Eco Cleaner

Safety Data Sheet

1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1. Product Identifier

Code:	610004215
Name :	**Eco Cleaner tabs flowpack**
Chemical name and synonims :	FA7 tabs

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

Description/Usage : Detergent Tablets for coffee machines.
Registration number: N.A. as mixture.

1.3. Details of the supplier of the safety data sheet

Supplier	Forenz'Dino Zoani snc
Address	Via XXV Aprile 4/b
City / P.O Code	20030 Senago MI - ITALIA
Telephone	0039 02 9981050
E-mail competent person	forenzmail@libero.it
Responsible for the safety data sheet	Dott. Silvano Invernizzi

1.4. Emergency telephone number

For urgent inquiries refer to CAV Hospital Niguarda Milan 0039 02 66101029.

(*) The symbol indicates that the information has been updated to the date of revision.
N.D. = Not available
N.A. = Not applicable
[ ] = Bibliographic reference

2. HAZARDS IDENTIFICATION *

2.1. Classification of the substance or mixture

The product is classified as dangerous in accordance with Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety data sheet complies with the provisions of Regulation (EC) 1907/2006 and subsequent amendments.

Hazard symbols
GHS07
GHS05
Classification
Acute Tox. 2 H302 Harmful if swallowed.
Skin Corr. 1A H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes severe eye damage.
Met. Corr. 1 H290 May be corrosive to metals.
Label Elements
This product subject to hazard labeling pursuant to Regulation (IS) 1272/2008 (CLP) (and subsequent amendments and supplements).

Pictograms:

	
ATTENTION	**Danger**

Hazard Statements:

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.

Precautionary Statements:

P234 Keep only in original container.
P260 Do not breathe dust / fume / and gas / mist / vapors / spray.
P264 Wash hands thoroughly after use.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves / protective clothing / eye protection / face protection.
P301+P330+P331 IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
P301+P312 IF SWALLOWED : Call a POISON CENTER a doctor or physician If you feel unwell.
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.
P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 IN CASE OF CONTACT WITH EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue to rinse.
P310 Immediately call a POISON CENTER or Doctor/physician .
P330 Rinse mouth.
P363 Wash contaminated clothing before reuse..
P390 Absorb spillage to prevent material damage
P406 Store in corrosive resistant / provided with a resistant inner liner.
P501 Dispose of contents / container in accordance with the regulations.

Special Provisions: none.

Contains : sodium percarbonate, disodium metasilicate.

2.3. Other Hazards

Information not available.

3. COMPOSITION/INFORMATION ON THE INGREDIENTS*

3.1. Substances
Information not relevant..

3.2. Mixtures
Contains:

Identification	Conc. %	Classification 67/548/CEE o 1999/45/CEE	Classification 1272/2008 (CLP)
SODIUM CARBONATE **CAS 497-19-8** **EC 207-838-8** **INDEX 011-005-00-2** **N ° REGISTRATION. 01-2119485498-19**	**40 – 50 %**	**Xi R36**	**Eye Irrit. 2 H319**
SODIUM PERCARBONATE ***CAS 15630-89-4*** ***CE 239-707-6*** ***INDEX -*** ***N° REGISTRATION. 01-2119457268-30***	**15 – 28 %**	**O R8, Xn R22, Xi R41**	**Acute Tox. 4 H302, Eye Dam. 1 H318, Ox. Solid 3 H272**
DiSODIUM METASILICATE **CAS 6834-92-0** **EC 229-912-9** **INDEX 014-010-00-8** **N ° REGISTRATION. 01-2119449811-37**	**6 – 8 %**	**C R34, Xi R37**	**Skin Corr. 1A H314, Met. Corr. 1 H290, STOT SE 3 H335**
(1-IDROSSIETILIDEN) BIPHOSPHONATE SODIUM ***CAS 29329-71-3*** ***CE 249-559-4*** ***INDEX: -***	**1 – 5 %**	**Xi R36**	**Met. Corr.1 H290, Acute Tox. 4 H302, Eye Irrit. 2 H319**
REACTION PRODUCT OF BENZENSULFONIC ACID, 4-C10-13 SEC-ALKYL DERIVATES ,BENZENESULFONIC ACID, 4-METHYL AND SODIUM HYDROXIDE ***CAS*** ***EC 932-051-8*** ***INDEX -*** ***N ° REGISTRATION. 01-2119565112-48-0000***	**1 – 5 %**	**Xi R38, R41**	**Skin Irrit. 2 H315, Eye Dam. 1 H318**

T + = Very Toxic (T +), T = Toxic (T), Xn = Harmful (Xn), C = Corrosive (C), Xi = lrritating (Xi), O = Oxidising (O), E = Explosive (E), F + = Extremely flammable (F +), F = Highly flammable (F)

The complete list of the Risk (R) and hazard (H) phrases is given in section 16 of this document.

