. (supplier test)

Sensitization of respiratory tract/of skin - Experimental data/calculated (solid product):

Guinea Pig Maximation: not sensitization (OECD - guideline 406).

The product has not been tested. The statement has been derived from products of a similar structure or composition.

Mutagenicity on germinal cells – Evaluation of mutagenicity (solid product): on the most part of the test (bacterium/micro-organism/cells culture) no mutagenicity effect appeared from substance. Neither on animal test appeared this effect.

Cancerogenity – Evaluation of Cancerogenity (solid product): result of long term study on animal on rats, with oral administration, in food, the substance did not result cancerogenous. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Reproductive toxicity – Evaluation of toxicity for reproduction (solid product): the result of study on animal does not show damaging effects on fertility. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Toxic for growth – Evaluation of Teratogenity (solid product): test on animal did not show toxic effect on growth, at dose that does not show toxic for parent animal.

Specific toxicity for target organs (single exposure) - Evaluation STOT single (solid product): on available data, none specific toxicity is expected for target organs after single exposure.



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Toxicity of repeated dose and specific toxicity for target organs (repeated exposure)  
- Evaluation of the toxicity after repeated administration (solid product): no adverse effects on test on animals even after repeated administrations

Danger in case of inhalation: Not relevant.

LD50 (Oral): > 1780 mg/kg rat

LC50 (Inhalation): > 1000 mg/m<sup>3</sup>/6h rat (evaluated from similar products)

## SODIUM HYDROXIDE

LD50 (Inhalation): 4.800 mg/kg/1 hour (rat)

LD50 (skin): 1.350 mg/kg (rabbit)

LD50 (Oral): 500 mg/kg (rabbit)

Chronic effects: aerosol inhalation may cause bronchogenic pneumonia. Irritation to nose and gorge, respiratory difficulty. Repeated exposure may cause hemorrhage to nose.

Acute effects: powders are corrosive to digestive mucosae, eyes and skin. Swallowing causes burns to mouth, gorge, esophagus, nausea, black color vomit, risk of gorge edema and state of shock. In the most serious cases, it may happen the perforation of gastro-intestinal tract and cardiovascular arrest.

Experience on human being: mortal dose in one shot for a man weight 70 kgs is 5-8 grams.

## DISODIUM METASILICATE

LD50 (Inhalation): > 2,06 g/m<sup>3</sup> (rat)

LD50 (Oral): 1152 – 1349 mg/kg (rat)

LD50 (Skin): > 5000 mg/kg (rat)

NOAEL (read-across): > 159 mg/kg (rat)

NOAEL (read-across): > 200 mg/kg (mouse)

NOAEL (Oral): 227 mg/kg (rat)

NOAEL (Oral): 260 mg/kg (mouse)

Experience on human being: with contact with skin, danger of skin absorption and irritation to skin and mucosae

## SODIUM CARBONATE

LD50 (Inhalation): 0,8 mg/L/2h (Guinea Pig)

LD50 (Inhalation): 1,2 mg/L/2h (mouse)

LD50 (Inhalation): 2,3 mg/L/2h (rat)

LD50 (Oral): 2800 mg/kg (rat)

LD50 (Skin): > 2000 mg/kg (rabbit)

## SULFONIC ACIDS, C14-16-ALKANE HYDROXY AND C14-16-ALKENE, SODIUM SALTS

LC50 (Inhalation): > 52 mg/L/4h (rat)

LD50 (Oral): 2079 mg/kg (rat)

LD50 (skin): 6300 – 13500 mg/kg (rabbit)

NOAEL (Oral): 227 mg/kg

Contact with skin: irritating to skin.

Contact with eyes: exposure to atmospheric concentration over the law limits may cause irritation to eyes.

Inhalation: exposure to atmospheric concentration over the law limits may cause irritation to nose, gorge and lungs.

Ingestion: irritant to mouth, gorge and stomach.

Sensibilisation (Guinea Pig OECD 406): no sensibilisation.

Mutagenicity: OECD 471 Bacterial Reverse Mutation Test, OECD 476 *In vitro* Mammalian Cell Gene Mutation Test, OECD 473 *In vitro* Mammalian Chromosomal Aberration Test: negative.

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Teratogenicity: OECD 414 Prenatal Developmental Toxicity Study: NOAEL= 2 mg/kg (rabbit).

## 12. ECOLOGICAL INFORMATION.\*

Use according good working practice; avoid spreading the product into environment  
Advise immediately authorities in case of lose or spilling.

### 12.1. Toxicity.

#### SODIUM HYDROXIDE

LC50 (96 hours): 72 mg/L (*Gambusia affinis*)

EC80 (48 hours): 33 - 100 mg/L (*Daphnia magna*)

#### SODIUM CARBONATE

EC50 (48 h): 200-227mg/L *Ceriodaphnia dubia*

LC50 (96 h): 300mg/L *Lepomis macrochirus*

#### DISODIUM METASILICATE

EC50 (72 h): 207 mg/L (*Scenedesmus subspicatus*)

LC50 (96 h): 1108 mg/L (*Brachydanio rerio*)

EC50 (48 h): 1700 mg/L (*Daphnia magna*)

#### EDTA

The product probably is not harmful for aquatic organisms.

