

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

1.1. Product identifier

Product code : Hygienfresh Detergente Black Premium

Trades code : A39-515

Product line: Hygienfresh

UFI: 0J12-G0ND-D00U-51TN

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

Deo concentrated detergent

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

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

Hazard statement Code(s):

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

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

2.2. Label elements

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

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



Hazard statement Code(s):
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.

Supplemental Hazard statement Code(s):
EUH208 - Contains α -Hexylcinnamaldehyde, reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

Precautionary statements:

General

- P101 - If medical advice is needed, have product container or label at hand.
- P102 - Keep out of reach of children.

Prevention

- P264 - Wash your hand thoroughly after handling.

Response

- P302+P352 - IF ON SKIN: Wash with plenty of water and 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 (Reg.EC 648/2004):
≥ 5% < 15% non-ionic surfactants, anionic surfactants, < 5% Dye, enzymes, reaction mass of:
5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1),
perfumes, α -Hexylcinnamaldehyde, Linalool

Contains (Reg.CE 648/2004):
5% < 15% Anionic surfactants, Non-ionic surfactants, < 5% Fragrances, Enzymes,, Hexyl cinnamal, Linalool,
Methylchlorisothiazolinone, Methylisothiazolinone.

Content of VOC ready to use condition: 0,09 %

UFI: 0J12-G0ND-D00U-51TN

2.3. Other hazards

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

Based on available data, there are no substances that interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

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

Note B - Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: 'nitric acid ... %'. In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
Sodium Lauryl Ether sulfate	$\geq 5,00 < 10,00\%$	Skin Irrit. 2, H315; Eye Dam. 1, H318; Aquatic Chronic 3, H412 Limits: Eye Dam. 1, H318 %C ≥ 10 ; Eye Irrit. 2, H319 $5 \leq$ %C < 10 ; 1 1 ATE oral = 2.000,0 mg/kg ATE dermal = 2.000,0 mg/kg ATE inhal = 4.100,0mg/l/4 h	ND	68891-38-3	500-234-8	01-2119488 639-16
Alcohols, C13-15, branched and linear, ethoxylated	$\geq 1 < 5\%$	Acute Tox. 4, H302; Eye Dam. 1, H318; Aquatic Chronic 3, H412 Limits: Eye Irrit. 2, H319 $3 \leq$ %C < 10 ; Eye Dam. 1, H318 %C > 10 ; 1 1 ATE oral $> 300,0$ mg/kg	ND	157627-86-6	ND	ND
Coconut diethanolamide	$\geq 1 < 3,00\%$	Skin Irrit. 2, H315; Eye Dam. 1, H318 ATE oral = 5.000,0 mg/kg	ND	68603-42-9	271-657-0	ND
cellulase	$\geq 0,1 < 1\%$	Resp. Sens. 1, H334 ATE oral = 2.880,0 mg/kg	647-002-00-3	9012-54-8	232-734-4	ND
α -Hexylcinnamaldehyde	$< 0,1\%$	Skin Sens. 1, H317; Aquatic Chronic 2, H411 ATE oral = 2.450,0 mg/kg	ND	101-86-0	202-983-3	01-2119533 092-50
reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1) Note: B	$< 0,1\%$	EUH071; Acute Tox. 3, H301; Acute Tox. 2, H310; Skin Corr. 1C, H314; Skin Sens. 1, H317; Eye Dam. 1, H318; Acute Tox. 2, H330; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Limits: Skin Corr. 1C, H314 %C $\geq 0,6$; Skin Irrit. 2, H315 $0,06 \leq$ %C $< 0,6$; Eye Dam.	613-167-00-5	55965-84-9	ND	ND

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
		1, H318 %C >=0,6; Eye Irrit. 2, H319 0,06<= %C <0,6; Skin Sens. 1A, H317 %C >=0,0015; 100 100				

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

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

No data available.

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

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.
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):

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**

- Substance: Sodium Lauryl Ether sulfate

DNEL

Systemic effects Long term Workers inhalation = 175 (mg/m³)

Systemic effects Long term Workers dermal = 2750 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 52 (mg/m³)

Systemic effects Long term Consumers dermal = 1650 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 15 (mg/kg bw/day)

PNEC

Sweet water = 0,24 (mg/l)

sediment Sweet water = 5,45 (mg/kg/sediment)

Sea water = 0,02 (mg/l)

sediment Sea water = 0,54 (mg/kg/sediment)

intermittent emissions = 0,07 (mg/l)

STP = 10000 (mg/l)

ground = 0,946 (mg/kg ground)

- Substance: Coconut diethanolamide

DNEL

Systemic effects Long term Workers inhalation = 73,4 (mg/m³)

Systemic effects Long term Workers dermal = 4,16 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 21,73 (mg/m³)

Systemic effects Long term Consumers dermal = 2,5 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 6,25 (mg/kg bw/day)

