

SECTION1. Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product code : BIOFORM PLUS DETERSIVO IN POLVERE ATOMIZZATA IGIENIZZANTE CON OSSIGENO ATTIVO
Trades code : 3SPXXBX008301

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

Powdered laundry detergent for washing machine and by hand

Sectors of use:

Private households (= general public = consumers)[SU21], Public domain (administration, education, entertainment, services, craftsmen)[SU22]

Uses advised against

Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

Biochimica S.p.A.
Via Roma, 49
40069 Zola Predosa (BO)
tel. +39 051 755269
fax +39 051 752707
email: info@biochimicaspa.it
www.biochimicaspa.it

1.4. Emergency telephone number

CAVp Osp. Pediatrico Bambino Gesù, Piazza Sant'Onofrio, 4 00165 Roma - Tel.: 06 68593726
Az. Osp. Univ. Foggia, V.le Luigi Pinto, 1 71122 Foggia - Tel.: 0881-732326
Az. Osp. "A. Cardarelli", Via A. Cardarelli, 9 80131 Napoli - Tel.: 081-7472870
CAV Policlinico "Umberto I", V.le del Policlinico, 155 00161 Roma - Tel.: 06-49978000
CAV Policlinico "A. Gemelli", Largo Agostino Gemelli, 8 00168 Roma - Tel.: 06-3054343
Az. Osp. "Careggi" U.O. Tossicologia Medica, Largo Brambilla, 3 50134 Firenze - Tel.: 055-7947819
CAV Centro Nazionale di Inf. Tossicologica, Via Salvatore Maugeri, 10 27100 Pavia - Tel.: 0382-24444
Osp. Niguarda Ca' Granda Piazza Ospedale Maggiore, 3 20162 Milano - Tel.: 02-66101029
Azienda Ospedaliera Papa Giovanni XXII, Piazza OMS, 1 24127 Bergamo - Tel.: 800883300

SECTION2. Hazards identification**2.1. Classification of the substance or mixture**

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms:
GHS07

Hazard Class and Category Code(s):
Eye Irrit. 2

Hazard statement Code(s):
H319 - Causes serious eye irritation.
Classified according to Digest Det Net/1307 report.

If brought into contact with eyes, the product, causes significant irritations which may last for more than 24 hours.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s):
 GHS07 - Warning

 Hazard statement Code(s):
 H319 - Causes serious eye irritation.

 Supplemental Hazard statement Code(s):
 not applicable

Precautionary statements:

General

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P264 Wash hands thoroughly after handling.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice / attention..

Contains (Reg.EC 648/2004):

5% < 15% oxygen-based bleaching agents, < 5% optical brighteners, perfumes, zeolites, polycarboxylates, soap, anionic surfactants, non-ionic surfactants

2.3. Other hazards

The substance / mixture does NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

No information on other hazards

SECTION3. Composition/information on ingredients

3.1 Substances

Irrelevant

3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

| Substance | Concentration | Classification | Index | CAS | EINECS | REACH |
|---|---------------|--|--------------|-------------|-----------|----------------------|
| sodium carbonate | > 20 <= 30% | Eye Irrit. 2, H319 | 011-005-00-2 | 497-19-8 | 207-838-8 | 01-2119485 498-19 |
| Disodium carbonate, compound with hydrogen peroxide (2:3) | > 10 <= 20% | Ox. Sol. 3, H272; Acute Tox. 4, H302; Eye Dam. 1, H318 | | 15630-89-4 | 239-707-6 | 01-2119457 268-30 |
| Silicic acid, sodium salt | >= 3 <= 5% | Skin Irrit. 2, H315; Eye Dam. 1, H318; STOT SE 3, H335 | N.D. | 1344-09-8 | 215-687-4 | 01-2119448 725-31 |
| Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts | > 1 <= 5% | Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; Aquatic Chronic 3, H412 | N.A. | 68411-30-3 | 270-115-0 | 01-2119489 428-22 |
| Alcohols, C12-13- branched and linear, ethoxylated | > 1 <= 5% | Acute Tox. 4, H302; Eye Dam. 1, H318; Aquatic Chronic 3, H412 | N.A. | 160901-19-9 | 931-954-4 | 01-2119490 233-42 |

| Substance | Concentration | Classification | Index | CAS | EINECS | REACH |
|-----------|---------------|----------------|-------|-----|--------|-------|
|-----------|---------------|----------------|-------|-----|--------|-------|

SECTION4. First aid measures

4.1. Description of first aid measures

Inhalation:

Air the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

Direct contact with skin (of the pure product):

Take contaminated clothing Immediately off.

