

SECTION 1. Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product code : Hygienfresh HygieneBomb spray no gas Clean Sense
Trades code : A76-010
Product line: Hygienfresh

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

Super-concentrated detergent and sanitizing spray. For a clean and deep hygiene

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, GHS09

Hazard Class and Category Code(s):

Skin Irrit. 2, Eye Irrit. 2, Aquatic Acute 1

Hazard statement Code(s):

H315 - Causes skin irritation.

H319 - Causes serious eye irritation.

H400 - Very toxic to aquatic life. (1)

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 for the environment as it is very toxic to aquatic organisms

2.2. Label elements

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

Pictogram, Signal Word Code(s):
GHS07, GHS09 - Warning



Hazard statement Code(s):
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H400 - Very toxic to aquatic life. (1)

Supplemental Hazard statement Code(s):
EUH208 - Contains butylphenyl methylpropional, amyl cinnamal, citronellol. 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

- P273 - Avoid release to the environment.
- P280 - Wear protective gloves/protective clothing/eye protection/face protection.

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.

Disposal

- P501 - Dispose of contents / container in accordance with local and national regulations.

Contains (Reg.EC 648/2004):

< 5% non-ionic surfactants, cationic surfactants, perfumes, phosphonates, didecyltrimonium chloride - butylphenyl methylpropional - amyl cinnamal - citronellol - cinnamyl alcohol - geraniol

Content of VOC ready to use condition: 10,60 %

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[w/w]	Classification	Index	CAS	EINECS	REACH
Propan-2-ol - FEMA 2929	> 5 <= 15%	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	603-117-00-0	67-63-0	200-661-7	
Fatty alcohol ethoxylate	> 1 <= 5%	Acute Tox. 4, H302; Eye Dam. 1, H318		64425-86-1		02-2119548 515-35-000 0

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACH
ethanol	> 1 <= 5%	Flam. Liq. 2, H225	603-002-00-5	64-17-5	200-578-6	
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides - FEMA 0	> 1 < 3%	Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Corr. 1B, H314; Eye Dam. 1, H318; Aquatic Acute 1, H400 100 100		68424-85-1	270-325-2	
didecyldimethylammonium chloride	> 0,1 <= 1%	Flam. Liq. 3, H226; Acute Tox. 4, H302; Skin Corr. 1B, H314; Aquatic Acute 1, H400; Aquatic Chronic 2, H411 10	612-131-00-6	7173-51-5	230-525-2	
2-(4-tert-butylbenzyl)propionaldehyde	>= 0,1 < 1%	Acute Tox. 4, H302; Skin Irrit. 2, H315; Skin Sens. 1, H317; Repr. 2, H361f; Aquatic Chronic 2, H411		80-54-6	201-289-8	01-2119907 954-30-000 0
2-benzylideneheptanal	> 0,1 < 1%	Skin Sens. 1, H317; Aquatic Chronic 2, H411		122-40-7	204-541-5	
musk ketone - FEMA 0	<= 0,1%	Carc. 2, H351; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 10	609-069-00-7	81-14-1	201-328-9	

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
Do not use eye drops or ointments of any kind before the examination or advice from an oculist.

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 mask, gloves and protective clothing.

6.1.2 For emergency responders:

Wear a mask, gloves and protective clothing. Suitable: LaTeX, nitrile, PVC

Delete all naked flames and potential sources of ignition. Do not smoke.

Provide adequate ventilation.

Evacuate danger area and, where appropriate, 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
Wear protective gloves/protective clothing/eye protection/face protection.
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:

Propan-2-ol:

TLV: TWA 200 ppm 400 ppm as STEL A4 (not classifiable as a human carcinogen); (ACGIH 2004).

MAK: 200 ppm 500 mg/m peak limitation Category: II (2); Risk group for pregnancy: C; (DFG 2004).

ethanol:

Component CAS-No. Value Control parameters

Basis

Ethanol-17-64 TWA 5 ppm 1.000

1.920 mg/m³

UK. EH40 WEL-Workplace Exposure Limits

Remarks Where no specific short-term exposure limit is listed, a figure three times the long-term exposure should be used

- Substance: Propan-2-ol

DNEL

Systemic effects Long term Workers inhalation = 500 (mg/m³)

Systemic effects Long term Workers dermal = 880 (mg/kg bw/day)

Systemic effects Long term Consumers inhalation = 319 (mg/m³)

Systemic effects Long term Consumers dermal = 26 (mg/kg bw/day)