Local effects Long term Workers dermal = 0,09 (mg/kg bw/day)

Local effects Long term Consumers dermal = 0,0562 (mg/kg bw/day)

PNEC

Sweet water = 0,007 (mg/l)

sediment Sweet water = 0,195 (mg/kg/sediment)

Sea water = 0,001 (mg/l)

sediment Sea water = 0,019 (mg/kg/sediment)

intermittent emissions = 0,024 (mg/l)

STP = 830 (mg/l)

ground = 0,035 (mg/kg ground)

- Substance: cellulase

DNEL

Local effects Long term Workers inhalation = 0,00006 (mg/m³)

Local effects Long term Consumers inhalation = 0,000015 (mg/m³)

PNEC

Sweet water = 0,0237 (mg/l)

Sea water = 0,00237 (mg/l)

intermittent emissions = 0,237 (mg/l)

STP = 65 (mg/l)

ground = 0,00376 (mg/kg ground)

- Substance: α -Hexylcinnamaldehyde

DNEL

Systemic effects Long term Workers inhalation = 0,000078 (mg/m³)

Systemic effects Short term Workers inhalation = 0,00628 (mg/m³)

PNEC

Sweet water = 0,03 (mg/l)

sediment Sweet water = 47,7 (mg/kg/sediment)

Sea water = 0,003 (mg/l)

sediment Sea water = 4,77 (mg/kg/sediment)

ground = 9,51 (mg/kg ground)

- Substance: diethanolamine

DNEL

Systemic effects Long term Workers dermal = 0,13 (mg/kg bw/day)

Systemic effects Long term Consumers dermal = 0,07 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 0,06 (mg/kg bw/day)

Local effects Long term Workers inhalation = 1 (mg/m³)

Local effects Long term Consumers inhalation = 0,25 (mg/m³)

PNEC

Sweet water = 0,0156 (mg/l)

sediment Sweet water = 0,019 (mg/kg/sediment)

Sea water = 0,00156 (mg/l)

sediment Sea water = 0,0019 (mg/kg/sediment)

intermittent emissions = 0,097 (mg/l)

STP = 100 (mg/l)

ground = 0,007 (mg/kg ground)

- Substance: Linalool

DNEL

Systemic effects Long term Workers inhalation = 2,8 (mg/m³)

Systemic effects Long term Workers dermal = 2,5 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 0,7 (mg/m³)

Systemic effects Long term Consumers dermal = 1,25 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 0,2 (mg/kg bw/day)

- Substance: Terpineol

DNEL

Systemic effects Long term Workers inhalation = 5,8 (mg/m³)

- Substance: benzyl acetate

DNEL

Systemic effects Long term Workers inhalation = 21,9 (mg/m³)

Systemic effects Long term Workers dermal = 6,25 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 5,5 (mg/m³)

Systemic effects Long term Consumers dermal = 3,125 (mg/kg bw/day)

Systemic effects Long term Consumers oral = 3,125 (mg/kg bw/day)

8.2. Exposure controls

Appropriate engineering controls:

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

Manipulate with gloves. The gloves should be checked before being used. Use a technique suitable for the removal of gloves (without touching the outside of the glove) to avoid skin contact with this product dispose of contaminated gloves after use in accordance with the legislation and good laboratory practices. Wash and dry your hands.
Selected protective gloves shall comply with the requirements of EU Directive 89/686/EEC and EN 374 standards arising therefrom.

Full contact

Material: nitrile rubber
minimum thickness: 0.11 mm
permeation time: 480 min

(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.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method
Physical state	Liquid	
Colour	Grey	
Odour	Characteristic	
Odour threshold	not determined	
Melting point/freezing point	not determined	
Boiling point or initial boiling point and boiling range	not determined	
Flammability	nonflammable	
Lower and upper explosion limit	not determined	
Flash point	> 65 °C	
Auto-ignition temperature	not determined	
Decomposition temperature	not determined	

Physical and chemical properties	Value	Determination method
pH	8.5 - 9.5	
Kinematic viscosity	not determined	
Solubility	Completely soluble in water	
Water solubility	Completely soluble in water	
Partition coefficient n-octanol/water (log value)	not determined	
Vapour pressure	not determined	
Density and/or relative density	1,000 - 1,060 gr/cm3	
Relative vapour density	not determined	
Particle characteristics	irrelevant	