Wash immediately with plenty of running water and possibly with soap, the areas of the body that have, or are only suspected to have, come in contact with the product.

Direct contact with eyes (of the pure product):

Wash immediately and thoroughly with running water, keeping eyelids open for at least 10 minutes, then protect your eyes with a dry sterile gauze. Seek medical advice immediately

Ingestion:

Not hazardous. It's possible to give activated charcoal in water or liquid paraffin medicine

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

If brought into contact with eyes, the product, causes significant irritations which may last for more than 24 hours.

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

If you experience harmful symptoms, contact a physician immediately.

SECTION5. Firefighting measures

5.1. Extinguishing media

Advised extinguishing agents:

Water spray, CO₂, foam, dry chemical, depending on the materials involved in the fire.

Extinguishing means to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use protection for the breathing apparatus

Safety helmet and full protective suit.

The spray water can be used to protect the people involved in the extinction

You may also use selfrespirator, especially when working in confined and poorly ventilated area and if you use halogenated extinguishers (Halon 1211 fluobrene, Solkan 123, NAF, etc...)

Keep containers cool with water spray

SECTION6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel:

Leave the area surrounding the spill or release. Do not smoke
Wear gloves and protective clothing

6.1.2 For emergency responders:
Wear gloves and protective clothing
Eliminate all unguarded flames and possible sources of ignition. No smoking.
Provision of sufficient ventilation.
Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spill
Inform the competent authorities.
Discharge the remains in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 For containment:
Rapidly recover the product, wear a mask and protective clothing
Recover the product for reuse, if possible, or the removal.

6.3.2 For cleaning up:
After wiping up, wash with water the area and materials involved

6.3.3 Other information:
None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION 7. Handling and storage

7.1. Precautions for safe handling

At work do not eat or drink.
Wear protective gloves/protective clothing/eye protection/face protection.
See also paragraph 8 below.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabeled containers.
Keep containers upright and safe by avoiding the possibility of falls or collisions.
Store in a cool place, away from sources of heat and direct exposure of sunlight.

7.3. Specific end use(s)

Private households (= general public = consumers):
Store in cool and dry places.

Public domain (administration, education, entertainment, services, craftsmen):
Handle with care.
Store in ventilated place away from heat sources,
Keep the container tightly closed.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

No data available on the mixture.

Related to contained substances:

sodium carbonate:
SAEL (Solvay Acceptable Exposure Limit) 2007
TWA = 10 mg/m³
US. ACGIH Threshold Limit Values
Comments: none established

Disodium carbonate, compound with hydrogen peroxide (2:3)
DNEL, inhalation, long-term, local effects, workers: 5 mg/m³
DNEL, dermal, long term, local effects, workers: 12.8 mg/cm²
DNEL, inhalation, long-term, local effects, population: 6.4 mg/cm²
PNEC freshwater: 0035 mg/L
PNEC marine water: 0035 mg/L
Wastewater treatment plant PNEC: 16.24 mg/L

Silicic acid, sodium salt:
DN (M) for workers
chronic systemic effects, contact skin/eyes, DNELS 1.59 (mg/kg bw/day), toxic for continuous dosing
chronic systemic effects, inhalation, DNELS 5.61 (mg/m), toxic for continuous dosing
DN (M) for the consumer
chronic systemic effects, contact skin/eyes, DNELS 0.8 (mg/kg bw/day), toxic for continuous dosing
chronic systemic effects, inhalation, 1.38 DNEL (mg/m), toxic for continuous dosing
chronic systemic effects, ingesting, DNELS 0.8 (mg/kg bw/day), toxic for continuous dosing
PNEC descriptors:
Aquatic freshwater PNEC-7.5 mg/l
Aquatic-acqua marina PNEC 1 mg/l
Aquatic-discontinuous PNEC release 7.5 mg/l
PNEC sewage treatment plant 348 mg/l

