

Hygienfresh Detergente BioOrky

Issued on 02/05/2014 - Rel. # 2 on 02/08/2016

#1/14

In conformity to Regulation (EU) 2015/830

SECTION 1. Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product code: Hygienfresh Detergente BioOrky

Trades code : A39-519 Product line: Hygienfresh

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

Enzymatic Deodetergente of white musk perfume

Sectors of use:

Industrial Manufacturing[SU3], 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

Tintolav s.r.l. - Via M. D' Antona 7 - 10028 Trofarello (TO) Tel. 011/649.68.27 Fax 011/649.67.42

Email: info@tintolav.com - Sito internet: www.tintolav.com

Email tecnico competente: a.conedera@tintolav.com

National contact: Malta: Emergency Ambulance 112 Accident & Emergency Department 2545 4030

1.4. Emergency telephone number

The UK National Poisons Emergency number +44 (0)870 600 6266 London: Emergency 24 hour telephone +44 (0) 207188 0100

SECTION 2. 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):

Skin Irrit. 2, Eye Irrit. 2, Aquatic Chronic 3

Hazard statement Code(s):

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H412 - Harmful to aquatic life with long lasting effects.

If brought into contact with eyes, the product causes significant irritations which may last for more than 24 hours, if brought into contact with skin, it causes significant inflammation with erythema, scabs, or edema

The product is dangerous to the environment as it is harmful to aquatic life with long lasting effects

2.2. Label elements

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





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Pictogram, Signal Word Code(s):

GHS07 - Warning

Hazard statement Code(s):

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H412 - Harmful to aquatic life with long lasting effects.

Supplemental Hazard statement Code(s):

EUH208 - Contains 4-formylphenylboronic acid, Coumarin, 3-methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-en-2-one, α-Hexylcinnamaldehyde, Citrus Aurantium Dulcis Oil,

1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone, Hexyl salicylate. May produce an allergic reaction.

Precautionary statements:

General

P102 - Keep out of reach of children.

Prevention

P264 - Wash your hand thoroughly after handling.

P273 - Avoid release to the environment.

Response

P302+P352 - IF ON SKIN: Wash with plenty of waterand soap.

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:

Dodecylbenzenesulphonic acid, compound with 2,2',2"nitrilotriethanol (1:1). , Fatty alcohol ethoxylate, Coconut diethanolamide

Contains (Reg.EC 648/2004):

5% < 15% anionic surfactants, < 5% perfumes, Dye, enzymes, non-ionic surfactants

2.3. Other hazards

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

No information on other hazards

SECTION 3. Composition/information on ingredients

3.1 Substances

Irrilevant

3.2 Mixtures

Refer to paragraph 16 for full text of hazard statements

Substance	Concentration	Classification	Index	CAS	EINECS	REACh
Dodecylbenzenesulphonic acid, compound with 2,2',2"nitrilotriethanol (1:1).	> 5 <= 10%	Skin Irrit. 2, H315; Eye Irrit. 2, H319		27323-41-7	248-406-9	
Fatty alcohol ethoxylate	> 1 <= 5%	Acute Tox. 4, H302; Eye Dam. 1, H318		64425-86-1		02-2119548 515-35-000 0
Coconut diethanolamide	> 1 <= 5%	Skin Irrit. 2, H315; Eye Irrit. 2, H319		68603-42-9	271-657-0	



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Substance	Concentration	Classification	Index	CAS	EINECS	REACh
Sodium Lauryl Ether sulfate	> 0,1 <= 1%	Skin Irrit. 2, H315; Eye Irrit. 2, H319		68891-38-3	500-234-8	01-2119488 639-16
2,2',2"-nitrilotriethanol	> 0,1 <= 1%	Eye Irrit. 2, H319		102-71-6	203-049-8	01-2119486 428-31-xxxx
diethanolamine	> 0,1 <= 1%	Acute Tox. 4, H302; Skin Irrit. 2, H315; Eye Dam. 1, H318; STOT RE 2, H373	603-071-00-1	111-42-2	203-868-0	
Hexyl salicylate - FEMA 0	> 0,1 <= 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319; Aquatic Acute 1, H400; Aquatic Chronic 1, H410		6259-76-3	228-408-6	01-2119638 275-36-000 2
Coco glucoside	<= 0,1%	Skin Irrit. 2, H315; Eye Irrit. 2, H319		141464-42-8		
Subtilisin	<= 0,1%	Skin Irrit. 2, H315; Eye Dam. 1, H318; Resp. Sens. 1, H334; STOT SE 3, H335	647-012-00-8	9014-01-1	232-752-2	01-2119480 434-38
1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)eth anone - FEMA 0		Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 2, H411		54464-57-2	259-174-3	
3-(5,5,6-trimethylbicyclo[2.2.1]hep t-2-yl)cyclohexan-1-ol - FEMA 0	<= 0,1%	Skin Irrit. 2, H315; Eye Irrit. 2, H319		3407-42-9	222-294-1	
Steareth-21	<= 0,1%	Skin Irrit. 2, H315; Eye Dam. 1, H318		9005-00-9	500-017-8	

SECTION 4. 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.

