

## Safety Data Sheet

According to Annex II to REACH - Regulation (EU) 2020/878 and to Annex II to UK REACH

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

#### 1.1. Product identifier

Code: 68281\_ORANGE SKY  
Product name: Fragrance diffuser with wicks - Orange Sky  
UFI: RRT3-X07U-300W-GD5A

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

Intended use: Fragrance diffuser with wicks Purity line Orange Sky perfume

#### 1.3. Details of the supplier of the safety data sheet

Name: STAR S.P.A. CON SOCIO UNICO  
Full address: Via Ungaretti 6  
District and Country: 16157 Genova (Ge)  
Italia  
Tel. +39 0108903600  
Fax +39 0106129727

e-mail address of the competent person  
responsible for the Safety Data Sheet

ufficiotecnico@starspa.net

#### 1.4. Emergency telephone number

For urgent inquiries refer to

+39 010 8903640 (Monday - Friday, 8.30-13.00, 14.30-18.00)  
Poison Centre, Azienda Ospedaliera Universitaria Riuniti, Viale Luigi Pinto 1, Foggia;  
Tel.: + 39800183459  
Poison Centre, Azienda Ospedaliera Universitaria Careggi, U.O. Tossicologia medica,  
Via Largo Brambilla 3, Florence; Tel.: + 39 055-7947819  
Poison Control Centre, National Centre for Toxicological Information, IRCCS  
Fondazione Salvatore Maugeri Work and Rehabilitation Clinic, Via Salvatore Maugeri  
10, Pavia; Tel.: + 390382-24444  
Poison Centre, Azienda Ospedaliera "Antonio Cardarelli", III Service of Anaesthesia  
and  
reanimation, Via Antonio Cardarelli 9, Naples; Tel.: + 39 081-5453333  
Poison Centre, Niguarda Ca' Grande Hospital Authority, Piazza Ospedale Maggiore 3,  
Milan; Tel.: + 39 02-66101029  
Poison Centre, Azienda ospedaliera "Papa Giovanni XXIII", clinical toxicology,  
Department of clinical pharmacy and pharmacology, Piazza OMS 1, Bergamo; Tel.: + 39  
800883300  
Poison Centre, "Umberto I" Polyclinic, PRGM emergency toxicology, Viale del  
Policlinico 155, Rome; Tel.: + 39 06-49978000  
Poison Centre, Bambino Gesù Paediatric Hospital, Emergency and Acceptance  
Department DEA, Piazza Sant'Onofrio 4, Rome; Tel.: + 39 06 68593726  
Poison Centre, Policlinico "Agostino Gemelli", Clinical Toxicology Service, Largo  
Agostino Gemelli 8, Rome; Tel.: + 39 06-3054343  
Poison Centre of the Azienda Ospedaliera Universitaria Integrata (AOUI) di Verona sede  
di Borgo Trento, Piazzale Aristide Stefani, 1 - 37126 Verona. Tel.: + 39 800011858

### SECTION 2. Hazards identification

## 68281\_ORANGE SKY - Fragrance diffuser with wicks

**2.1. Classification of the substance or mixture**

The product is classified as hazardous pursuant to the provisions set forth in (EC) Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of (EU) Regulation 2020/878. Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

## Hazard classification and indication:

Flammable liquid, category 2	H225	Highly flammable liquid and vapour.
Eye irritation, category 2	H319	Causes serious eye irritation.
Skin sensitization, category 1B	H317	May cause an allergic skin reaction.
Hazardous to the aquatic environment, chronic toxicity, category 3	H412	Harmful to aquatic life with long lasting effects.

**2.2. Label elements**

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

## Hazard pictograms:



Signal words: Danger

## Hazard statements:

<b>H225</b>	Highly flammable liquid and vapour.
<b>H319</b>	Causes serious eye irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H412</b>	Harmful to aquatic life with long lasting effects.

## Precautionary statements:

<b>P101</b>	If medical advice is needed, have product container or label at hand.
<b>P102</b>	Keep out of reach of children.
<b>P210</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
<b>P273</b>	Avoid release to the environment.
<b>P302+P352</b>	IN CASE OF CONTACT WITH SKIN: Wash thoroughly with soap and water
<b>P305+P351+P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>P501</b>	Dispose of the product/container according to local regulations in force

## 68281\_ORANGE SKY - Fragrance diffuser with wicks

**Contains:** d-limonene  
citral  
pin-2(3)-ene  
linalool

**2.3. Other hazards**

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

The product does not contain substances with endocrine disrupting properties in concentration  $\geq$  0.1%.