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts:
DNEL, inhalation, long-term, systemic effects, workers: 6 mg/m³
DNEL, inhalation, long-term, local effects, workers: 6 mg/m³
DNEL, dermal, long term systemic effects, workers: 85 mg/kg bw/day
DNEL, inhalation, long-term, systemic effects, population: 1.5 mg/m³
DNEL, inhalation, long-term, local effects, population: 1.5 mg/m³
DNEL, dermal, long term systemic effects, population: 42.5 mg/kg bw/day
DNEL, oral, long-term, systemic effects, population: 0425 mg/kg bw/day
PNEC freshwater: 0.268 mg/l
PNEC marine water: 0.027 mg/l
PNEC water (intermittent release): 0.017 mg/l
Wastewater treatment plant PNEC: 3.43 mg/l
PNEC sediments (soft water): 8.1 mg/kg dw sediment
PNEC sediments (sea water): 6.8 mg/kg dw sediment
PNEC soil: 35 mg/kg dw soil

Alcohols, C12-13- branched and linear, ethoxylated:
DNEL, inhalation, long term systemic effects, workers: 294 mg/m³
DNEL, dermal, long term systemic effects, workers: 2080 mg/kg bw/day
DNEL, dermal, short term, systemic effects, workers: 87 mg/kg bw/day
DNEL, dermal, long term systemic effects, population: 1250 mg/kg bw/day
DNEL, oral, long term systemic effects, population: 25 mg/kg bw/day
PNEC freshwater: 0.022 mg/l
PNEC marine water: 0.022 mg/l
PNEC water (intermittent release): 0.00282 mg/l
PNEC, wastewater treatment plant: 10 mg/l
PNEC (freshwater) sediment: 5.91 mg/kg dw sediment
PNEC sediments (sea water): 5.91 mg/kg dw sediment
PNEC soil: 1 mg/kg dw soil

8.2. Exposure controls

Appropriate engineering controls:

Private households (= general public = consumers):

Open with caution. Close the container immediately after its use.

Adopt the appropriate protective measures.

Public domain (administration, education, entertainment, services, craftsmen):

Open with caution. Close the container immediately after its use.

Adopt the appropriate protective measures.

Individual protection measures:

(a) Eye / face protection

Not needed for normal use.

(b) Skin protection

(i) Hand protection

Not needed for normal use.

(ii) Other

Wear normal work clothing.

(c) Respiratory protection

Not needed for normal use.

(d) Thermal hazards

No hazard to report

Environmental exposure controls:

Use according to good working practices to avoid pollution into the environment.

SECTION9. Physical and chemical properties
9.1. Information on basic physical and chemical properties

| Physical and chemical properties | Value | Determination method |
|--|---|----------------------|
| Appearance | white powder | |
| Odour | Pine scented | |
| Odour threshold | not defined | |
| pH | 10.8 (sol. 1%) | |
| Melting point/freezing point | This property is not suitable for safety and product classification | |
| Initial boiling point and boiling range | This property is not suitable for safety and product classification | |
| Flash point | data not available | ASTM D92 |
| Evaporation rate | This property is not suitable for safety and product classification | |
| Flammability (solid, gas) | data not available | |
| Upper/lower flammability or explosive limits | This property is not suitable for safety and product classification | |

| Physical and chemical properties | Value | Determination method |
|--|--|----------------------|
| Vapour pressure | This property is not suitable for safety and product classification | |
| Vapour density | data not available | |
| Relative density | data not available | |
| Solubility | in water | |
| Water solubility | miscible | |
| Partition coefficient: n-octanol/water | data not available | |
| Auto-ignition temperature | This property is not suitable for safety and product classification | |
| Decomposition temperature | This property is not suitable for safety and product classification | |
| Viscosity | data not available | |
| Explosive properties | not classified as explosive, does not contain explosives according to reg. CLP Art. (14 (2)) | |
| Oxidising properties | The product is not an oxidizing substance | |

9.2. Other information

No data available.

SECTION 10. Stability and reactivity

10.1. Reactivity

Related contained substances:

Disodium carbonate, compound with hydrogen peroxide (2: 3):

The product is an oxidizing substance

Sodium Silicate:

It can react with metals. Potential exothermic reactions in the presence of acids and / or other incompatible materials.