9.2. Other information

Content of VOC ready to use condition: 0,09 %

9.2.1 Information with regard to physical hazard classes**a) Explosives**

i) sensitivity to shock
Irrilevant

ii) effect of heating under confinement
Irrilevant

iii) effect of ignition under confinement
Irrilevant

iv) sensitivity to impact
Irrilevant

v) sensitivity to friction
Irrilevant

vi) thermal stability
Irrilevant

vii) package
Irrilevant

b) Flammable gases

i) Tci / explosion limits
Irrilevant

ii) fundamental burning velocity
Irrilevant

c) Aerosols
Irrilevant

d) Oxidising gases
Irrilevant

e) Gases under pressure

Irrilevant

f) Flammable liquids

Irrilevant

g) Flammable solids

i) burning rate, or burning time as regards metal powders

Irrilevant

ii) statement on whether the wetted zone has been passed

Irrilevant

h) Self-reactive substances and mixtures

i) decomposition temperature

Irrilevant

ii) detonation properties

Irrilevant

iii) deflagration properties

Irrilevant

iv) effect of heating under confinement

Irrilevant

v) explosive power, if applicable

Irrilevant

i) Pyrophoric liquids

Irrilevant

j) Pyrophoric solids

i) statement on whether spontaneous ignition occurs when poured or within five minutes thereafter, as regards solids in powder form

Irrilevant

ii) statement on whether pyrophoric properties could change over time

Irrilevant

k) Self-heating substances and mixtures

i) statement on whether spontaneous ignition occurs and the maximum temperature rise obtained

Irrilevant

ii) results of screening tests referred to in section 2.11.4.2 of Annex I to Regulation (EC) No 1272/2008, if relevant and available

Irrilevant

l) Substances and mixtures, which emit flammable gases in contact with water. The following information may be provided

i) identity of the emitted gas, if known

Irrilevant

ii) statement on whether the emitted gas ignites spontaneously

Irrilevant

iii) gas evolution rate

Irrilevant

m) Oxidising liquids

Irrilevant

n) Oxidizing solids

Irrilevant

o) Organic peroxides

i) decomposition temperature

Irrilevant

ii) detonation properties

Irrilevant

iii) deflagration properties

Irrilevant

iv) effect of heating under confinement

Irrilevant

v) explosive power

Irrilevant

p) Corrosive to metals

i) metals that are corroded by the substance or mixture

Irrilevant

ii) corrosion rate and statement on whether it refers to steel or aluminium

Irrilevant

iii) reference to other sections of the safety data sheet with regard to compatible or incompatible materials

Irrilevant

q) Desensitised explosives

i) desensitising agent used

Irrilevant

ii) exothermic decomposition energy

Irrilevant

iii) corrected burning rate (Ac)

Irrilevant

iv) explosive properties of the desensitised explosive in that state

Irrilevant

9.2.2 Other safety characteristics

- a) mechanical sensitivity
Irrilevant
- b) self-accelerating polymerisation temperature
Irrilevant
- c) formation of explosible dust/air mixtures
Irrilevant
- d) acid/alkaline reserve
Irrilevant
- e) evaporation rate
Irrilevant
- f) miscibility
Irrilevant
- g) conductivity
Irrilevant
- h) corrosiveness
Irrilevant
- i) gas group
Irrilevant
- j) redox potential
Irrilevant
- k) radical formation potential
Irrilevant
- l) photocatalytic properties
Irrilevant

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 sulfide, strong reducing agents.

10.6. Hazardous decomposition products

Does not decompose when used for intended uses.

SECTION 11. Toxicological information**11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008**

ATE(mix) oral = 9.390,0 mg/kg

ATE(mix) dermal = 317.460,3 mg/kg

ATE(mix) inhal = ∞

(a) acute toxicity: α-Hexylcinnamaldehyde: Oral (rat) LD50: 2450 mg/kg

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

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.

Coconut diethanolamide: 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.

Coconut diethanolamide: Acute Irritazione\Corrosione eyes

(d) respiratory or skin sensitisation: Coconut diethanolamide: Non-sensitizing

(e) germ cell mutagenicity: based on available data, the classification criteria are not met.

(f) carcinogenicity: Coconut diethanolamide: IARC Group 2B carcinogen-possible carcinogenic to humans

(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 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:

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

Alcohols, C13-15, branched and linear, ethoxylated:

LD50 (rat) Oral (mg/kg body weight) > 300

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

cellulase:

Acute oral toxicity

Parameter: LD50 (Cellulases, No. CAS: 9012-54-8)

Exposure route: Oral

Species: Rat

Effective dose: > 2880 mg / kg dw

LD50 (rat) Oral (mg/kg body weight) = 2880

α -Hexylcinnamaldehyde:

LD50 (rat) Oral (mg/kg body weight) = 2450

11.2. Information on other hazards

No data available.