IGREDIENTS MEETING THE REQUIREMENTS OF THE EUROPEAN REGULATION ON DETERGENT CE N.648/2004

Contains oxygen based bleaching agents 15-30%, anionic surfactants, phosphonates, polycarboxylates <5%.

4. FIRST AID MEASURES *

4.1. Description of first aid measuresEYES: Wash immediately with plenty of water for at least 15 minutes, holding the eyelids apart, protect the eyes with sterile gauze or a clean handkerchief dry. Remove the eyepiece lenses, if present. Consult a doctor immediately.
SKIN: Take off contaminated clothing as soon as possible. Immediately wash with mild soap and water areas of the body, even if only suspected. Consult a doctor immediately. Wash contaminated clothing before reuse.
INHALATION: Remove to fresh air and keep at rest. If breathing is irregular, seek medical advice immediately. Keep the casualty in the recovery position. Loosen tight clothing such as ties, collars, belt or waistband.
INGESTION: Rinse mouth immediately with water. Remove dentures if any. Consult your doctor immediately. Keep the patient at rest in a position comfortable for breathing. Do not

induce vomiting. If vomiting comes spontaneously, keep airway clear. Never give anything by mouth to an unconscious person unless authorized by the physician.

4.2. Most important symptoms and effects, both acute and delayed
No episodes of damage to health ascribable to the product.

4.3. Indication of any immediate medical attention and special treatment needed
In case of accident or if you feel unwell, seek medical advice immediately and follow the instructions. If possible, show the safety data sheet.

5. FIREFIGHTING MEASURES

5.1. Extinguishing media
The product is oxidizing and in contact with combustible material may cause fire. On contact with hot surfaces or flames decomposes, with the risk of release of substances that increase the danger of fire.
SUITABLE EXTINGUISHING MEDIA
Extinguishing media which are the conventional kind: carbon dioxide, alcohol-resistant foam, powder and nebulised water. For product leaks and spills that have not caught fire, nebulized water may be used to disperse the flammable vapors and protect the people involved in stopping the leakage.
NOT SUITABLE EXTINGUISHING MEDIA
Do not use water jet. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture
HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE
Avoid inhalation of the gas resulting from explosion or fire. In case of fire may liberate carbon dioxide, carbon monoxide, phosphorus compounds, nitrogen oxides, acetic acid and other potentially toxic compounds for health. For further information refer to section 10 of this document.

5.3. Advice for firefighters
General information Move out from dangerous area unauthorized and unprotected perons. Cool by spraying with water, containers exposed to fire to prevent product decomposition and the development of substances potentially hazardous for health. Perform all the steps in safety. Always wear full fire prevention. Collect extinguishing water that must not be discharged into drains. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.
EQUIPMENT Hardhat with visor, fireproof clothing (fireproof jacket and trousers with straps around arms, legs and waist), work gloves (fireproof, cut proof and dielectric), a depressurised mask with facemask covering entirely the face of the operator or self-respirator (self-protector) in the event of large quantities of smoke.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and procedures in case of emergency
Eliminate all sources of ignition (cigarettes, flames, sparks, etc..) From the area where the leak occurred. Avoid generation of static electricity. Stop leak if safe to do so. Avoid formation of dust. Do not breathe dust. Do not handle damaged containers or the leaked product before donning appropriate protective gear. Remove unprotected persons. For information on risks for the environment and health, protection of the respiratory airways, ventilation and individual protective measures, refer to the other sections of this sheet.

6.2. Environmental precautions
Prevent product from entering drains, surface water, ground water and neighboring areas. In the case of seepage into water course or sewage alert the relevant authorities.