It reacts with acids with heat release.

It can react with amphoteric metals with evolution of hydrogen.

Alcohols, C12-13- branched and linear, ethoxylated (> 5-10 EO):

Nothing to report.

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

If contact with acids may cause strong exothermic reactions

10.4. Conditions to avoid

Avoid contact with acids

10.5. Incompatible materials

Acids

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

No toxicological tests have been performed on the mixture.

- (a) acute toxicity: based on available data, the classification criteria are not met.
- (b) skin corrosion/irritation based on available data, the classification criteria are not met.
- (c) serious eye damage/irritation: If brought into contact with eyes, the product, causes significant irritations which may last for more than 24 hours.
- (d) respiratory or skin sensitization: based on available data, the classification criteria are not met.
- (e) germ cell mutagenicity: based on available data, the classification criteria are not met.
- (f) carcinogenicity: based on available data, the classification criteria are not met.
- (g) reproductive toxicity: based on available data, the classification criteria are not met.
- (h) specific target organ toxicity (STOT) single exposure: based on available data, the classification criteria are not met.
- (i) specific target organ toxicity (STOT) repeated exposure based on available data, the classification criteria are not met.
- (j) aspiration hazard: based on available data, the classification criteria are not met.

Related to contained substances:

sodium carbonate:

Acute toxicity

Acute Toxicity, oral: Ld_{50} , rat > 2,800 mg/kg

Acute toxicity, inhalation: .2h LC_{50} , guinea pig, 0.8 mg/L

LC_{50} , mouse 2h, 1.2 mg/L

LC_{50} , rat, 2h, 2.3 mg/L

Acute toxicity, dermal LD_{50} , rabbit: 2,000 mg/kg

Corrosion/irritation: rabbit, no skin reaction.

Human experience, no skin irritation.

Serious eye injury/serious eye irritation: rabbit, irritant effects.

Respiratory or skin sensitization: no data available.

Mutagenicity: no effect.

Cancerogenicity: no data available.

Toxicity for reproduction: oral (gavage feeding), 10 days, various species, 179 mg/Kg. It didn't show teratogenic effects in animal experiments.

Specific target organs toxic exposure: no data available.

LD_{50} (rat) Oral (mg/kg body weight) = 4090

LD_{50} Dermal (rat or rabbit) (mg/kg body weight) = 117

CL_{50} Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 5200

Disodium carbonate, compound with hydrogen peroxide (2:3):

LD_{50} (rat) Oral (mg/kg body weight) = 2000

LD_{50} Dermal (rat or rabbit) (mg/kg body weight) = 2000

Silicic acid, sodium salt:

Acute toxic

ingestion, LD_{50} 3400 mg/kg bw, rat

inhalation LC_{50} > 2.06 g/m³, rat

skin/eye contact, LD_{50} > 5000 mg/kg bw, rat

Toxic for reproduction:

effects on fertility, NOAEL > 159 mg/kg bw/d, rat

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In conformity to Regulation (EU) 2015/830

development of damage to the fetus, NOAEL > 200 mg/kg bw/d, mouse
STOT repeated exposure
ingestion, NOAEL > 159 mg/kg bw/d, rat
LD50 (rat) Oral (mg/kg body weight) = 3400
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 2,06

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

acute toxicity

Acute oral toxicity

LD50 Oral rat:> 2,000 mg / kg; TG 401

LD50 rat:> 300 to 2000 mg / kg; TG 401

Target organs: Gastrointestinal tract

Symptoms: drowsiness, diarrhea, breathing difficulties

Substance to be tested of: benzenesulfonic acid, and C10-13-alkyl derivatives, sodium salts, = 65%

Harmful if swallowed.

LD50 rat:> 2.000 mg / kg; TG 401

Target organs: Gastrointestinal tract

Symptoms: drowsiness, diarrhea, breathing difficulties

Substance to be tested of: benzenesulfonic acid, and C10-13-alkyl derivatives, sodium salts, <65%

In Base For information AVAILABLE the classification criteria are not satisfied.

Acute toxicity by inhalation

The exam does not And Necessary

Justification:

routes of exposure or negligible Improbable

Acute toxicity dermal

LD50 rat:> 2.000 mg / kg; TG 402

Symptoms: Local effects, Di Crosta Training

(Literature value)

In Base For information AVAILABLE the classification criteria are not satisfied.