The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Fish toxicity: CL50 (96 h) > 100 mg/L, *Lepomis macrochirus* (OPP 72-1 (EPA directive), static). Nominal concentration. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Aquatic invertebrates: CE50 (48 h) > 100 mg/L, *Daphnia magna* (DIN 38412 part 11, static) Nominal concentration. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Aquatic plants: CE50 (72 h) > 100 mg/L (growth tax), *Scenedesmus obliquus* (Directive 88/302/CEE, parte C, p89, static). Nominal Concentration.

Microorganisms/Effects on active muds: CE20 (30 min) > 500 mg/L, active mud, domestic (OECD - guideline 209, aquatic). Nominal concentration. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Chronic toxicity on fish: NOEC (35 d) >= 36,9 mg/L, *Brachydanio rerio* (Guideline OECD 210, Flux). The indications of toxic action are referred to concentration analytically determined. The product has not been tested. The statement has been derived from products of a similar structure or composition.

Chronic toxicity for aquatic invertebrates: NOEC (21 d), 25 mg/L, *Daphnia magna* (OECD - guideline 211, semi static). Nominal concentration. The product has not been tested. The statement has been derived from products of a similar structure or composition.

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Toxicity to soil dwelling organisms: CL50 (14 d) 156 mg/kg, *Eisenia foetida* (OECD - guideline 207, artificial soil). The product has not been tested. The statement has been derived from products of a similar structure or composition.

Other terrestrial non-mammals: study scientifically not justified.

LC50 (96 h): >100 mg/L *Lepomis macrochirus* (deducted from similar product)

IC50 (72 h): >100 mg/L *Scenedesmus obliquus* (growth tax)

EC50 (48 h): >100 mg/L *Daphnia magna* (deducted from similar product)

PNEC fresh water: 2,2 mg/L. Derivate is referred to free acid

PNEC salt water: 0,22 mg/L. Derivate is referred to free acid

PNEC irregular emission: 1,2 mg/L. Derivate is referred to free acid.

PNEC soil: 0,72 mg/kg. Derivate is referred to free acid

PNEC depuration plant: 43 mg/L. Derivate is referred to free acid.

## **SULFONIC ACIDS, C14-16-ALKANE HYDROXY AND C14-16-ALKENE, SODIUM SALTS**

LC50 (96 h): 4,2 mg/L (*Brachydanio rerio*), OECD 203

EC50 (48 h): 4,53 mg/L (*Daphnia magna*), OECD 202

EC50 (72 h): 5,2 mg/L (*Skeletonema costatum*, *Phaeodactylum tricornutum*)

IC50 (3 h): 230 mg/L (*bacteria*), OECD 209

### **12.2 Persistence and degradability**

No data available for mixture.

SODIUM HYDROXIDE: In water hydrolyses immediately with increase of the pH, in air it neutralizes for effect on atmospheric CO<sub>2</sub>.

EDTA: evaluation of biodegradability and elimination (H<sub>2</sub>O), was found to be potentially biodegradable. Not readily biodegradable (by OECD criteria).

SODIUM CARBONATE: easy to hydrolyze

DISODIUM METASILICATE: the organic silicates soluble to dissolution depolymerize quickly in molecular kinds that can be confused from dissolved natural silicates

Combination with ions of Ca, Mg, Fe, Al and other till form insoluble compounds similar to natural soils.

SULFONIC ACIDS, C14-16-ALKANE HYDROXY AND C14-16-ALKENE, SODIUM SALTS: easily biodegradable (evaluation from similar product).

### **12.3. Bio accumulative potential.**

No data available for mixture.

EDTA: bio concentration factor is about 1,8 (28 days), *Lepomis macrochirus*. Accumulation in organisms is unlikely.

SODIUM CARBONATE: not bio accumulative.

DISODIUM METASILICATE: product is not bio accumulative.

SULFONIC ACIDS, C14-16-ALKANE HYDROXY AND C14-16-ALKENE, SODIUM SALTS: low potential of bio accumulation. BCF= 70,8 and LogP<sub>ow</sub>= -1,3.

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

No data available for mixture.

EDTA: the substance does not evaporate in the air from water surface. Soil absorption is not prevue from solid phase.

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

No data available for mixture.

SODIUM HYDROXIDE: this product is not, and does not contain, substance classified PBT or vPvB.

EDTA: according to Annex XIII of Regulation (EC) N.1907/2006 concern the registration, the evaluation, the authorization and restriction of chemical substances (REACH), does not require

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the classification criteria as substance PBT (persisting/ bioaccumulable/ toxic). Auto classification

SODIUM CARBONATE: this product is not, and does not contain, substance classified PBT or vPvB.

## 12.6. Other adverse effects.

No data available for mixture.

