

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

### **1.1. Product identifier**

Product code : Hygienfresh DeoSpray Soffio Tropicale  
Trades code : A73-018  
Product line: HygienFresh

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

Mangiaodori & fabrics Deospray Environment  
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:  
GHS02

Hazard Class and Category Code(s):  
Flam. Aerosol 1

Hazard statement Code(s):  
H222 - Extremely flammable aerosol.  
H229 - Pressurised container: May burst if heated

2.1.2 Classification according to Directive 1999/45/EEC:

Classification:  
F+; R12

Nature of special risks attributed:  
R12 - Extremely flammable.

Aerosol that ignites easily even at low temperatures, fire risk  
The repeated inhalation of vapors can cause drowsiness and giddiness.

Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 ° C.  
The aerosol containers overheated burst and can be ejected with violence from a distance and can take place a dangerous mechanism for the fire.

### 2.2. Label elements

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

Pictogram, Signal Word Code(s):  
GHS02 - Danger



Hazard statement Code(s):  
H222 - Extremely flammable aerosol.  
H229 - Pressurised container: May burst if heated

Precautionary statements:

General

P102 - Keep out of reach of children.

Prevention

P210 - Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P211 - Do not spray on an open flame or other ignition source.

P251 - Pressurized container: Do not pierce or burn, even after use.

Storage

P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

### 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 risk phrases and hazard statements

Substance	Concentration	Classification	Index	CAS	EINECS	REACH
Propane	> 30 <= 50%	F+; R12 Flam. Gas 1, H220; Press. Gas, H280	601-003-00-5	74-98-6	200-827-9	
Butane	> 20 <= 30%	F+; R12 Flam. Gas 1, H220	601-004-00-0	106-97-8	203-448-7	
Isobutane	> 10 <= 20%	F+; R12 Flam. Gas 1, H220	601-004-00-0	75-28-5	200-857-2	
Propan-2-ol - FEMA 2929	> 1 <= 5%	F; R11 Xi; R36 R67 Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	603-117-00-0	67-63-0	200-661-7	
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran	> 0,1 <= 1%	N; R50/53 Aquatic Acute 1, H400; Aquatic Chronic 1, H410	603-212-00-7	1222-05-5	214-946-9	01-2119488 227-29-000 0

Substance	Concentration	Classification	Index	CAS	EINECS	REACH
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**Fractionated global values**

Xi R36 = 3,94	Xi R36/38 = 0,04	Xi R41 = 0,01	Xi R43 = 1,72
Xi = 0,01	Xn R22 = 0,09	Xi R38 = 0,08	N R50/53 = 0,13
N R51/53 = 2,02	N R52/53 = 0,00	Xn R62 = 0,00	

**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):**

Wash thoroughly with soap and running water.

**Direct contact with eyes (of the pure product):**

Wash immediately and thoroughly with running water for at least 10 minutes.

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

**SECTION 5. Firefighting measures****5.1. Extinguishing media****Advised extinguishing agents:**

Water spray, CO<sub>2</sub>, foam, dry chemical, depending on the materials involved in the fire.

CO<sub>2</sub> or dry powder extinguisher

**Extinguishing means to avoid:**

Direct jets of water

**5.2. Special hazards arising from the substance or mixture**

The aerosol containers overheated burst and can be ejected with violence from a distance and can take place a dangerous mechanism for the fire.

Manufactured under pressure in sealed metal container (test pressure 15 bar max). Cool containers with water spray trying to remove them from the fire. The aerosol containers can be overheated and burst violently ejected from a distance ( protect the head using a safety helmet).

**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  
Leave the surrounding area recalling that any overheating could project the cylinder at a considerable distance.  
Wear gloves and protective clothing

#### **6.1.2 For emergency responders:**

Given the tightness of aerosol, it is unlikely that the spillage may occur.  
However if some container is damaged likely to cause a loss, insulate the tank in question by bringing it to open air or covering it with inert material and fuel (eg sand, earth, vermiculite) and having the care to avoid any point of ignition that might pose a serious risk of fire.  
Wear 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  
Inform the competent authorities.  
Discharge the remains in compliance with the regulations

### **6.3. Methods and material for containment and cleaning up**

#### **6.3.1 For containment:**

Recover the product for reuse, if possible, or the removal.

#### **6.3.2 For cleaning up:**

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

#### **6.3.3 Other information:**

None in particular.