Skin corrosion / irritation

Irritating to skin

Rabbit: irritating; TG 404

(Literature value)

Provocation skin irritation.

gravi eye damage / eye irritation gravi

Irritating to eyes

Rabbit: may cause irreversible damage of the eyes.; OECD Test Guideline 405

(Literature value)

Provocation gravi eye damage.

respiratory or skin sensitization

sensitization

Maximisation Test guinea pig: not sensitizing; TG 406

In Base For information AVAILABLE the classification criteria are not satisfied.

Germ cell mutagenicity

Genotoxicity in vitro

In vitro assays have revealed no mutagenic effects

(Literature value)

Genotoxicity in vivo

The in vivo assays have revealed no mutagenic effects

(Literature value)

Remarks

In Base For information AVAILABLE the classification criteria are not satisfied.

carcinogenicity

The substance is not genotoxic and proved, therefore there is no MUST Wait a potential carcinogen.

reproductive toxicity

rat; Oral; 2 years

NOAEL (parents): 350 mg / kg (referring to body weight and day)

NOAEL (F1): 350 mg / kg (in reference to body weight and day)

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NOAEL (F2): 350 mg / kg (in reference to body weight and day)

(Literature value)

Group observation

Osservazioni Tossicità riproduttiva

In Base For information AVAILABLE the classification criteria are not satisfied.

teratogenicity

rat; Oral; 20 days

NOAEL: 300 mg / kg (in reference to body weight and day)

NOAEL (pregnant female): 300 mg / kg (referring to body weight and day)

(Literature value)

mouse; Oral; 20 days

NOAEL: 300 mg / kg (in reference to body weight and day)

NOAEL (pregnant female): 2 mg / kg (referring to body weight and day)

(Literature value)

Observations-Teratogenicity

In Base For information AVAILABLE Classification criteri I Am Not Satisfied.

SPECIFICATIONS target organ toxicity (STOT) - single exposure

Remarks

The Substance or Mixture not classified And come target organ toxicant, single exposure.

SPECIFICATIONS target organ toxicity (STOT) - repeated exposure

Remarks

The substance or mixture is not classified And come SPECIFIC target organ toxicant, repeated exposure.

A repeated dose toxicity

rat; Oral; 28 days

NOAEL: 125 mg / kg (in reference to body weight and day)

LOAEL: 250 mg / kg (in reference to body weight and day)

Target organs: Blood, Liver, Heart, thyme

Symptoms: Increased weight Limited, Diarrhea

(Literature value)

rat; Power in the studio; 6 months

NOAEL: 40 mg / kg (in reference to body weight and day)

LOAEL: 115 mg / kg (in reference to body weight and day)

Target organs: Blood, Kidney, blind

Symptoms: Increased weight Limited, Diarrhea

(Literature value)

rat; drinking water; 9 months

NOAEL: 85 mg / kg (in reference to body weight and day)

LOAEL: 145 mg / kg (in reference to body weight and day)

Target organs: Blood

Symptoms: Increased weight Limited

Danger of aspiration case

Toxicity Aspiration

Not applicable

TOXICOLOGICAL INFORMATION

toxicokinetics

It is assumed that the substance is bioavailable oral intake.

Substance IS metabolised and eliminated by secretion

The Product is not IS VOLTAGE well dermal

Alcohols, C12-13- branched and linear, ethoxylated:

Acute toxicity

Acute oral toxicity: Alcohols, C7-18, ethoxylated (> 5-20 EO):

LD50 rat:> 300 to 2,000 mg / kg of test values / bibliographic values;

Harmful if swallowed.

Acute dermal toxicity: Alcohols, C7-18, ethoxylated (> 5-20 EO):

Rat LD50:> 2,000 mg / kg of test values / bibliographic values;

Based on the available data the classification criteria are not met.

Skin corrosion / irritation

Skin irritation: Alcohols, C7-18, ethoxylated (> 5-20 EO):

rabbit: not irritating; test values / bibliographic values

Based on the available data the classification criteria are not met.

Serious eye damage / eye irritation

Severe irritation to eyes: Alcohols, C7-18, ethoxylated (> 5-20 EO):

rabbit: irritant test values / bibliographic values

Causes severe eye injury.