In case of contact with skin, wash immediately with water and soap.

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

Inaestion:

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

No data available.



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

If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention.

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

SECTION 5. 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

SECTION 6. 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 with earth or sand.

If the product has entered a watercourse in sewers or has contaminated soil or vegetation, notify it to the 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 for removal. Possibly absorb it with inert material.

Prevent it from entering the sewer system.

6.3.2 For cleaning up:

After wiping up, wash with water the area and materials involved



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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

Avoid contact and inhalation of vapors At work do not eat or drink. 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)

Industrial Manufacturing:

Handle with extreme caution.

Store in a well ventilated place away from heat sources.

Private households (= general public = consumers):

Handle with care.

Store in ventilated place away from heat sources,

Keep the container tightly closed.

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

Handle with care. Store in a ventilated area and away from heat, keep the container tightly closed.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

Related to contained substances:

2,2',2"-nitrilotriethanol:

TWA: 5 from ACGIH (TLV) [United States] [2001]

diethanolamine:

TLV: 2 mg/m (cute) (ACGIH 2002).

Mak: cancerogenicit class: Class 3A; Sh, H (2002)

Subtilisin:

ACGIH TLV: Ceiling: 0.00006 mg/m3 Ceiling (as crystalline active enzyme, listed under Subtilisins)

Belgium: 0.00006 mg/m3 Maximum Limit Value (8 hours)

Denmark: Ceiling: 0.00006 mg/m3

Ireland: TWA: 0.00006 mg/m3 STEL: 0.00006 mg/m3

Netherlands: Ceiling: 0.00006 mg/m3 Norway: 0.00006 mg/m3 Ceiling Portugal: Ceiling: 0.00006 mg/m3 Spain: VLA-EC: 0.00006 mg/m3

Sweden: 1 glycineunit/m3 LLV 3 glycineunit/m3 LLV

Switzerland: STEL: 0.00006 mg/m3

Germany: = 1 glycineunit/m3 LLV = 3 glycineunit/m3 LLV

United Kingdom: 0.00004 mg/m3 TWA



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8.2. Exposure controls



Appropriate engineering controls: Industrial Manufacturing: No specific monitoring foreseen

Private households (= general public = consumers): No specific checks planned

Public domain (administration, education, entertainment, services, craftsmen): No specific monitoring foreseen

Individual protection measures:

- (a) Eye / face protection Not needed for normal use.
 - (b) Skin protection
- (i) Hand protection When handling the pure product use chemical resistant protective gloves (EN 374-1/EN374-2/EN374-3)
- (ii) Other Wear normal work clothing.
- (c) Respiratory protection Not needed for normal use.
- (d) Thermal hazards No hazard to report

Environmental exposure controls:

Related to contained substances:

diethanolamine:

Do not let this chemical contaminates the environment.

Subtilisin:

The local authority must be informed if the losses cannot be

Waste water must be conveyed to the waste water treatment plant

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Appearance	Green liquid	
Odour	characteristic	
Odour threshold	not determined	
рН	7 - 8 @ 1 %	



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Physical and chemical properties	Value	Determination method
Melting point/freezing point	not determined	
Initial boiling point and boiling range	not determined	
Flash point	> 60 °C	ASTM D92
Evaporation rate	irrelevant	
Flammability (solid, gas)	irrelevant	
Upper/lower flammability or explosive limits	not determined	
Vapour pressure	not determined	
Vapour density	not determined	
Relative density	1,07 g/cm3	
Solubility	soluble in water	
Water solubility	completely soluble	
Partition coefficient: n-octanol/water	not determined	
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	
Viscosity	not determined	
Explosive properties	not explosive	
Oxidising properties	non-oxidizing	

9.2. Other information

No data available.