**SECTION 3. Composition/information on ingredients****3.2. Mixtures**

Contains:

Identification	x = Conc. %	Classification (EC) 1272/2008 (CLP)
<b>Ethanol</b>		
INDEX 603-002-00-5	$74 \leq x < 78$	Flam. Liq. 2 H225, Eye Irrit. 2 H319
EC 200-578-6		
CAS 64-17-5		
REACH Reg. 01-2119457610-43-xxxx		
<b>d-limonene</b>		
INDEX 601-029-00-7	$7 \leq x < 8$	Flam. Liq. 3 H226, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1B H317, Aquatic Acute 1 H400 M=1, Aquatic Chronic 3 H412
EC 227-813-5		
CAS 5989-27-5		
REACH Reg. 01-2119529223-47		
<b>2,2-dimethyl-1,3-dioxolan-4-ylmethanol</b>		
INDEX -	$2 \leq x < 2,5$	Eye Irrit. 2 H319
EC 202-888-7		
CAS 100-79-8		
REACH Reg. 01-2120066005-66-0000		
<b>linalool</b>		
INDEX -	$0,25 \leq x < 0,3$	Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1B H317
EC 201-134-4		
CAS 78-70-6		
REACH Reg. 01-2119474016-42-0000		
<b>pin-2(3)-ene</b>		
INDEX -	$0,1 \leq x < 0,15$	Flam. Liq. 3 H226, Acute Tox. 4 H302, Asp. Tox. 1 H304, Skin Irrit. 2 H315, Skin Sens. 1 H317, Aquatic Chronic 1 H410 M=1 STA Oral: 500 mg/kg
EC 201-291-9		
CAS 80-56-8		
<b>2,6-di-tert-butyl-p-cresol</b>		

## 68281\_ORANGE SKY - Fragrance diffuser with wicks

INDEX - 0,1 ≤ x < 0,15 Aquatic Acute 1 H400 M=10, Aquatic Chronic 1 H410 M=1

EC 204-881-4

CAS 128-37-0

REACH Reg. 01-2119480433-40

**citral**

INDEX 605-019-00-3 0,1 ≤ x < 0,15 Eye Irrit. 2 H319, Skin Irrit. 2 H315, Skin Sens. 1 H317

EC 226-394-6

CAS 5392-40-5

REACH Reg. 01-2119462829-23

The full wording of hazard (H) phrases is given in section 16 of the sheet.

**SECTION 4. First aid measures****4.1. Description of first aid measures**

**EYES:** Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

**SKIN:** Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

**INHALATION:** Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

**INGESTION:** Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

**4.2. Most important symptoms and effects, both acute and delayed**

Specific information on symptoms and effects caused by the product are unknown.

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

Information not available

**SECTION 5. Firefighting measures****5.1. Extinguishing media****SUITABLE EXTINGUISHING EQUIPMENT**

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

**UNSUITABLE EXTINGUISHING EQUIPMENT**

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

**5.2. Special hazards arising from the substance or mixture****HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE**

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

**5.3. Advice for firefighters****GENERAL INFORMATION**

Use jets of water to cool the containers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contaminated water used for extinction and the remains of the fire according to applicable regulations.

**SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS**

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

**SECTION 6. Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

Send away individuals who are not suitably equipped. Use explosion-proof equipment. Eliminate all sources of ignition (cigarettes, flames, sparks, etc.) from the leakage site.

**6.2. Environmental precautions**

The product must not penetrate into the sewer system or come into contact with surface water or ground water.

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

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

**6.4. Reference to other sections**

Any information on personal protection and disposal is given in sections 8 and 13.

**SECTION 7. Handling and storage****7.1. Precautions for safe handling**

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. When performing transfer operations involving large containers, connect to an earthing system and wear antistatic footwear. Vigorous stirring and flow through the tubes and equipment may cause the formation and accumulation of electrostatic charges. In order to avoid the risk of fires and explosions, never use compressed air when handling. Open containers with caution as they may be pressurised. Do not eat, drink or smoke during use. Avoid leakage of the product into the environment.