6.3. Methods and materials for containment and cleaning up
Avoid formation of dust. In case of spills collect in suitable container (made of material not incompatible with the product). Remove most of the resulting material with non-sparking tools and deposit it in containers for disposal. Eliminate the rest using jets of water if there are no contraindications. Ensure adequate ventilation of the area affected by the loss. 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
Keep away from food and drink. Do not swallow the product. Handle in accordance with good industrial hygiene and safety practice. Provide adequate ventilation of the place of use. Handle with extreme caution. Avoid contact with skin, eyes and do not breathe dust. Avoid generation of static charges by providing the grounding of the equipment. Avoid formation of dust. Before the transfer operations, make sure that the containers there are no incompatible materials residue. Wear appropriate personal protective equipment (see section 8).

7.2. Conditions for safe storage, including any incompatibilities
Store in a cool, well-ventilated place and away from direct sunlight. Keep away from sources of ignition, flames and sparks. Avoid generation of static electricity. Avoid formation of dust. Store in airtight and labeled containers. Store in a well-ventilated area. Store at room temperature between 5 ° C and 40 ° C. Store away from incompatible materials such as acids, alkalis, aluminum, zinc, tin, copper and their alloys, metals, metal salts, acids, alkalis, reducing agents. For more information see also section 10 of this sheet.

7.3. Specific End Use(s)
Detergent Tablets for coffee machines.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION *

8.1. Control Parameters

Sodium carbonate ; Nr. CAS : 497-19-8
Specification: DNEL (EC)
Parameter: Local effects Long term Inhalation Workers
Value: 10 mg / m3
Parameter: Local Effects_Long Term_Inhalation_Population
Value: 10 mg / m3
Specification: TLV / TWA (EC)
Value: 10 mg / m3

Sodium percarbonate ; Nr. CAS : 15630-89-4
Specification: DNEL (EC)
Parameter: Local effects Short-term Dermal Workers
Value: 12.8 mg / cm2
Parameter: Local effects_Long term_Dermal_Workers
Value: 12.8 mg / cm2
Parameter: Local effects_Long term_Inhalation_workers
Value: 5 mg / m3
Parameter: Local effects_Short-term_Dermal_Population

Value: 6.4 mg / cm2
Parameter: Local effects_Long term_Dermal_Population
Value: 6.4 mg / cm2
Specification: PNEC STP (EC)
Value: 16.24 mg / l
Specification: PNEC (EC)
Parameter: Freshwater
Value: 0.035 mg / l
Parameter: Sea Water
Value: 0.035 mg / l
Parameter: Occasional output
Value: 0.035 mg / l
Specification: TLV / TWA (EC)
Parameter: Respirable fraction
Value: 3 mg / m3
Parameter: Inhalable fraction
Value: 10 mg / m3

Disodium metasilicate ; Nr. CAS : 6834-92-0
Specification: DNEL (EC)
Parameter: Systemic effetcs_Long term_Dermal_Workers
Value: 1.49 mg / kg
Parameter: Systemic effetcs_Long term_Inhalation_Workers
Value: 6.22 mg / m3
Parameter: Systemic effetcs_Long term_Dermal_Population
Value: 0.74 mg / kg
Parameter: systemi effetcs_Long term_Inhalation_Population
Value: 1.55 mg / m3
Parameter: Systemic effetcs_Long term_Oral_Population
Value: 0.74 mg / kg
Specification: OEL (EC)
Parameter: Inhalable fraction
Value: 3 mg / m3
Parameter: Respirable fraction
Value: 10 mg / m3
Specification: PNEC (EC)
Parameter: Occasional output
Value: 7.5 mg / l
Parameter: Sewage Treatment Plant
Value: 1000 mg / l
Parameter: Freshwater
Value: 7.5 mg / l
Parameter: Sea Water
Value: 1 mg / l
REACTION PRODUCT OF BENZENESULFONIC ACID, 4-C10-13 SEC-ALKYL DERIVATES AND BENZENSULFONIC ACID, 4-METHYL AND SODIUM HYDROXIDE
Specification: DNEL (EC)
Workers, Dermal, Acute Exposure / short term - Systemic effects:
Not applicable / not applicable
Workers, Inhalation, Exposure acute / short-term - Systemic effects:
Not applicable / not applicable
Workers, Dermal, Acute Exposure / short term - Local effects:
Not applicable / not applicable
Workers, Inhalation, Exposure acute / short-term - Local effects:
Not applicable / not applicable
Workers, Dermal, Long-term exposure - systemic effects:

