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

1.1. Product identifier

Product code : Hygienfresh HygienBomb Essence Clean Sense
Trades code : A80-210
Product line: Hygienfresh

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

Super concentrated essence with deep hygiene effect.
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:
GHS05, GHS07, GHS09

Hazard Class and Category Code(s):
Skin Irrit. 2, Skin Sens. 1A, Eye Dam. 1, Aquatic Chronic 1

Hazard statement Code(s):
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H410 - Very toxic to aquatic life with long lasting effects. (1)

If brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema.
The product, if brought into contact with skin can cause skin sensitization.
If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.
The product is dangerous to the environment as it is very toxic to aquatic life with long lasting effects

2.2. Label elements

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

Pictogram, Signal Word Code(s):
GHS05, GHS07, GHS09 - Danger

Hazard statement Code(s):
H315 - Causes skin irritation.
H317 - May cause an allergic skin reaction.
H318 - Causes serious eye damage.
H410 - Very toxic to aquatic life with long lasting effects. (1)

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.
Prevention
P261 - Avoid breathing vapours.
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.
P310 - Immediately call a POISON CENTER/doctor/physician
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.
Disposal
P501 - Dispose of contents / container in accordance with local and national regulations.

Contains:
aqua, parfum, citronellol, trideceth-12, didecyldimonium chloride, dihydrogenated tallow hydroxyethylmonium methosulfate, butylphenyl methylpropional, geraniol, ethoxydiglycol, ricinus communis oil, isopropyl alcohol, alpha isomethylionone, benzalkonium chloride, linalool, hydroxyisohexyl 3-cyclohexene carboxaldehyde, limonene, dimethicone, alcohol, amines, c12-16-alkyldimethyl, steareth-21.

Contains (Reg.EC 648/2004):
> 30% perfumes,5% < 15% non-ionic surfactants, < 5% cationic surfactants, didecyldimonium chloride - citronellol - butylphenyl methylpropional - geraniol - hydroxyisohexyl 3-cyclohexene carboxaldehyde - alpha isomethylionone - linalool - limonene

Content of VOC ready to use condition: 9,20 %

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
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy; Isotridecanol, ethoxylated - FEMA 0	> 5 <= 15%	Acute Tox. 4, H302; Eye Dam. 1, H318		24938-91-8		
Terpineol - FEMA 0	> 1 <= 5%	Skin Irrit. 2, H315; Eye Irrit. 2, H319		8000-41-7	2322681	01-2119553062-49-xxxx
Citronellol	> 1 <= 5%	Skin Irrit. 2, H315; Eye Irrit. 2, H319; STOT SE 3, H335		106-22-9	203-375-0	01-2119453995-23-0000
didecyldimethylammonium chloride	> 1 <= 5%	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	
Fatty acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized	> 1 <= 5%			157905-74-3	931-203-0	01-2119463889-16-0004
2-(4-tert-butylbenzyl)propionaldehyde	> 1 < 3%	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	01-2119907954-30-0000
Geraniol - FEMA 2507	> 1 <= 5%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Dam. 1, H318		106-24-1	203-377-1	01-2119552430-49-0000
Propan-2-ol - FEMA 2929	> 1 <= 5%	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	603-117-00-0	67-63-0	200-661-7	
3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl acetate - FEMA 0	> 1 <= 5%	Aquatic Chronic 3, H412		54830-99-8	259-367-2	
benzyl acetate - FEMA 2135	> 1 <= 5%	Aquatic Chronic 3, H412		140-11-4	205-399-7	
2,2,2-trichloro-1-phenylehtylacetate - FEMA 0	> 1 <= 5%	Skin Corr. 2, H315; Aquatic Chronic 3, H412		90-17-5	201-972-0	01-2119929625-31-0000
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	> 1 <= 5%	Aquatic Acute 1, H400; Aquatic Chronic 1, H410	603-212-00-7	1222-05-5	214-946-9	01-2119488227-29-0000
diphenyl ether - FEMA 3667	> 1 <= 5%	Aquatic Acute 1, H400; Aquatic Chronic 1, H410		101-84-8	202-981-2	
allyl phenoxyacetate - FEMA 2038	> 1 <= 5%	Acute Tox. 4, H302; Acute Tox. 4, H312; Skin Irrit. 2, H315; Skin Sens. 1, H317		7493-74-5	231-335-2	
4-tert-Butylcyclohexyl acetate - FEMA 0	> 0,1 <= 1%	Skin Sens. 1B, H317; Aquatic Chronic 2,		32210-23-4	250-954-9	