Respiratory sensitization or skin sensitization: Alcohols, C7-18, ethoxylated (> 5-20 EO):

Maximisation test guinea pig: not sensitizing; test values / bibliographic values

Based on the available data the classification criteria are not met.

Mutagenicity of germ cells

Genotoxicity in vitro: Alcohols, C7-18, ethoxylated (> 5-20 EO):

Method Ames, Salmonella typhimurium, with and without metabolic activation: not mutagenic; test values / bibliographic values

Based on the available data the classification criteria are not met.

SECTION12. Ecological information

12.1. Toxicity

The product has not been tested for environmental impact in the event of accidental release in the environment.

Related to contained substances:

sodium carbonate:

Acute Toxicity: fish, macrochirus gibbosus, LC50, 96 h, 300 mg/l

Crustaceans (Hymenochirus Biettgeri)-dubia, EC50, 48 h, -227 200 mg/l

Disodium carbonate, compound with hydrogen peroxide (2:3):

Aquatic toxicity:

LC50 (83d): 70.7 mg/L-Fish

EC50 (48 h): 4.9 mg/L-aquatic invertebrates

NOEC (48 h): 2 mg/L-aquatic invertebrates

C(E)L50 (mg/l) = 70,699997

NOEC (mg/l) = 2

Silicic acid, sodium salt:

Acute toxic

fish, Brachydanio rerio, LC50 (83d) 1108 mg/l

fish, Oncorhynchus mykiss, LC50 (83d) 260-310 mg/l

fish, Brachydanio rerio, NOAEC (83d, mortality) 348 mg/l

aquatic invertebrates, Daphnia magna EC50 (48 h) 1700 mg/l

aquatic plants

Scenedesmus subspicatus, EC50 (72 h IC50, biomass) 207 mg/l

Scenedesmus subspicatus, EC50 (growth rate charts) 345.4 mg/l

microorganisms in wastewater

Prochlorococcus, EC0 (6:0 pm) (1) (2) > 10000 mg/l

Prochlorococcus, EC0 (6:0 pm) (3) (4) > 1000 mg/l

Prochlorococcus, EC0 (30 mn) 3454 mg/l

Chronic toxic

fish, comparable to tests on desmodesmus subspicatus, EC0 207 mg/l

algae, algae, NOEC/EC0 35 mg/l

microorganisms in wastewater, Prochlorococcus, PNEC stp 348 mg/l

C(E)L50 (mg/l) = 260

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

Toxic for fish

LC50 (96 h) lepomis macrochirus (fish-Bluegill salt): 1 >-10 mg/l; Static test; US EPA 1975

(value of literature)
Toxic for fish-chronic Toxic
(28 d) *Lepomis macrochirus* (fish-Bluegill salt): 0.1-1 > mg/l; Rate of growth; 28 d; The ecosystem model
(value of literature)
C(E)L50 (mg/l) = 0,2

Alcohols, C12-13- branched and linear, ethoxylated:

Toxicity to fish:

LC50 (96 h) *Cyprinus carpio*:> 1 - 10 mg / l;

Flow-through test, OECD TG 203; values test / bibliographic values.

Toxicity to daphnia:

EC50 (48 h) *Daphnia magna*:> 1 - 10 mg / l, static test, OECD TG 202; values test / bibliographic values.

Toxicity to algae:

EC50 (72 h) *Desmodesmus subspicatus* (green algae):> 1 - 10 mg / l, static test, OECD TG 201; values test / bibliographic values.

Use according to good working practices to avoid pollution into the environment.

12.2. Persistence and degradability

No data available for the mixture.

Related to contained substances:

sodium carbonate:

Abiotic degradation: water, hydrolyze.

Result: acid/base balance as a function of pH.

Degradation products: carbonic acid/bicarbonate/carbonate

Biodegradation:

Comments: methods for the determination of biological degradability are not applicable to non-organic substances.

Disodium carbonate, compound with hydrogen peroxide (2:3)

No data available

Silicic acid, sodium salt:

Not applicable, the product of inorganic nature.