170 mg / kg in reference to body weight and day

8.2. Exposure controls

As the use of adequate technical equipment must always take priority over personal protection equipment, ensure good ventilation at the workplace through effective local aspiration of the exhaust by good air vent. If these steps do not keep the concentration of the product below the exposure limit values in the workplace, wear suitable protection for the respiratory tract. During usage see product label for hazard details. When selecting personal protective equipment if necessary, request advice from their chemical supplier. The personal protective equipment must comply with the rules in force indicated below. Ensure that safety showers and eye wash facilities are located in the vicinity of places where you can check and contact with eyes or skin.

HAND PROTECTION

Protect your hands with gloves category II (ref. Directive 89/686 / EEC and standard EN 374), such as PVC, PVA, neoprene, nitrile, fluorine elastomers, PTFE, Viton or equivalent. Final selection of glove material must be considered work: degradation, breakage times and permeation. In the case of preparations the resistance of protective gloves should be checked before use, as it can be unpredictable. The gloves have a time limit depends on the duration of exposure.

EYE PROTECTION

Wear protective airtight goggles (ref. Standard EN 166) or a full facepiece 402 EN Do not use eye lens. Provide for the installation of eyewash stations in the vicinity of the workplace.

SKIN PROTECTION

Wear work clothes with long sleeves and safety shoes for professional use category II (ref. Directive 89/686 / EEC and standard EN 344). Wash with soap and water after removing protective clothing. Provide for the installation of safety showers in the vicinity of the workplace.

RESPIRATORY PROTECTION

In case of exceeding the threshold value for one or more of the substances present in the preparation for daily exposure in the workplace or to a fraction established by the service of prevention and protection business, wear a breathing protection combined Type A-P2 or ABEK-P2 (ref. standard EN 141). Usage of respiratory protection, such as masks with organic vapor and dust / mist cartridges, is necessary in the absence of technical measures limiting worker exposure. The protection provided by masks is in any case limited. In the case in which the substance in question is odorless 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% volume, wear a compressed air breathing apparatus open circuit (ref. standard EN 137) or fresh air breathing apparatus for use with full face mask, half mask or mouthpiece (ref. standard EN 138). Should there be a risk of exposure to splashes or squirts during work performed, there should be an adequate protection of the mucous membranes (mouth, nose, eyes) in order to prevent accidental absorption.

9. PHYSICAL AND CHEMICAL PROPERTIES *

9.1. Information on basic physical and chemical properties

Appearance	Tabs
Color	White
Odour	Characteristic
pH	< 1
Distillatin range	ND (not available)
Flash point	ND (not available)
Evaporation rate	ND (not available)
Flammability (solid/gas)	ND (not available)
Autoignition	ND (not available)
Explosive properties	Non explosive
Comburent properties	Non comburent
Relative Densiti at 20° C	1.2 g/mL
Solubility in water	Soluble
Lipid solubility	ND (not available)
(n-Octanol / Water) Partition coefficient	ND (not available)
Vapor pressure	ND (not available)
Vapor Density	ND (not available)
Oxidising properties	ND (not available)

9.2. Other informations

Not available

10. STABILITY AND REACTIVITY *

10.1. Reactivity

There are no particular risks of reaction with other substances in normal conditions of use. It may be corrosive towards metals. Reacts with reducing agents and acids.

10.2. Chemical Stability

The product is stable in normal conditions of use and storage.

10.3. Possibility of hazardous reactions

In normal conditions of use and storage is not hazardous reactions are foreseeable.
However, avoid contact with incompatible materials. Protect against moisture.

10.4. Conditions to avoid

Observe the usual precautions against chemicals. Avoid overheating, electrostatic discharge and all sources of ignition. Do not expose to moisture.

10.5. Incompatible materials

Sodium percarbonate: decomposition catalysts, metals, metal salts, acids, alkalis, reducing agents. Reaction with reducing agents.
Sodium carbonate reacts with acids to liberate CO2.
Disodium metasilicate: Avoid contact with aluminum, zinc, tin, copper and their alloys.