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
		H411				
3-methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-en-2-one - FEMA 2714	> 0,1 <= 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Eye Irrit. 2, H319; Aquatic Chronic 2, H411		127-51-5	204-846-3	
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides - FEMA 0	> 0,1 <= 1%	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	
4-(4-hydroxy-4-methylpentyl)cyclohex-3-enecarbaldehyde	> 0,1 <= 1%	Skin Sens. 1A, H317	605-040-00-8	31906-04-4	250-863-4	
2-Methyl-3-(p-isopropylphenyl)propionaldehyde - FEMA 2743	> 0,1 <= 1%	Skin Irrit. 2, H315; Skin Sens. 1, H317; Aquatic Chronic 2, H411		103-95-7	203-161-7	01-2119970582-32-0000
Lavender, Lavandula hybrida grosso, ext. - FEMA 0	> 0,1 <= 1%	Skin Sens. 1, H317; Aquatic Chronic 3, H412		93455-97-1	297-385-2	
ethanol	<= 0,1%	Flam. Liq. 2, H225	603-002-00-5	64-17-5	200-578-6	

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 medical advice is needed, have product container or label at hand.
Immediately call a POISON CENTER/doctor/physician

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 mask, gloves and protective clothing. Suitable: LaTeX, nitrile, PVC
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
Wear protective gloves/protective clothing/eye protection/face protection.
In residential areas do not use on large surfaces.
At work do not eat or drink.
Contaminated work clothing should not be allowed out of the workplace.
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: didecyldimethylammonium 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)

- Substance: Fatty acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized
DNEL
Systemic effects Long term Workers inhalation = 44 (mg/m3)
Systemic effects Long term Workers dermal = 312,5 (mg/kg bw/day)
Systemic effects Long term Consumers inhalation = 13 (mg/m3)
Systemic effects Long term Consumers dermal = 187,5 (mg/kg bw/day)
Systemic effects Long term Consumers oral = 7,5 (mg/kg bw/day)
PNEC
Sweet water = 0,00191 (mg/l)
sediment Sweet water = 0,58 (mg/kg/sediment)
Sea water = 0,000191 (mg/l)
intermittent emissions = 0,0191 (mg/l)
STP = 2,96 (mg/l)
ground = 0,115 (mg/kg ground)

- 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)

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
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	6-7	
Melting point/freezing point	not determined	
Initial boiling point and boiling range	not determined	
Flash point	> 60 °C	
Evaporation rate	irrelevant	
Flammability (solid, gas)	irrelevant	
Upper/lower flammability or explosive limits	not determined	
Vapour pressure	undefined	
Vapour density	not determined	
Relative density	1.00 - 1.05 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	

Physical and chemical properties	Value	Determination method
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: 9,20 %

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.

SECTION 11. Toxicological information

11.1. Information on toxicological effects

ATE(mix) oral = 3.118,5 mg/kg
ATE(mix) dermal = 87.246,4 mg/kg
ATE(mix) inhal = ∞

(a) acute toxicity: Citronellol: orl-rat LD50:3450 mg/kg
skn-rbt LD50:2650 mg/kg
ihl-rat LCLo:1.3 mg/m3/4H
2-(4-tert-butylbenzyl)propionaldehyde: Oral Rat LD50 mg/kg 3.700
Skin Rabbit > 2.000 mg/kg LD50