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

Readily biodegradable; > 60%; 28 d; aerobic; OECD TEST GUIDELINE 301 B

Alcohols, C12-13- branched and linear, ethoxylated:

Biodegradable

branched / linear alcohols, ethoxylated: Readily biodegradable.,> 70%, 28 d; aerobic; OECD TG 301 A (new version); test values / bibliographic values.

branched / linear alcohols, ethoxylated: Readily biodegradable.;> 60%, 28 d; aerobic; OECD TG 301 B; test values / bibliographic values.

12.3. Bioaccumulative potential

No data available for the mixture.

Related to contained substances:

sodium carbonate:

Do not bioaccumulate.

Disodium carbonate, compound with hydrogen peroxide (2:3)

No data available

Silicic acid, sodium salt:
Based on available data excludes possibility of bioaccumulation.

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts:
Pimephales promelas (Chub); 192 h; OECD TG 305 and
(value of literature)
It accumulates significantly in organisms.

Alcohols, C12-13- branched and linear, ethoxylated:
No data available

12.4. Mobility in soil

No data available for the mixture.

Related to contained substances:

sodium carbonate:
Air Comments: n.a.
Water solubility comments:
Water comments: mobility
Soil/sediment observations: not significant

Disodium carbonate, compound with hydrogen peroxide (2:3)
No data available

Silicic acid, sodium salt:
In the event of accidental releases of the product, as well as intentional soil treatments, the product reacts with the acids and metal ions of multi-purpose soil, forming a gel waterproof. As A result of this reaction, not the further spread of the product into the soil.

Benzenesulfonic acid, C10-13-alkyl derivs., sodium salts:
Soil/sludge sedimentation tank
Slightly mobile in soils

Alcohols, C12-13- branched and linear, ethoxylated:
No data available

12.5. Results of PBT and vPvB assessment

The substance / mixture does NOT contains substances PBT/vPvB according to Regulation (EC) No 1907/2006, Annex XIII

12.6. Other adverse effects

No adverse effects

Regulation (EC) No 2006/907 - 2004/648
The surfactant (s) contain (s) in this formulation comply (ies) with the criteria set out in Regulation (EC) biodegradability/648/2004 on detergents. All supporting data shall be kept at the disposal of the competent authorities of the Member States and will be provided, at their explicit request or at the request of a manufacturer of the formulation, the above authority.

SECTION13. Disposal considerations

13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies. Recover if possible. Operate according to local or national regulations

SECTION 14. Transport information**14.1. UN number**

Not included in the scope of application regulations concerning the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).

14.2. UN proper shipping name

None

14.3. Transport hazard class(es)

None

14.4. Packing group

None

14.5. Environmental hazards

None

14.6. Special precautions for user

No data available.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

It is not intended to carry bulk

SECTION 15. Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Reg. 648/2004/EC (detergents), Decree 2/2/2002 n. 25 (risks related to chemical agents at work). D.m. 2/26/2004 Work (occupational exposure limits); D.m. 4/3/2007 (implementation of Directive 2006/8/EC). Regulation (EC) No 1907/2006 (REACH) Regulation (EC) no 1272/2008 (CLP), Regulation (EC) no 790/2009, 2012/18/EU Directive (cd. Seveso III). REGULATION (EU) No 1357/2014 - waste: HP4 - Irritant — skin irritation and eye damage

15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier

SECTION 16. Other information**16.1. Other information**

Description of the hazard statements exposed to point 3

H319 = Causes serious eye irritation.

H272 = May intensify fire; oxidiser.
H302 = Harmful if swallowed.
H318 = Causes serious eye damage.
H315 = Causes skin irritation.
H335 = May cause respiratory irritation.
H412 = Harmful to aquatic life with long lasting effects.

Classification based on data of all mixture components

The skin and/or eye classification of this product was effectuated using bridging principles (such as dilution, interpolation within one hazard category or substantially similar mixtures; with or without expert judgement) following Article 9, points 3) and 4) of Regulation (EC) No 1272/2008.

Test with logging number: Digest Det Net/1307

Main normative references:
Regulation 2008/1272/EC
Regulation 2015/830/EC

Link ECHA (source of information on chemical substances produced or imported in Europe)
<https://echa.europa.eu/information-on-chemicals>
MSDS provided by the customer and on the same raw material

*** This Board cancels and replaces any previous edition.