10.6. Hazardous decomposition products

Thermal decomposition or in case of fire potentially dangerous to health vapors or gases may be released; such as carbon dioxide, carbon monoxide, phosphorus compounds, nitrogen

oxides, acetic acid and other toxic compounds potentially harmful for health.

11. TOXICOLOGICAL INFORMATION*

11.1. Information on toxicological effects

The product is corrosive and causes severe burns and blistering on the skin, which can occur even after exposure. Burns cause strong burning sensaton and pain. Contact with eyes causes severe injury and may cause corneal opacity, iris lesions, irreversible eye coloration. Ingestion may cause burns to mouth, throat and esophagus; vomiting, diarrhea, edema, larynx swelling and, consequently, asphyxia. , Perforation of the gastrointestinal tract can occur.

SODIUM PERCARBONATE
LD50 (oral): 1034 mg / kg (rat)
LD50 (oral): 893 mg / kg (rat, female)
LD50 (oral): 1164 mg / kg (rat, male)
LD50 (Dermal):> 2000 mg / kg (rabbit)
LD50 (Inhalatorium): 700 mg / m 3 (mouse)

Skin irritation (OECD 404): May be slightly irritating
Eye irritation (OECD 405): strong irritant (determined on rabbit eyes)
Sensitisation: not cause sensitisation.

SODIUM CARBONATE
LC50 (Inhalatorium) 2300 mg / m3 / 2 hours (rat)
LD50 (oral): 2800 mg / kg (rat)
LD50 (Dermal):> 2000 mg / kg (rabbit)
Causes severe eye irritation.
Skin irritation (OECD 404): non-irritant (Determined rat)
There are no experimental information about the mutagenicity in vitro.

DISODIUM METASILICATE
LC50 (Inhalatorium):> 2.06 mg / l / 4 h (rat)
LD50 (oral): 1152-1349 mg / kg (rat)
LD50 (Dermal):> 5000 mg / kg (rat)
Skin irritation (OECD 404): Corrosive (Determined rat)
Eye irritation (OECD 405): Corrosive (determined on rabbit eyes) No sensitizing effects known.

(1-IDROSSIETILIDEN) BIPHOSPHONATE SODIUM CAS 29329-71-3
LD50 (oral):> 2000 mg / kg (rat) according to OECD 401
Primary irritant effect:
• on the skin (Rabbit OECD 404): No irritant effect.
• on the eye (Rabbit OECD 405): Irritant.
Sensitization (Guinea pig OECD 406): No sensitizing effects known.
Additional toxicological information: The product, according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest valid version, presents the following risks: irritant

REACTION PRODUCT OF BENZENESULFONIC ACID, 4-C10-13 SEC-ALKYL DERIVATES AND BENZENSULFONIC ACID, 4-METHYL AND SODIUM HYDROXIDE
LD50 (oral): 2000-5000 mg / kg (rat), according to OECD TG 401
LD50 (Dermal):> 2000 mg / kg (rat), according to OECD TG 402 The data are derived from evaluations or test results obtained with similar products (conclusion by analogy).
Primary irritant effect:
• on the skin (Rabbit OECD TG 404): irritant.
• on the eye (Rabbit OECD TG 405): Causes severe eye damage.
Sensitization (Guinea pig OECD TG 406): not sensitizing. The data are derived from