Geraniol: Oral, rat: LD50 = 3500 mg/kg
Skin, rabbit: LD50 = >5000 mg/kg
IHL-rat TCLo: 0.5 mg/m3/4:00
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran: Acute Oral Toxicity
(1) Wistar rats (10/sex) were administered commercial grade HHCB (65% HHCB in either diethyl phthalate or isopropyl myristate) via gavage at 5000 mg/kg-bw and observed for 14 days. The corrected dose of HHCB was 3250 mg/kg-bw. One death occurred at this dose.
LD50 > 3250 mg/kg-bw
(2) Rats (10 females/dose; strain not specified) were administered commercial sample (65% HHCB in either diethyl phthalate or isopropyl myristate) via gavage at 3000 mg/kg-bw and observed for 14 days. It is not clear whether the reported dose reflected dose of the mixture or of HHCB. Therefore, a conservative estimate of the LD50 is considered to be 65% of the test concentration. No mortality was observed during the study.
LD50 > 1950 mg/kg-bw
diphenyl ether: LD50 = 2450 mg/kg bw rat

LD50 > 7940 mg/kg bw rabbit

LC50 = 2.66 mg/L
4-tert-Butylcyclohexyl acetate: Rats (10 per dose, sex and strain not reported) were administered 4-tert-butylcyclohexyl acetate by gavage at 5000 mg/kg-bw. No information on mortality was reported
Rabbits (4, sex and strain not reported) were administered 4-tert-butylcyclohexyl acetate dermally at 5000 mg/kg-bw. One rabbit died.
ethanol: LD50 Oral-rat-7.060 mg/kg
Remarks: Lungs, Thorax, or Respiration: Other changes.
LC50 Inhalation-rat-10:0-20000 ppm
(b) skin corrosion/irritationIf brought into contact with the skin, the product causes significant inflammation with erythema, scabs, or edema.
Terpineol: Skin-rabbit-skin irritant-Draize Test
Citronellol: skn-rbt 100 mg/24H SEV
Skin - Human - Skin irritation - 48 h
Geraniol: SKN-rbt 100 mg/12:00 am SEV
SKN-gpg 100 mg/12:00 am SEV
SKN-man 12:00 am 16 mg/SEV
Propan-2-ol: Skin-rabbit
Result: Mild skin irritation
benzyl acetate: Skin-rabbit-skin irritant-24 h
diphenyl ether: Severely irritating (24-h exposure) Slightly irritating (4-h exposure)
4-tert-Butylcyclohexyl acetate: Rabbits (species, sex and number not specified) were administered 4-tert-butylcyclohexyl acetate dermally to the ears and backs. Observations of the backs included slight erythema after 1 and 5 min, severe erythema and slight edema at 15 min, and severe erythema and edema at 20 hours. On day 8, slight redness and severe scaling were observed. Observations of the ears included severe erythema and edema with blistering after 20 hours. Severe necrosis was recorded on day 8. (Bhatia, S.P., et al., Food and Chemical Toxicology 46 (2008) S36-S41) 4-tert-Butylcyclohexyl acetate was irritating to rabbit skin
Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides: rabbit Result: Method: DOT Corrosive Exposure time: 12:0 am
ethanol: Skin-rabbit
Result: Irritating to skin. -12:0 am
(c) serious eye damage/irritation: If brought into contact with eyes, the product causes serious damages to eyes, such as an opaque cornea or injury to iris.
Geraniol: Eyes-rabbit
Result: Risk of serious damage to eyes. -12:00 am
(Directive 67/548/EEC, Annex V, b. 5.)
ethanol: Eyes-rabbit
Result: Mild eye irritation-12:0 am
(Draize Test)
Terpineol: Eyes-rabbit-Slight eye irritation Test Draize
Propan-2-ol: Eyes-rabbit
Result: Eye irritation- 24 h
diphenyl ether: Slightly irritating

4-tert-Butylcyclohexyl acetate: Albino rabbits (3/sex dose not specified) were instilled 0.1 mL aliquot of 0.625% solution (vehicle not reported) into the right eye of each rabbit with no further treatment while the left eye served as control. Scores were recorded according to the Draize scale. Slight to moderate irritation with conjunctival chemosis and discharge were observed in all three rabbits (mean score for redness and 1.9 for 1 chemosis). All eyes cleared by day 4. (Bhatia, S.P., et al., Food and Chemical Toxicology 46 (2008) S36-S41) 4-tert-Butylcyclohexyl acetate was irritating to rabbit eyes.

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

(d) respiratory or skin sensitization: The product, if brought into contact with skin can cause skin sensitization.

Citronellol: mouse - May cause sensitization by skin contact.