SECTION 10. Stability and reactivity

10.1. Reactivity

No reactivity hazards

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Nothing to report

10.5. Incompatible materials

It can generate inflammable gases to contact with elementary metals, nitrides, inorganic sulfide, strong reducing agents.

It can generate toxic gases to contact with inorganic solfide, strong reducing agents.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.



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SECTION 11. Toxicological information

11.1. Information on toxicological effects

ATE(mix) oral = 314.159,3 mg/kg

ATE(mix) dermal = ∞

ATE(mix) inhal = ∞

(a) acute toxicity: 1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone: TOXIC DOSE 1-LD > 50 5000 mg/kg (oral rat)

TOXIC DOSE 2-LD > 50 5000 mg/kg (skn-rbt)

(b) skin corrosion/irritationIf brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema.

Dodecylbenzenesulphonic acid, compound with 2,2',2"nitrilotriethanol (1:1).: Irritating

Coconut diethanolamide: Irritating

Sodium Lauryl Ether sulfate: Acute effects: contact with eyes will cause irritation; symptoms may include: redness, edema, pain and tears.

Through contact with the skin has irritation with erythema, edema, dryness and cracking.

diethanolamine: irritating

(c) serious eye damage/irritation: If brought into contact with eyes, the product, causes significant irritations which may last for more than 24 hours.

Dodecylbenzenesulphonic acid, compound with 2,2',2"nitrilotriethanol (1:1).: Irritating

Coconut diethanolamide: Acute Irritazione\Corrosione eyes

diethanolamine: Severely irritating

(d) respiratory or skin sensitization: Coconut diethanolamide: Non-sensitizing Subtilisin: Respiratory system: substance-sensitizing (human experience)

- (e) germ cell mutagenicity: Subtilisin: No indication of mutagenic effects (OECD TG 471, 473, 476)
- (f) carcinogenicity: Coconut diethanolamide: IARC Group 2B carcinogen-possible carcinogenic to humans

diethanolamine: IARC: Group 3-3: not classifiable regarding its carcinogenicit for man

- (g) reproductive toxicity: based on available data, the classification criteria are not met.
- (h) specific target organ toxicity (STOT) single exposure: Subtilisin: Target organ-specific toxic (single exposure) Irritant, respiratory tract (ACGIH 2001)
 - (i) specific target organ toxicity (STOT) repeated exposureDodecylbenzenesulphonic acid, compound with
- 2,2',2"nitrilotriethanol (1:1).: Rabbit 90-day dermal NOAEL > 5 mg/kg bw (only dose tested)
- (j) aspiration hazard: based on available data, the classification criteria are not met.

Related to contained substances:

Dodecylbenzenesulphonic acid, compound with 2,2',2"nitrilotriethanol (1:1).:

LD50 (rat) Oral (mg/kg body weight) = 1653

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 4199

Fatty alcohol ethoxylate:

LD50 (rat) Oral (mg/kg body weight) = 3100

Coconut diethanolamide:

Ingestion: oral rat LD50: > 2,000 mg/kg

Eye contact: irritating to the eye (rabbit). Can cause irreversible damage to the eye.

Skin contact: moderately irritating for a single application (4 h-rabbit)

Readily biodegradable in accordance with the criteria of Directive 67/548 and subsequent modifications.

LD50 (rat) Oral (mg/kg body weight) = 5000

Sodium Lauryl Ether sulfate:

LD50 (alcohols, C12-14, ethoxylated, sulfated, sodium salts; CAS No.: 68891-38-3)

Via Inhalation Administration:

Test species: rat Value: 4100 mg/kg

Specification: LD50 (alcohols, C12-14, ethoxylated, sulfated, sodium salts; CAS No.: 68891-38-3)

Via Dermal intake:



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Test species: rat Value: > 2000 mg/kg

LD50 (rat) Oral (mg/kg body weight) = 2000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 4100

2,2',2"-nitrilotriethanol:

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals: Acute oral toxicity (LD50): 2200 mg/kg [Rabbit].

Chronic Effects on Humans:

CARCINOGENIC EFFECTS: 3 (Not classifiable for human.) by IARC. MUTAGENIC EFFECTS: Mutagenic for mammalian somatic cells. May cause damage to the following organs: kidneys, liver, skin.

Other Toxic Effects on Humans:

Hazardous in case of skin contact (permeator), of ingestion, of inhalation.

Slightly hazardous in case of skin contact (irritant).