evaluations or test results obtained with similar products (conclusion by analogy).
Genotoxicity in vitro and in vivo: non-mutagenic (OECD TG 471).
Carcinogenicity: rat; dermal; 2 years; 5 days / week; OECD TG 453 (literature value). Animal testing did not show any carcinogen effect. Data are derived from evaluations or test results obtained with similar products (conclusion by analogy) Reproductive toxicity: study scientifically unjustified.
There are no embryotoxic effects were observed in experiments on animals. Data are derived from evaluations or test results obtained with similar products (conclusion by analogy). Teratogenicity: rat; drinking water; 20 days
NOAEL: 300 mg / kg (in reference to body weight and day)
NOAEL (pregnant female): 300 mg / kg (in reference to body weight and day) (literature value). Data are derived from evaluations or test results obtained with similar products (conclusion by analogy). Specific target organ toxicity (STOT) - single exposure: The substance or mixture is not classified as a target organ toxicant, single exposure.
Specific target organ toxicity (STOT) - repeated exposure The substance or mixture is not classified as a specific target organ toxicant, repeated exposure.
Repeated dose toxicity: rat; drinking water; subchronic toxicity NOAEL: 85 mg / kg (in reference to body weight and day) LOAEL: 145 mg / kg (in reference to body weight and day) Target Organs: Kidney (literature value) data are derived from evaluations or test results obtained with similar products (conclusion by analogy). mouse; dermal; subchronic toxicity NOAEL: 440 mg / kg (in reference to body weight and day); OECD TG 411 (literature value) Data are derived from evaluations or test results obtained with similar products (conclusion by analogy). Toxicological Information: Absorption through the skin is possible. The substance is metabolized and eliminated by secretion. Bioaccumulation is improbabile.

12. ECOLOGICAL INFORMATION*

Use according to good working practices, avoiding disposal in the environment. Inform the competent authorities if the product has reached waterways or sewers or contaminate soil or vegetation.

12.1. Toxicity

SODIUM PERCARBONATE
EC50 (140 h): 8 mg/L (algae anabaena)
LC50 (96 h): 70,7 mg/L (fish *Pimephales promelas*)
EC50 (48 h): 4,9 mg/L (*Daphnia magna*)
NOEL (96 h): 7,4 mg/L (fish *Pimephales promelas*)
NOEL (48 h): 2 mg/L (*Daphnia magna*)
SODIUM CARBONATE
EC50 (48 h): 200 – 227 mg/L (*Daphnia magna*)
LC50 (96 h): 300 mg/L (fish *Lepomis macrochirus*)
DISODIUM METASILICATE
EC50 (72 h): 207 mg/L (Algae *Scenedesmus subspicatus*)
LC50 (96 h): 2320 mg/L (fish *Gambusia affinis*)
EC50 (48 h): 1700 mg/L (*Daphnia magna*)
(1-IDROSSIETILIDEN) SODIUM BIPHOSPHONATE CAS 29329-71-3
LC50 (96 h): > 300 mg/L (Fish), secondo OECD 203
EC50 (48 h): > 100 mg/L (*Daphnia magna*), secondo OECD 202
REACTION PRODUCT OF BENZENESULFONIC ACID, 4-C10-13 SEC-ALKYL DERIVATES AND BENZENSULFONIC ACID, 4-METHYL AND SODIUM HYDROXIDE
LC50 (96 h): > 1 – 10 mg/L (*Cyprinus carpio*), second OECD 203
NOEC (72 d) Oncorhynchus mykiss (Rainbow trout): > 0,1 - 1 mg/l; Flow-through test
EC50 (48 h): > 1 – 10 mg/L (*Daphnia magna*), secondo OECD 202
EC50 (72 h): > 10 – 100 mg/L (Piante acquatiche *Scenedesmus subspicatus*), second OECD 201

CE50 (17 h) Pseudomonas putida: 63 mg/l; Test of inhibition of the multiplication

12.2 Persistence and degradability
No information available for the mixture.
SODIUM PERCARBONATE: Product can be removed by abiotic processes, e.g. chemical or photolytic.
SODIUM CARBONATE: Product easily hydrolyzable.
DISODIUM METASILICATE: Soluble inorganic silicate dissolution depolymerize rapidly in molecular species that are indistinguishable from natural dissolved silica. It's Ion combine with Ca, Mg, Fe, Al and others to form insoluble compounds similar to the constituents of natural soils.
(1-IDROSSIETILIDEN) SODIUM BIPHOSPHONATE CAS 29329-71-3: Data on elimination (persistence and degradability):> 60% OECD 302 B. COD (Std. Method D 5220): 900 mg / g; BOD-5 (Std. Method 5210 B): 30 mg / g; MBAS: 0 mg / g; BiAS: 0 mg / g.
REACTION PRODUCT OF BENZENESULFONIC ACID, 4-C10-13 SEC-ALKYL DERIVATES AND BENZENESULFONIC ACID, 4-METHYL AND SODIUM HYDROXIDE
Readily biodegradable> 70% (28 d), aerobic, OECD TG 301 A.