Geraniol: Guinea pig

May cause sensitisation by skin contact.

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: benzyl acetate: Laboratory tests revealed mutagenic effects.

Genotoxicity in vitro lymphocyte-topo-

mutation in mammalian somatic cells

In vitro genotoxicity-Hamster-Lungs

Cytogenetic analysis

4-tert-Butylcyclohexyl acetate: Salmonella typhimurium strains TA98, TA100, TA1535, TA1537 and Ta 1538 were exposed to 4-tert-butylcyclohexyl acetate at 8 to 5000 g/plate in a bacterial reverse mutation assay in the presence and absence of metabolic activation. Positive and negative controls were used but their response was not provided. Cytotoxicity was observed at and above 200 g/plate.

4-tert-Butylcyclohexyl acetate was not mutagenic in this assay.

(f) carcinogenicity: Geraniol: No component of this product present at levels greater than or equal to 0.1% is identified as

probable, possible or confirmed human carcinogen by IARC.

benzyl acetate: Cancerogenicit-rat-Oral

Oncogenia: second neoplastic RTECS gastrointestinal tumors

Cancerogenicit-rat-Oral

Oncogenia: Liver cancer second neoplastic RTECS:

This product or contains a component that cannot be classified according to its effect

carcinogen IARC classification, ACGIH, NTP or EPA.

IARC: Group 3-3: Not classifiable as to its carcinogenicity to humans (Benzyl acetate)

(g) reproductive toxicity: 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran: Mated female Crl:CD(SD)Br rats (animals/sex/dose not specified) were administered HHCB via gavage at 0, 2, 6 or

20 mg/kg-bw/day beginning on gestation day 14. The F1 offspring were exposed in utero and throughout lactation. At the end of the pre-weaning period, 24 male and 24 female pups per dose were retained for further study. On day 22 post-partum, excess pups and parents were sacrificed and examined for abnormalities. When offspring were 84 days of age, males and females were mated and produced litters. After day 21 post-partum, all F2 pups and F1 dams were sacrificed and examined internally and externally for abnormalities. No adverse effects on behavior or reproduction were observed at any dose in parental animals or in F1 or F2 pups.

NOAEL (systemic and reproductive toxicity) = 20 mg/kg-bw/day (based on no effects at the highest dose tested)

diphenyl ether: In the repeated-dose dietary toxicity study described previously, reproductive organs of both genders were weighed and examined macroscopically and histopathologically. No adverse effects related to treatment were observed.

Pregnant female Sprague-Dawley rats (24/dose) were administered a mixture of diphenyl oxide (73.5 percent) and biphenyl (26.5 percent) by gavage at 0, 50, 200 or 500 mg/kg-day in corn oil on gestational days 6 through 15. Dams were observed for mortality, weight gain, food consumption and clinical signs of toxicity. Fetal resorptions, viability post implantation loss, total implantations and mean litter weight were determined. One-half of fetuses were processed for soft-tissue evaluations and the other half for skeletal evaluations. Two dams at 500 mg/kgday died. Reduced maternal body weight gain and food consumption were seen at 200 and 500 mg/kg-day. No treatment-related effects on developmental outcomes was observed.

LOAEL (maternal toxicity) = 200 mg/kg-from

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.

(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 exposure1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran: Sprague-Dawley rats (15/sex/dose) were administered HHCB via the diet at 0, 5, 15, 50 or 150 mg/kg-bw/day for 13 weeks. Test concentrations were determined from a range finding study in which a LOAEL of 300 mg/kg-bw/day (based on hepatic effects) was determined. Mean estimated test substance intakes were 5.4, 15.7, 51.8 or 155.8 mg/kg-bw/day for males and 5.1, 15.6, 51.9 or 154.6 mg/kg-bw/day for females. There were no mortalities, adverse clinical signs or treatment-related effects on body weight, hematology or ophthalmologic evaluation. Slightly lower mean plasma triglyceride levels were observed at week13 in males at 50 and 150 mg/kg-bw/day. Slightly lower plasma glucose concentrations were noted at week 7 in males and females given 15, 50 and 150 mg/kg-bw/day and at week 13 in males given 50 and 150 mg/kg-bw/day; these effects were not seen at the end of the 4-week recovery period. There were no treatment-related differences in absolute organ weights or organ weight

diphenyl ether: NOAEL (male) = 301 mg/kg-bw/day (the highest dose tested)
NOAEL (female) = 334.8 mg/kg-bw/day (the highest dose tested)