### **6.4. Reference to other sections**

Refer to paragraphs 8 and 13 for more information

## **SECTION 7. Handling and storage**

### **7.1. Precautions for safe handling**

Avoid contact and inhalation of vapors. See also paragraph 8 below.  
At work do not eat or drink.  
Do not smoke at work  
Vapors are heavier than air and may spread close to the ground and form explosive mixtures with air. Prevent formation of flammable or explosive concentrations in the air.  
Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50 ° C.  
Do not pierce or burn, even after the use. Do not spray on flame or incandescent objects. Use in adequately ventilated areas.

**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.  
Pressurized container. Store in a ventilated place, in original packaging away from heat and sunlight.  
Always store in well ventilated areas.  
Keep away from open flames, sparks and heat sources. Avoid direct sunlight exposure.  
Keep faway from flames and spark. Avoid static discharges.

**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**

Related to contained substances:

Propane

TLV: (Aliphatic hydrocarbon gases) 1000 ppm as TWA; (ACGIH 2005).

ACGIH TLV (United States, 3/2012).

TWA: 1000 ppm 8 hour (s).

NIOSH REL (United States, 1/2013).

TWA: 1800 mg/m 10 hour (s).

TWA: 1000 ppm 10 hour (s).

OSHA PEL (United States, 6/2010).

TWA: 1800 mg/m 8 hour (s).

TWA: 1000 ppm 8 hour (s).

OSHA PEL 1989 (United States, 3/1989).

TWA: 1800 mg/m 8 hour (s).

TWA: 1000 ppm 8 hour (s)

Butane

TLV (ACGIH) = 1000 ppm

ACGIH TLV (United States, 3/2012).

TWA: 1000 ppm 8 hour (s).

NIOSH REL (United States, 1/2013).

TWA: 1900 mg/m 10 hour (s).

TWA: 800 ppm 10 hour (s).

OSHA PEL 1989 (United States, 3/1989).

TWA: 1900 mg/m 8 hour (s).

TWA: 800 ppm 8 hour (s).

Butane EH40 WEL TWA 600 ppm 1.450 mg/m<sup>3</sup>

Isobutane

ACGIH TLV (United States, 3/2012).

TWA: 1000 ppm 8 hour (s).

NIOSH REL (United States, 1/2013).

TWA: 1900 mg/m 10 hour (s).

TWA: 800 ppm 10 hour (s)

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).

### 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

Wear safety goggles to EN-166

(b) Skin protection

(i) Hand protection

Not needed for normal use.

(ii) Other

Avoid direct contact with the skin

Better is to use cotton antistatic clothing

(c) Respiratory protection

Work in a sufficiently ventilated to avoid inhaling the product.

(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	Colorless liquid under pressure	
Odour	characteristic-Tropical Breeze	
Odour threshold	not determined	
pH	irrelevant	
Melting point/freezing point	< -100 °C (gas liquido)	
Initial boiling point and boiling range	> -42 °C (gas liquido)	
Flash point	< -80 °C (gas liquido)	ASTM D92
Evaporation rate	irrelevant	
Flammability (solid, gas)	inflammabile	
Upper/lower flammability or explosive limits	9,5% vol / 1,8% vol	
Vapour pressure	3,2 bar	
Vapour density	> 2 (liquid gas)	

Physical and chemical properties	Value	Determination method
Relative density	0,65 kg/l	
Solubility	liposoluble	
Water solubility	not determined	
Partition coefficient: n-octanol/water	not determined	
Auto-ignition temperature	> 400 °C	
Decomposition temperature	not determined	
Viscosity	not determined	
Explosive properties	not explosive	
Oxidising properties	non-oxidizing	
Container volume	520 ml	
Product volume	400 ml	
Pressure to 20°C	3,2 bar	
Deformation pressure	16,5 bar	
Burst pressure of the container	18 bar	
Flash point of liquid phase	< 21 °C	
Propellant inflammability	< 0 °C	

**9.2. Other information**

No data available.

**SECTION 10. Stability and reactivity****10.1. Reactivity**

No reactivity hazards

**10.2. Chemical stability**

No hazardous reaction when handled and stored according to provisions.

**10.3. Possibility of hazardous reactions**

There are no hazardous reactions

**10.4. Conditions to avoid**

Avoid static discharges.

The aerosol product is stable for a period exceeding 36 months and in normal storage conditions can not take place dangerous reactions as the container is almost hermetically sealed.

Avoid contact with combustible materials. The product could catch fire.  
heat, open flames, sparks or hot surfaces.