Special Remarks on Toxicity to Animals: LD50 [Rat] - Route: Oral; Dose: 4920 ul/kg LD50 [Rabbit] - Route: Skin; Dose: >20ml/kg

Special Remarks on Chronic Effects on Humans:

May cause cancer (tumorigenic) based on animal data.

May affect genetic material (mutagen): cytogenic analysis (human lymphocyte) = 100 umol/L; sister chromatid exchange (human lymphocyte) = 1mmol/L.

Special Remarks on other Toxic Effects on Humans:

Acute Potential Health Effects:

Skin: May cause skin irritaiton with burning pain, itching, and redness. May be absorbed through the skin amd affect the liver, metabolism, and urinary tract.

Eyes: Causes eye irritation with tearing and burning pain. May cause transient corneal injury.

Ingestion: Causes gastrointestinal (digestive) tract irritation with nausea, vomitig, and diarrhea. May also affect behavior, sense organs, liver and urinary system.

Inhalation: Inhalation of mist may cause respiratory tract irritation. May also affect the liver, blood, urinary system and cardiovascular system.

Chronic Potential Health Effects: May cause liver and kidney damage. Prolonged or repeated contact may cause skin necrosis and /or ulceration of the skin.

LD50 (rat) Oral (mg/kg body weight) = 5000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

diethanolamine:

ROUTES of EXPOSURE: the substance can be absorbed into the body by inhalation of its fumes and ingestion.

INHALATION RISK: A dangerous air contamination will not be reached or the sar only very slowly by evaporation of the substance at 20 C.

Effects of short-term exposure: the substance is corrosive to the eyes.

Effects of REPEATED EXPOSURE or long-term repeated or prolonged Contact may cause skin sensitization. The substance may have effects on the liver kidneys ACUTE HAZARDS/symptoms EYES Reddening. Pain. Severe deep burns.

INGESTION abdominal pain. Burning sensation.

N O T and not bring home work clothes.

LD50 (rat) Oral (mg/kg body weight) = 710

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 1220

Hexyl salicylate:

LD50 (rat) Oral (mg/kg body weight) = 5000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

Coco glucoside:

Experimental/data calculated:

LD50 (oral): > 2,000 mg/kg

LD50 (rat) Oral (mg/kg body weight) = 2000



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LD50 (rat) Oral (mg/kg body weight) = 1800

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 0,13

1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl) ethanone:

LD50 (rat) Oral (mg/kg body weight) = 5000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

3-(5,5,6-trimethylbicyclo[2.2.1]hept-2-yl)cyclohexan-1-ol:

LD50 (rat) Oral (mg/kg body weight) = 5400

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

Steareth-21:

LD50 (rat) Oral (mg/kg body weight) = 15000

SECTION 12. Ecological information

12.1. Toxicity

Related to contained substances:

C(E)L50 (mg/l) = 2,6

Fatty alcohol ethoxylate:

Ittiotossicit:

LC50 (96 h) 1-10 mg/l, Brachydanio rerio

Aquatic invertebrates:

EC50 (48 h) 1-10 mg/l Daphnia magna

Aquatic plants:

EC50 (72 h) 1-10 mg/l Scenedesmus subspicatus

Microorganisms/effects on activated sludge:

CE10 > 1,000 mg/l, activated sludge (DEV-L2)

Chronic toxic to aquatic invertebrates:

NOEC (21 d), 0.33 mg/l Daphnia magna

C(E)L50 (mg/I) = 1

Coconut diethanolamide:

Acute/prolonged toxicity to fish: (83d) 2.52 mg/l (brachydanio rerio)

Acute toxicity to Aquatic Invertebrates: EC50 (12:0 am) 2.8 mg/l (daphnia Magna)

Primary: Biodegradabilit > 90% (OECD)

Easy Biodegradabilit: 60% > (manometric Tests, O2 consumption)

Theoretical O2 demand (thod) 2.52 mg O2/mg. Chemical O2 demand (COD): 2.51 mg O2/mg.

C(E)L50 (mg/I) = 2,39

Sodium Lauryl Ether sulfate:

LC50 (alcohols, C12-14, ethoxylated, sulfated, sodium salts; CAS No.: 68891-38-3)

Paramettro: Fish Danio Rerio Value = 7.1 mg/l For. test: 96 h

Specification: EC50 (alcohols, C12-14, ethoxylated, sulfated, sodium salts; CAS No.: 68891-38-3)

Paramettro: Daphnia Daphnia magna Value = 7.2 mg/l For. test: 48 h

Specification: EC50 (alcohols, C12-14, ethoxylated, sulfated, sodium salts; CAS No.: 68891-38-3)



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Paramettro: Algae

Scenedesmus subspicatus

Value = 27 mg/lC(E)L50 (mg/l) = 7,1

2,2',2"-nitrilotriethanol: Ecotoxicity: Not available. BOD5 and COD: Not availab

BOD5 and COD: Not available. Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

C(E)L50 (mg/I) = 1390

diethanolamine:

The substance is harmful to aquatic organisms.