4-tert-Butylcyclohexyl acetate: In a modified developmental toxicity screening test (OCED TG 421), Crl: CD pregnant (SD) rats were administered 4-tert-butylcyclohexyl acetate (a mixture of 71% 28% trans and cis) in corn oil by gavage at 0, 40, 160 or 640 mg/kg-bw per day during gestation days 7 20. Rats were Caesarean-sectioned on day 21 of gestation and examined for number and distribution of corpora lutea, implantation sites and placenta. Live and dead fetuses and early and late resorptions were recorded. Fetuses were examined for sex ratio, gross external alterations and skeletal and soft tissue alterations. There were no effects on maternal body weights, weight gain, food consumption or organ weights. Pup viability, body weights, external observations and microscopic examination showed no significant alterations that could be related to the administration of the test substance.
NOAEL (maternal or developmental toxicity) = 640 mg/kg-bw/day (based on no effects at the highest dose tested)

(j) aspiration hazard: based on available data, the classification criteria are not met.

Hygienfresh HygienBomb Essence Clean Sense:
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

Related to contained substances:
Terpineol:
LD50 oral, rat-5,420 mg/kg
Ld50 oral, rat-4,300 mg/kg
Dermal Ld50-rabbit-> 2,000 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) = 4,76

Citronellol:
LD50 (rat) Oral (mg/kg body weight) = 3450
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2650
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 1,3

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

Fatty acids, C16-18 (even numbered) and C18 unsatd., reaction products with triethanolamine, di-Me sulfate-quaternized:
Oral, LD50: 5000 mg / kg (rat)
Dermal, LD50:> 2000 mg / kg (rat)
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

2-(4-tert-butylbenzyl)propionaldehyde:
LD50 (rat) Oral (mg/kg body weight) = 3700
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

Geraniol:
LD50 (rat) Oral (mg/kg body weight) = 3500
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 0,5

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).

N O T 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

3a,4,5,6,7,7a-hexahydro-4,7-methano-1H-indenyl acetate:
Acute oral toxicity : Acute toxicity estimate Dose: 2,750 mg/kg Method: Calculation method
Acute oral toxicity (Component) : LD50 rat Dose: 2,750 mg/kg Method: OECD Test Guideline 401 Remarks: IFF
Acute dermal toxicity LD50 rat Dose: > 5,000 mg/kg Method: OECD Test Guideline 402
LD50 (rat) Oral (mg/kg body weight) = 2750
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

benzyl acetate:
Oral LD50-rat-2,490 mg/kg
Observations: behavior: somnolence (General depressed activity)
LD50 Dermal-rabbit-> 5,000 mg/kg
Acute toxicity of the vapor (LC50): 245 8 hours
LD50 (rat) Oral (mg/kg body weight) = 2490
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 245

2,2,2-trichloro-1-phenylehtylacetate:
LD50 Oral - rat - 6.800 mg / kg
DL50 Dermal - on rabbit -> 2,000 mg / kg
LD50 (rat) Oral (mg/kg body weight) = 6800
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 2000

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran:
LD50 (rat) Oral (mg/kg body weight) = 3250
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 3250

diphenyl ether:
LD50 (rat) Oral (mg/kg body weight) = 2450
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 7940
CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 2,66

allyl phenoxyacetate:
LD50 (rat) Oral (mg/kg body weight) = 523
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 903

allyl phenoxyacetate
Oral, rat: LD50 = 523 mg/kg;
Skin, rabbit: LD50 = 903 mg/kg;

4-tert-Butylcyclohexyl acetate:
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

3-methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-en-2-one:
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

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

4-(4-hydroxy-4-methylpentyl)cyclohex-3-enecarbaldehyde:
Oral LD50-rat-3,227 mg/kg
Remark: sense organs: sight: tearing behavior: somnolence (depressive activity generic) behavior: tremors
Dermal LD50 rabbit-11,221-mg/kg
Observations: behavior: somnolence (General depressed activity) gastrointestinal: structural alterations or salivary gland function

2-Methyl-3-(p-isopropylphenyl)propionaldehyde:
Oral-rat LD50 3810 mg / kg
Remarks: Behavior: ataxia Behavior: coma Cute and annexed: other: hair

Food and Cosmetics Toxicology. Vol. 2, Pg. 327, 1964.