PNEC

Sweet water = 140,9 (mg/l)

sediment Sweet water = 552 (mg/kg/sediment)

Sea water = 140,9 (mg/l)

sediment Sea water = 552 (mg/kg/sediment)

ground = 28 (mg/kg ground)

- Substance: ethanol

DNEL

Systemic effects Long term Workers inhalation = 950 (mg/m³)

- Substance: didecyltrimethylammonium chloride

DNEL

Systemic effects Long term Workers inhalation = 18,2 (mg/m³)

Systemic effects Long term Workers dermal = 8,6 (mg/kg bw/day)

PNEC

Sweet water = 0,002 (mg/l)

sediment Sweet water = 282 (mg/kg/sediment)

Sea water = 0,0002 (mg/l)

sediment Sea water = 0,28 (mg/kg/sediment)

intermittent emissions = 0,00029 (mg/l)

STP = 0,595 (mg/l)

ground = 1,4 (mg/kg ground)

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

When handling the pure product use safety glasses (spectacles cage) (EN 166).

(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



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In conformity to Regulation (EU) 2015/830

minimum thickness: 0.11 mm
permeation time: 480 min

(ii) Other

When handling the pure product wear full protective skin 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
Appearance	liquid	
Odour	characteristic	
Odour threshold	not determined	
pH	7	
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)	nonflammable	
Upper/lower flammability or explosive limits	not determined	
Vapour pressure	not determined	
Vapour density	not determined	
Relative density	0.97 - 1.02 gr/cm3	
Solubility	completamente solubile in acqua	
Water solubility	completamente solubile in acqua	
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

Content of VOC ready to use condition: 10,60 %

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 toxicological effects**

ATE(mix) oral = 22.022,8 mg/kg

ATE(mix) dermal = ∞

ATE(mix) inhal = ∞

(a) acute toxicity: ethanol: LD50 Oral-rat-7.060 mg/kg

Remarks: Lungs, Thorax, or Respiration: Other changes.

LC50 Inhalation-rat-10:0-20000 ppm

2-(4-tert-butylbenzyl)propionaldehyde: Oral Rat LD50 mg/kg 3.700

Skin Rabbit > 2.000 mg/kg LD50

2-benzylideneheptanal: oral-rat LD50: 3730 mg / kg

The dermal LD50 value for alpha-amylcinnamaldehyde was calculated to be greater than 2000 mg/kg.

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

Propan-2-ol: Skin-rabbit

Result: Mild skin irritation

ethanol: Skin-rabbit

Result: Irritating to skin. -12:0 am

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides: rabbit Result: Method: DOT Corrosive

Exposure time: 12:0 am

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

ethanol: Eyes-rabbit

Result: Mild eye irritation-12:0 am

(Draize Test)

Propan-2-ol: Eyes-rabbit

Result: Eye irritation- 24 h

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides: rabbit Result: Caustic Method: DOT
(d) respiratory or skin sensitization: Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:
Buehler guinea pig Test Classification: Did not cause sensitization on laboratory animals.

Result: not sensitizing Method: OECD Test Guideline 406

(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: ethanol: Reproductive toxicity-Human-female-Oral

Effects on Newborn: Apgar score (human only). Effects on Newborn: Other measures or neonatal effects.

Effects on Newborn: Drug dependence.

musk ketone: no data available

Reproductive toxicity - rat - Oral

Effects on the female reproductive system: other effects Fertility effects: post-implantation mortality (death and / or
reabsorption of the implant by total number of implants) Embryo or fetus effects: foetotoxicity (excluded
the death; eg, dwarf fetus)

Reproductive toxicity - rat - Oral

Effects on the female reproductive system: other effects Effects on the embryo or fetus: foetotoxicity (excluding the
death; eg, dwarf fetus)

(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:

Propan-2-ol:

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

INHALATION RISK: A harmful contamination of the air will be reached quite slowly due to evaporation of the substance
at 20 C; However, for spraying or scattering, much more quickly.

Effects of short-term exposure: the substance is irritating to the eyes and the respiratory tract the substance may cause
effects on the central nervous system, causing depression. Much greater exposure to the OEL may lead to
unconsciousness.

Effects of REPEATED EXPOSURE or long term: the liquid degreasing the skin features.

ACUTE HAZARDS/Symptoms INHALATION Cough. Vertigo. Drowsiness. Headaches. Sore throat. See If Swallowed.
CUTE CUTE.

EYE Redness.