Aquatic toxic

Specification: EC50 (2.2-IMINODIETANOLO; CAS No.: 111-42-2)

Paramettro: Daphnia Daphnia magna Value = 55 mg/l For. test: 48 h

Specification: EC50 (2.2-IMINODIETANOLO; CAS No.: 111-42-2)

Paramettro: Algae

Pseudokirchneriella subcapitata

Value = 2.2 mg/l For. test: 96 h

Specification: LC50 (2.2-IMINODIETANOLO; CAS No.: 111-42-2)

Paramettro: Fish Pimephales promelas Value = 1460 mg/l For. test: 96 h C(E)L50 (mg/l) = 2,2

Coco glucoside:

Ittiotossicit:

LC50 > 10-100 mg/l

Microorganisms/effects on activated sludge:

> To 100 mg/l C(E)L50 (mg/l) = 10

C(E)L50 (mg/I) = 0.586

1-(2,3,8,8-Tetramethyl-1,2,3,4,5,6,7,8-octahydronaphthalen-2-yl)ethanone:

Endpoint: LC50 species: lepomismacrochirus (fish-salt Bluegrill) = 1.30 mg/l-h Duration: 96-Note:: method: OECD 203

TG

Endpoint: EC50-species: Daphnia magna (Water flea) = 1.38 mg/l-h Duration: 48-comments:: semi-static test method:

OECD TG 202

Endpoint: EC50 Desmodesmus subspicatus-species (green algae) = 2.60 mg/l-h Duration: 72-

Note:: static test method: OECD TG201

C(E)L50 (mg/I) = 1,3



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Steareth-21: LC50/83d > Oncohynchus mykiss-5.6 mg/l C(E)L50 (mg/l) = 5,6

The product is dangerous for the environment as it is toxic for aquatic organisms following acute exposure.

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

12.2. Persistence and degradability

Related to contained substances:

Fatty alcohol ethoxylate:

Disposal considerations:

> = 90% the bismuth active substance (OECD guideline 303A)

60% > CO2 formation of theoretical value (28 d) (OECD 301B; ISO 9439; 92/69/EEC, c. 4-C)

Readily biodegradable (according to OECD criteria).

Sodium Lauryl Ether sulfate:

Easily biodegradable

Coco glucoside:

Readily and rapidly degradable. All organic substances contained in the product achieve > 60% BOD/COD of CO2 liberation, or 70% DOC > reduction in tests for ease of degradability. Threshold values for readily degradable (e.g. to OECD method 301) are reached.

Subtilisin:

Rapidly biodegradable (OECD TG 301B)

12.3. Bioaccumulative potential

Related to contained substances:

Subtilisin:

Do not bio-accumulate

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

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

12.6. Other adverse effects

No adverse effects

SECTION 13. 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



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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

No data available.

15.2. Chemical safety assessment

The supplier has made an assessment of chemical safety

SECTION 16. Other information

16.1. Other information

Points modified compared to previous release: 2.2. Label elements, 2.3. Other hazards, 4.1. Description of first aid measures, 11.1. Information on toxicological effects, 12.1. Toxicity

Description of the hazard statements exposed to point 3

H315 = Causes skin irritation.

H319 = Causes serious eye irritation.

H302 = Harmful if swallowed.

H318 = Causes serious eye damage.



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H373 = May cause damage to organs through prolonged or repeated exposure.

H317 = May cause an allergic skin reaction.

H400 = Very toxic to aquatic life.

H410 = Very toxic to aquatic life with long lasting effects.

H334 = May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335 = May cause respiratory irritation.

H411 = Toxic to aquatic life with long lasting effects.

Classification based on data of all mixture components

Main normative references: Directive 1999/45/EC Directive 2001/60/EC Regulation 1272/2008/EC Regulation 2010/453/EC

Related solely to the product and do not constitute a guarantee of a particular quality.

It is the duty of the user to ensure that these are appropriate and complete information regarding the specific use intended.

This data sheet cancels and replaces any previous edition.

^{**} The information contained herein is based on our knowledge at the date above.