LD50 Dermal - rat -> 5.000 mg / kg
Remarks: Sense organs: sight: lacrimation Behavior: drowsiness (depressive activity generic) Skin and appendages: other: hair
LD50 (rat) Oral (mg/kg body weight) = 3810
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

Lavender, Lavandula hybrida grosso, ext.:
LD50 (rat) Oral (mg/kg body weight) = 5000
LD50 Dermal (rat or rabbit) (mg/kg body weight) = 5000

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 concetrazioni 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

SECTION 12. Ecological information

12.1. Toxicity

Hygienfresh HygienBomb Essence Clean Sense:
Hygienfresh HygienBomb Essence Clean Sense:
C(E)L50 (mg/l) = 1,3
NOEC (mg/l) = 100

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:
Poly(oxy-1,2-ethanediyl), .alpha.-tridecyl-.omega.-hydroxy; Isotridecanol, ethoxylated:
The substance fulfills the criteria for ultimate aerobic biodegradability and
ready biodegradability

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.

Geraniol:
36 - 70 % (by BOD), 72 - 88 % (by TOC)

diphenyl ether:
51–94% after 7 days (inherently biodegradable);
76% after 20 days (readily biodegradable)
6.3% after 28 days OECD TG 301C (not readily biodegradable)
20% after 75 days (resistant to biological action)

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

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

diphenyl ether:
BCF = 196 (measured in trout);
BCF = 112–583 (measured in carp);
BCF = 49–594 (measured in carp)

12.4. Mobility in soil

Related to contained substances:
Geraniol:
log Pow: 3.47

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: 3082

ADR exemption because compliance with the following characteristics:
Combination packagings: per inner packaging 5 L per package 30 Kg
Inner packagings placed in skrink-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-alchildimetil, cloruri, etanolo, cloruro di didecildimetilammonio, Propan-2-olo, acetato di benzile, 1,3,4,6,7,8-esaidro-4,6,6,7,8,8-esametillinden[5,6-c]pirano, 2-(4-terz-butilbenzil)propionaldeide, ossido di difenile, fenossiacetato di allile, acetato di 4-terz-butilcicloesile, 3-metil-4-(2,6,6-trimetilcicloes-2-enil)but-3-en-2-one, eptan-2-one)
ADR/RID/IMDG: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, ethanol, didecyldimethylammonium chloride, Propan-2-ol, benzyl acetate, 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, 2-(4-tert-butylbenzyl)propionaldehyde, diphenyl ether, allyl phenoxyacetate, 4-tert-Butylcyclohexyl acetate, 3-methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-en-2-one, heptan-2-one)
ICAO-IATA: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Quaternary ammonium compounds, benzyl-C12-16-alkyldimethyl, chlorides, ethanol, didecyldimethylammonium chloride, Propan-2-ol, benzyl acetate, 1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran, 2-(4-tert-butylbenzyl)propionaldehyde, diphenyl ether,

allyl phenoxyacetate, 4-tert-Butylcyclohexyl acetate, 3-methyl-4-(2,6,6-trimethylcyclohex-2-enyl)but-3-en-2-one, heptan-2-one)

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
H302 = Harmful if swallowed.
H318 = Causes serious eye damage.
H315 = Causes skin irritation.
H319 = Causes serious eye irritation.
H335 = May cause respiratory irritation.
H226 = Flammable liquid and vapour.
H314 = Causes severe skin burns and eye damage.
H400 = Very toxic to aquatic life.
H411 = Toxic to aquatic life with long lasting effects.

H317 = May cause an allergic skin reaction.
H361f = Suspected of damaging fertility.
H225 = Highly flammable liquid and vapour.
H336 = May cause drowsiness or dizziness.
H412 = Harmful to aquatic life with long lasting effects.
H410 = Very toxic to aquatic life with long lasting effects.
H312 = Harmful in contact with skin.

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.