## 13. DISPOSAL CONSIDERATIONS.\*

### 13.1. Waste treatment methods

Recycle, if possible. Act in accordance with local and national regulations. Refer to current national legislation. Do not release into sewerage. Do not pollute watercourses. Residues have to be considered as dangerous waste.

#### CONTAMINATED PACKAGING

Indications: empty containers shall not be released to the environment.

Remarks: user has to ensure that no other regional or national rules are in force.

## 14. TRANSPORT INFORMATION

Transport must be done with vehicles authorized to transport of dangerous goods according to A.D.R. and National regulations. Transport of goods must be in their original packaging and anyhow in packaging made with material that cannot be attached from contained product and that cannot react dangerously with contained product. Transportation, including loading and unloading must be carried out by people who have received the necessary training required by the modal regulations concerning the transport of dangerous goods.

### Road and Railway Transport:

Class ADR/RID:	8	UN: 3262	
Classification code:	C6		
Packing Group:	II		
ADR Label:	8		
Nr. Kemler:	80		
Limited Quantity:	1 kg		
Tunnel restriction code	E		
Special reg.:	274		

Technical name: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, DISODIUM TRIOXOSILICATE)

### Shipping transport:

Class IMO:	8	UN: 3262	
Packing Group:	II		
Label:	8		
Marine Pollutant.	NO		
Proper Shipping Name:	CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, DISODIUM TRIOXOSILICATE)		

### Air transport:

IATA:	8	UN: 3262	
Packing Group:	II		
Label:	8		
Cargo:			
Packaging instructions:			

Pass.:

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Packaging instructions:

Special instruction:

Proper Shipping Name: CORROSIVE SOLID, BASIC, INORGANIC, N.O.S. (SODIUM HYDROXIDE, DISODIUM TRIOXOSILICATE)

## 15. REGULATORY INFORMATION.\*

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

This document has been written following scheme and rules of below Directive and Regulation. It is underlined that this mixture is for food application, hence it is out of the scope of the below Legislation.

1. Directive 1999/45/EC and following amendments;
2. Directive 67/548/EEC and following amendments;
3. Regulation (EC) 1907/2006 of European Parliament (REACH)
4. Regulation (EC) 1272/2008 of European Parliament (CLP)
5. Regulation (EC) 790/2009 of European Parliament (I Atp. CLP)
6. Regulation (EC) 286/2011 of European Parliament (II Atp. CLP)
7. Regulation (EC) 618/2012 of European Parliament (III Atp. CLP)
8. Regulation (EC) 453/2010 of European Parliament

When applicable, refer to following directive:

D.Lgs. 21 September 2005 n. 238 (Directive Seveso Ter)

Seveso class. None

Restriction related to the mixture or contained substance, according to Annex XVII, Regulation EC 1907/2006.

Point 3

Substance in Candidate List (Art. 59 REACH).

None

Substance edified for Authorization (Annex XIV REACH)

None

Sanitary controls.

Workers exposed to this chemical agent must be monitored for health issues according to Legislation.

### 15.2. Chemical safety assessment.

Not available

## 16. OTHER INFORMATION.\*

Full Danger and H-phrase indicated in section 2-3 of this document

- Acute Tox. 4 Acute toxicity, category 4
- Eye Dam. 1 severe damage to eyes, category 1
- Met. Corr. 1 Corrosive to metals, category 1
- Skin Irrit. 2 Skin irritation, category 2
- Eye Irrit. 2 Eye irritation, category 2

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Skin Corr. 1A Skin corrosion, category 1A  
STOT SE 3 Specific target organ toxicity — single exposure, category 3  
H290 May be corrosive to metals  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage  
H315 Causes skin irritation.  
H318 Causes severe damage to eyes.  
H319 Causes serious eye irritation  
H332 Harmful if inhaled.  
H335 May irritate respiratory system.

Full Danger and R-phrase indicated in section 2-3 of this document

R20/22: HARMFUL BY INHALATION AND IF SWALLOWED  
R34: CAUSES BURNS  
R35: CAUSES SEVERE BURNS.  
R36: IRRITATING TO EYES.  
R37: IRRITATING TO RESPIRATORY SYSTEM.  
R38: IRRITATING TO SKIN  
R41: RISK OF SERIOUS DAMAGE TO EYES

## LITERATURE:

1. The Merck Index. Ed. 10
2. Handling Chemical Safety
3. Niosh - Registry of Toxic Effects of Chemical Substances
4. INRS - Fiche Toxicologique
5. Patty - Industrial Hygiene and Toxicology
6. N.I. Sax - Dangerous properties of Industrial Materials-7 Ed., 1989

## Note for the user:

The information on this sheet is based on information that was available at our premises as of the date of the last version.

The user must make sure such information is complete in relation to the specific use being made of the product.

Said document must not be interpreted as a guarantee of any specific property of the product. Since the use of the product is not under our direct control, it is the responsibility of the user to observe the law and other provisions in force on matters of health and safety. We shall not be held liable for any improper uses.