SECTION 12. Ecological information

12.1. Toxicity

Related to contained substances:

Sodium Lauryl Ether sulfate:

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

Parametro: 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)

Parametro: 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)

Parametro: Algae

Scenedesmus subspicatus

Value = 27 mg/l

C(E)L50 (mg/l) = 7,1 1

1

Alcohols, C13-15, branched and linear, ethoxylated:

C(E)L50 (mg/l) = 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/l) = 2,39 1
1

cellulase:

Acute (short-term) toxicity on fish

Parameter: LC50 (CELLULASES; CAS No. 9012-54-8)

Species: Oncorhynchus mykiss (Trout iris)

Effective dose: > 100 mg / l

Exposure time: 96 h

Acute (short-term) toxicity to dafnie

Parameter: EC50 (CELLULASES, CAS No. 9012-54-8)

Species: Daphnia magna (big flea of water)

Effective dose: > 100 mg / l

Exposure time: 48 h

Acute (short-term) toxicity to algae

Parameter: EC50 (CELLULASES, CAS No. 9012-54-8)

Species: Pseudokirchneriella subcapitata

Effective dose: > 100 mg / l

Exposure time: 72 h

C(E)L50 (mg/l) = 100 1

1

α -Hexylcinnamaldehyde:

Freshwater Fish Toxicity: acute LC50 >1-10 mg/L

Freshwater Invertebrates Toxicity: acute EC <1 mg/L

Algal Toxicity: acute EC <1 mg/L.

C(E)L50 (mg/l) = 0,99

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1):

Acute toxicity to fish

The material is very toxic to aquatic organisms (LC50 / EC50 / IC50 below 1 mg / l for the most sensitive species).

LC50, Oncorhynchus mykiss (rainbow trout), flow-through test, 96 Hour, 0.19 mg / l, OECD Test Guideline 203 or equivalent

Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), Flow-through test, 48 h, 0.16 mg / l, OECD Test Guideline 202 or equivalent

Acute toxicity to algae / aquatic plants

EC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, 0.027 mg / l, OECD Test Guideline 201 or equivalent

NOEC, Skeletonema costatum, Static test, 72 h, Growth rate, 0.0014 mg / l

Chronic toxicity to fish

NOEC, Rainbow trout (Oncorhynchus mykiss), flow, 14 d, 0.05 mg / l

Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna, Flow-through test, 21 d, 0.1 mg / l

100

NOEC (mg/l) = 0,05 100

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

12.2. Persistence and degradability

Related to contained substances:

Sodium Lauryl Ether sulfate:

Easily biodegradable

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1):

Biodegradation (aquatic metabolism): 5-chloro-2-methyl-4-isothiazolin-3-one (CMIT):

t $\frac{1}{2}$ anaerobic = 0.2 days. t $\frac{1}{2}$ aerobic = 0.38 - 1.3 days. 2-methyl-4-isothiazolin-3-one (MIT): aerobic t $\frac{1}{2}$ = 0.38 - 1.4 days

Biodegradability: Considered to be rapidly degradable. The product is not readily biodegradable according to OECD / EC criteria.

Biodegradation: <50%

Exposure time: 10 d

Photodegradation

Atmospheric half-life: 0.38 - 1.3 d

12.3 Bioaccumulative potential

Partition coefficient: n-octanol / water (log Pow): 0.401 Method not specified.

12.3. Bioaccumulative potential

Related to contained substances:

reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H -isothiazol-3-one [EC no. 220-239-6] (3:1):

Low potential for bioconcentration (FBC or Log Pow < 100 < 3).

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

12.6. Endocrine disrupting properties

Based on available data, there are no substances that interfere with the Endocrine System in accordance with Regulation (EU) 2017/2100

12.7. 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

SECTION 14. Transport information

14.1. UN number or ID 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. Maritime transport in bulk according to IMO instruments

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

REGULATION (EU) No 1357/2014 - waste:
HP4 - Irritant — skin irritation and eye damage

Substances in the Candidate List (REACH Article 59)
Based on available data, no SVHC substances are present

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, 3.2 Mixtures, 4.1. Description of first aid measures, 8.1. Control parameters, 9.2. Other information, 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008, 12.1. Toxicity, 12.2. Persistence and degradability, 12.3. Bioaccumulative potential, 12.5. Results of PBT and vPvB assessment, 12.6. Endocrine disrupting properties, 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Description of the hazard statements exposed to point 3

H315 = Causes skin irritation.

H318 = Causes serious eye damage.

H412 = Harmful to aquatic life with long lasting effects.

H302 = Harmful if swallowed.

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

H317 = May cause an allergic skin reaction.

H411 = Toxic to aquatic life with long lasting effects.
H301 = Toxic if swallowed.
H310 = Fatal in contact with skin.
H314 = Causes severe skin burns and eye damage.
H330 = Fatal if inhaled.
H400 = Very toxic to aquatic life.
H410 = Very toxic to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008

H315 - Causes skin irritation. Classification procedure: Calculation method
H319 - Causes serious eye irritation. Classification procedure: Calculation method

Main normative references:

Directive 1999/45/EC

Directive 2001/60/EC

Regulation 1272/2008/EC

Regulation 2010/453/EC

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

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.