INGESTION abdominal pain. Difficulty in breathing. Nausea. State of unconsciousness. Vomiting. (Further see
inhalation).

NOT and use of alcoholic beverages enhances the harmful effect.

LD50 (rat) Oral (mg/kg body weight) = 2100

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2100

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 29

Fatty alcohol ethoxylate:

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

ethanol:

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

INHALATION RISK: A harmful contamination of the air will be reached quite slowly due to evaporation of the substance
at 20 C.

Effects of short-term exposure: the substance is irritating to the eyes. Inhalation of high vapour can cause
irritation of the eyes and respiratory tract. The substance may cause effects on the central nervous system effects of
REPEATED EXPOSURE or long term: the liquid degreasing the skin features. The substance may have an effect on
the high central nervous system respiratory tract, causing irritation, headaches, fatigue and lack of concentration. See
Notes.

ACUTE HAZARDS/Symptoms INHALATION Cough. Headaches. Fatigue. Drowsiness.

CUTE CUTE.

EYE Redness. Pain. Burning.

SWALLOWED burning sensation. Headaches. Confusion. Vertigo. State of unconsciousness.

N O T and consumption of ethanol during pregnancy can have adverse effects on the unborn child. Chronic ethanol ingestion can cause cirrhosis of the liver.

LD50 (rat) Oral (mg/kg body weight) = 7060

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 20000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 20000

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

LD50 (rat) Oral (mg/kg body weight) = 344

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 3340

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 5

didecyldimethylammonium chloride:

Oral, LD50: 238 mg / kg (rat)

Dermal, LD50: 3342 mg / kg (Rabbit)

LD50 (rat) Oral (mg/kg body weight) = 238

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 3342

2-(4-tert-butylbenzyl)propionaldehyde:

LD50 (rat) Oral (mg/kg body weight) = 3700

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

2-benzylideneheptanal:

LD50 (rat) Oral (mg/kg body weight) = 3730

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

musk ketone:

LD50 (rat) Oral (mg/kg body weight) = 10000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 10000

SECTION 12. Ecological information

12.1. Toxicity

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

Related to contained substances:

Propan-2-ol:

Toxicity to fish LC50-Pimephales promelas (fathead minnow)-9, 640.00 mg/l-96 h

Toxicity to daphnia and other aquatic invertebrates

-EC50 Daphnia magna (Water flea)-5, 102.00 mg/l- 24 h

EC50 Immobilization-Daphnia magna (Water flea)-6.851 mg/l- 24h

C(E)L50 (mg/l) = 5102

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/l) = 1

ethanol:

C(E)L50 (mg/l) = 11200

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

C(E)L50 (mg/l) = 0,01 100

100

didecyldimethylammonium chloride:

Toxicity to fish

LC50 Pimephales promelas (fathead minnow): 0.19 mg / l; 96 h

Analytical monitoring: yes

US-EPA

Toxicity to daphnia and other aquatic invertebrates

EC50 Daphnia magna (Water flea): 0.062 mg / l; 48 h

Analytical monitoring: yes

US-EPA

Toxicity to algae

ErC50 Pseudokirchneriella subcapitata (green algae): 0.026 mg / l; 96 h

Analytical monitoring: yes

OECD Test Guideline 201

Toxicity to bacteria

EC50 activated sludge: 11 mg / l; 3 h

OECD Test Guideline 209

C(E)L50 (mg/l) = 0,026 10

2-(4-tert-butylbenzyl)propionaldehyde:

Daphnia magna 48 hrs-LC50 = 0.40 mg/l

Green algae 96 hrs-EC50 = 0.827 mg/l

C(E)L50 (mg/l) = 0,4

2-benzylideneheptanal:

Fish: 96h LC50: 0.91 mg / L (Oryzias latipes)

Crustacea: 48h EC50: 0.28 mg / L (Daphnia magna)

Algae: 72h EC50: 2.3 mg / L (Selenastrum capricornutum)

C(E)L50 (mg/l) = 0,28

musk ketone:

Toxicity to daphnia and other aquatic invertebrates

Static test - Daphnia magna (Large water flea) -> 0.46 mg / l - 48 h

Method: OECD TG 202

Toxicity to algae Growth inhibitor CE50 - Pseudokirchneriella subcapitata (algae chloroficee) -

0.24 mg / l - 72 h

Method: OECD TG 201

C(E)L50 (mg/l) = 0,088 10

The product is dangerous for the environment as it is very toxic to 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).

Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides:

Biodegradability:

OECD Confirmatory > 90% Test Method: OECD 303 A Modified SCAS Test Exposure time: 99% 7 d > Method: OECD

Test 302 Evolution CO₂ Concentration: 5 mg/litre Exposure time: 28 d Result: Readily biodegradable.

95.5% Method: OECD 301 B

didecyldimethylammonium chloride:

> 60%; 28 d; aerobics

OECD Test Guideline 301B

Readily biodegradable

2-(4-tert-butylbenzyl)propionaldehyde:

92% "biodegradation after 28 days. 96% after day 31.

2-benzylideneheptanal:

51% (by BOD), 81% (by TOC)

musk ketone:

aerobic Biochemical oxygen demand - Exposure time 28 d

Result: <80% - Not immediately biodegradable.

Method: OECD TG 302

12.3. Bioaccumulative potential

Related to contained substances:

didecyldimethylammonium chloride:

log Pow: ca. -0.4 (20 ° C)

OECD Test Guideline 107

Bioaccumulation is not expected.

Bioconcentration factor (BCF): 81

Lepomis macrochirus (Bluegill sunfish); 46 d

US-EPA

musk ketone:

Bioaccumulation Oncorhynchus mykiss (rainbow trout) - 21 d -47 µg / l

Bioconcentration factor (BCF): 1.380

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

No PBT/vPvB ingredient is present

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. Send to authorized discharge plants or for incineration under controlled conditions. Operate according to local and National rules in force

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

ADR/RID/IMDG/ICAO-IATA: 0000

ADR exemption because compliance with the following characteristics:

Combination packagings: per inner packaging 5 L per package 30 Kg

Inner packagings placed in shrink-wrapped or stretch-wrapped trays: per inner packaging 5 L per package 20 Kg

14.2. UN proper shipping name

ADR/RID/IMDG: MATERIA PERICOLOSA PER L'AMBIENTE, LIQUIDA, N.A.S. (Composti di ammonio quaternario, benzil-C12-16-alkyldimethyl, cloruri, etanolo, cloruro di didecildimetilammonio, 2-(4-terz-butylbenzil)propionaldeide, 2-benzylideneheptanal, acetato di 4-terz-butylcicloesile, Dodecanal, 3-metil-4-(2,6,6-trimetilcicloes-2-enil)but-3-en-2-one, α -Hexylcinnamaldehyde, Indole)

ADR/RID/IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, ethanol, didecyltrimethylammonium chloride, 2-(4-tert-butylbenzil)propionaldehyde, 2-benzylideneheptanal, 4-tert-Butylcyclohexyl acetate, Dodecanal, 3-methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-en-2-one, α -Hexylcinnamaldehyde, indole)

ICAO-IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, ethanol, didecyltrimethylammonium chloride, 2-(4-tert-butylbenzil)propionaldehyde, 2-benzylideneheptanal, 4-tert-Butylcyclohexyl acetate, Dodecanal, 3-methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-en-2-one, α -Hexylcinnamaldehyde, indole)

14.3. Transport hazard class(es)

ADR/RID/IMDG/ICAO-IATA: Class : 9

ADR/RID/IMDG/ICAO-IATA: Label :

ADR: Tunnel restriction code : --

ADR/RID/IMDG/ICAO-IATA: Limited quantities : 5 L

IMDG - EmS : F-A, S-F

14.4. Packing group

ADR/RID/IMDG/ICAO-IATA: III

14.5. Environmental hazards

ADR/RID/ICAO-IATA: Product is environmentally hazardous

IMDG: Marine polluting agent : Yes

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**

Seveso category:

E1 - ENVIRONMENTAL HAZARDS

REGULATION (EU) No 1357/2014 - waste:

HP4 - Irritant — skin irritation and eye damage

HP14 - Ecotoxic

15.2. Chemical safety assessment

The supplier has made an assessment of chemical safety

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

Description of the hazard statements exposed to point 3

H225 = Highly flammable liquid and vapour.

H319 = Causes serious eye irritation.

H336 = May cause drowsiness or dizziness.

H302 = Harmful if swallowed.

H318 = Causes serious eye damage.

H312 = Harmful in contact with skin.

H314 = Causes severe skin burns and eye damage.

H400 = Very toxic to aquatic life.

H226 = Flammable liquid and vapour.

H411 = Toxic to aquatic life with long lasting effects.

H315 = Causes skin irritation.

H317 = May cause an allergic skin reaction.

H361f = Suspected of damaging fertility.

H351 = Suspected of causing cancer .

H410 = Very 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

** 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.