To avoid that the metal container can deteriorate, keep away from acidic or basic products. Attention to the heat as temperatures exceeding 50 ° C has increased pressure inside the container that gets to deformation of the cylinder until the outbreak.

**10.5. Incompatible materials**

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

It can generate toxic gases to contact with oxidants mineral acids, organic peroxides, organic water peroxides.

It can ignite in contact with oxidants mineral acids, organic nitrides, peroxides and water peroxides, strong oxidants



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 = 0,0 mg/kg

ATE(mix) dermal = 0,0 mg/kg

ATE(mix) inhal = 0,0 mg/l/4 h

(a) acute toxicity: 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

(b) skin corrosion/irritation Propan-2-ol: Skin-rabbit

Result: Mild skin irritation

(c) serious eye damage/irritation: Propan-2-ol: Eyes-rabbit

Result: Eye irritation- 24 h

(d) respiratory or skin sensitization: not applicable

(e) germ cell mutagenicity: not applicable

(f) carcinogenicity: not applicable

(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)B<sub>6</sub> 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)

(h) specific target organ toxicity (STOT) single exposure: not applicable

(i) specific target organ toxicity (STOT) repeated

exposure 1,3,4,6,7,8-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 week 13 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

(j) aspiration hazard: not applicable

Propane:

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 410000

Butane:

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 658

Isobutane:



LD50 (rat) Oral (mg/kg body weight) = 570000

LD50 Dermal (rat or rabbit) (mg/kg body weight) = 570000

CL50 Inhalation (rat) vapour/dust/mist/fume (mg/l/4h) or gas (ppmV/4h) = 658000

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).

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

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

## SECTION 12. Ecological information

### 12.1. Toxicity

Propane

C(E)L50 (mg/l) = 7,71

Butane

C(E)L50 (mg/l) = 7,71

Isobutane

C(E)L50 (mg/l) = 7,71

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

1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran

21 days Daphnia magna NOEC 111 g/L NOEC 21 days Bluegill sunfish (Lepomis macrochirus) 68 g/L NOEC 35-day

early life stage test Fathead minnows (Pimephales promelas) 68 g/L NOEC 72 h Algae (Pseudokirchneriella

subcapitata) 201 g/L 8 weeks NOEC Earthworm (Eisenia fetida) 45 g/kg Soil DM 4 weeks Springtails NOEC (Folsomia

candida) 45 g/kg Soil DM

C(E)L50 (mg/l) = 0,282

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

### 12.2. Persistence and degradability

No data available.

**12.3. Bioaccumulative potential**

No data available.

**12.4. Mobility in soil**

No data available.

**12.5. Results of PBT and vPvB assessment**

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

**12.6. Other adverse effects**

No adverse effects

**SECTION 13. Disposal considerations****13.1. Waste treatment methods**

The waste must be disposed of in compliance with the regulations in force delivering empty containers for final disposal and equipped to safely handle pressurized containers containing flammable liquids and gas waste. The empty container heated to temperatures exceeding 70 ° C can burst.

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**

1950

ADR exemption because compliance with the following characteristics:

Combination packagings: per inner packaging 1 L per package 30 Kg

Inner packagings placed in shrink-wrapped or stretch-wrapped trays: per inner packaging 1 L per package 20 Kg

**14.2. UN proper shipping name**

AEROSOL flammable

**14.3. Transport hazard class(es)**

Class : 2

Label : 2.1

Tunnel restriction code : D

Limited quantities : 1 L

EmS : F-D, S-U

**14.4. Packing group**

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**14.5. Environmental hazards**

Product is not environmentally hazardous

Marine polluting agent : Not

**14.6. Special precautions for user**

No data available.

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

It is not intended to carry bulk

**SECTION 15. Regulatory information**

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

No data available.

**15.2. Chemical safety assessment**

The supplier has made an assessment of chemical safety

**SECTION 16. Other information**

**16.1. Other information**

Description of the sentences of risk set out in paragraph 3

R11 = Highly flammable.

R12 = Extremely flammable.

R36 = Irritating to eyes.

R50 = Very toxic to aquatic organisms.

R53 = May cause long-term adverse effects in the aquatic environment.

R67 = Vapours may cause drowsiness and dizziness.

Description of the hazard statements exposed to point 3

H220 = Extremely flammable gas.

H280 = Contains gas under pressure; may explode if heated.

H225 = Highly flammable liquid and vapour.

H319 = Causes serious eye irritation.

H336 = May cause drowsiness or dizziness.

H400 = Very toxic to aquatic life.

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.