12.3. Bioaccumulative potential
No information available for the mixture.
SODIUM CARBONATE: the product does not bioaccumulate.
DISODIUM METASILICATE: the product does not bioaccumulate.
REACTION PRODUCT OF BENZENESULFONIC ACID, 4-C10-13 SEC-ALKYL DERIVATES AND BENZENESULFONIC ACID, 4-METHYL AND SODIUM HYDROXIDE
: Bioaccumulation is improbabile.

12.4. Mobility in soil
No information available for the mixture.

(1-IDROSSIETILIDEN) SODIUM BIPHOSPHONATE CAS 29329-71-3: Water hazard class 1 (D) (Self-assessment): slightly hazardous.
Do not discharge in ground water, water course or public sewers undiluted product or large quantities, rinse off of bigger amounts into drains or the aquatic environment may lead to increased pH-values. High pH-value harms aquatic organisms. Diluted the pH value reduce greatly, so that after the use of the product the liquid waste, emptied into drains, are slightly hazardous.

12.5. Results of PBT and vPvB assessment
This product is not, or does not contain a substance classified as PBT or vPvB.

12.6. Other adverse effects
No information available for the mixture.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods
Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations. Disposal must be performed through an authorized waste management, in compliance with national and local regulations.
CONTAMINATED PACKAGING
Contaminated packaging must be recovered or disposed in compliance with national standards waste management regulations.

14. TRANSPORT INFORMATION
The product is not classified as dangerous under current provisions of the Carriage of

Dangerous Goods by Road (ADR) and by Rail (RID), by sea (IMDG Code) and by air (IATA).

15. REGULATORY INFORMATION

15.1. Standards and legislation on health, safety and environmental specifications for the substance or mixture

1 Directive 1999/45 / EC, and subsequent amendments
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) 790/2009 of the European Parliament (first ATP, CLP)
6 Regulation (EC) 453/2010 of the European Parliament

Where applicable, refer to the following standards:
Leg. September 21, 2005 n. 238 (Seveso Directive Ter)

Category Seveso. None

Restrictions relating to the product or contained substances pursuant to Annex XVII Regulation (IS) 1907/2006. Product.
Point. 3

Substances in Candidate List (Ad. 59 REACH).
None.

Substances subject to authorization (Annex XIV REACH).(Allegato XIV REACH).
None.

Healthcare controls.
Workers exposed to this hazardous chemical agent to must undergo health examination in accordance with the provisions of art. 41 of Legislative Decree no. 81 dated 9 April 2008 unless the risk to the safety and health of the worker is valuedv irrelevant , in accordance with art. 224, paragraph 2.

15.2. Chemical Safety Assessment

Has not been processed a chemical safety assessment for the mixture and the substances it contains.

16. OTHER INFORMATION*

Text of hazard (H) indications mentioned in section 2-3 of the sheet:
Acute Tox. 4 Acute toxicity, Category 4
Eye Dam. 1 Serious eye damage, category 1
Skin Corr. 1A Skin corrosion category 1A
Ox. Solid 3 oxidising solid, category 3
Eye Irrit. 2 Eye irritation, category 2
Skin Irrit. 2 Skin irritation, category 2
STOT SE 3 Specific target organ toxicity - single exposure, category 3
Met. Corr. 1 substance or mixture corrosive to metals, category 1
H272 May intensify fire; oxidizer .
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 eye damage.

H319 Causes severe eye irritation.
H335 May irritate the respiratory tract.

Text of risk (R) phrases mentioned in section 2-3 of the sheet:

R8 CONTACT WITH COMBUSTIBLE MATERIALS MAY CAUSE FIRE.
R22 HARMFUL IF SWALLOWED.
R34 CAUSES BURNS.
R36 IRRITATING TO EYES.
R37 IRRITATING TO RESPIRATORY SYSTEM.
R38 IRRITATING TO SKIN.
R41 RISK OF SERIOUS DAMAGE TO EYES.

GENERAL BIBLIOGRAPHY:

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 contained in this data sheet is based on the knowledge available to us at the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product. It should not be construed as a guarantee on any specific product property. The use of this product is not subject to our direct control, users must, under their own responsibility, laws and regulations relating to health and safety. We assume no responsibility for improper use.