**7.2. Conditions for safe storage, including any incompatibilities**

Store only in the original container. Store the containers sealed, in a well ventilated place, away from direct sunlight. Store in a cool and well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

**7.3. Specific end use(s)**

Information not available

**SECTION 8. Exposure controls/personal protection****8.1. Control parameters**

## 68281\_ORANGE SKY - Fragrance diffuser with wicks

**2,6-di-tert-butyl-p-cresol**

Predicted no-effect concentration - PNEC

Normal value in fresh water 0,004 mg/l

**Health - Derived no-effect level - DNEL / DMEL**

Route of exposure	Effects on consumers				Effects on workers			
	Acute local	Acute systemic	Chronic local	Chronic systemic	Acute local	Acute systemic	Chronic local	Chronic systemic
Inhalation			VND	0,002 mg/l				

VND = hazard identified but no DNEL/PNEC available ; NEA = no exposure expected ; NPI = no hazard identified ; LOW = low hazard ; MED = medium hazard ; HIGH = high hazard.

**8.2. Exposure controls**

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards.

Provide an emergency shower with face and eye wash station.

**HAND PROTECTION**

Protect hands with category III work gloves.

The following should be considered when choosing work glove material (see standard EN 374): compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

**SKIN PROTECTION**

Wear category II professional long-sleeved overalls and safety footwear (see Regulation 2016/425 and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

**EYE PROTECTION**

Wear airtight protective goggles (see standard EN 166).

**RESPIRATORY PROTECTION**

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, wear a mask with a type AX filter, whose limit of use will be defined by the manufacturer (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard EN 529.

**ENVIRONMENTAL EXPOSURE CONTROLS**

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Product residues must not be indiscriminately disposed of with waste water or by dumping in waterways.

**SECTION 9. Physical and chemical properties****9.1. Information on basic physical and chemical properties**

## 68281\_ORANGE SKY - Fragrance diffuser with wicks

Properties	Value	Information
Appearance	liquid	
Colour	not available	
Odour	characteristic	
Melting point / freezing point	not available	
Initial boiling point	> 35 °C	
Flammability	not available	
Lower explosive limit	not available	
Upper explosive limit	not available	
Flash point	< 23 °C	
Auto-ignition temperature	not available	
Decomposition temperature	not available	
pH	not available	
Kinematic viscosity	not available	
Solubility	not available	
Partition coefficient: n-octanol/water	not available	
Vapour pressure	not available	
Density and/or relative density	not available	
Relative vapour density	not available	
Particle characteristics	not applicable	

**9.2. Other information**

## 9.2.1. Information with regard to physical hazard classes

Information not available

## 9.2.2. Other safety characteristics

Information not available

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

There are no particular risks of reaction with other substances in normal conditions of use.

**10.2. Chemical stability**

The product is stable in normal conditions of use and storage.

**10.3. Possibility of hazardous reactions**

The vapours may also form explosive mixtures with the air.

**10.4. Conditions to avoid**

## 68281\_ORANGE SKY - Fragrance diffuser with wicks

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

#### 10.5. Incompatible materials

Information not available

#### 10.6. Hazardous decomposition products

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

## SECTION 11. Toxicological information

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

#### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

2,2-dimethyl-1,3-dioxolan-4-ylmethanol

Manca la traduzione CFF\_100-79-8 => (TOS AGG A). <=====(\*)

##### Metabolism, toxicokinetics, mechanism of action and other information

Ethanol

The bioaccumulus potential cannot be evaluated on the basis of the results of the study

This study indicates that about 20-30% of the ananol by inhalation following a low-level exposure is exhaled in the alveolar air, which indicates that about 70-80% of ethanol for inhalation is absorbed. The low -level inhalation of ethanol has determined measurable quantities of acetaldehyde in the alveolar air. For all the exposure concentrations, the results show that the concentration of ethanol and acetaldehyde in the expired alveolare air has increased proportionally and has reached a stable state after at least 2 hours of continuous exposure. Overall, there was a significant correlation between exposure to the ananol and the concentration of ethanol and acetaldehyde in the alveolar air. The relations between acetaldehyde and ethanol in the alveolar air after 4 hours of exposure to ethanol at 26, 102 or 991 ppm were 0.005, 0.008 and 0.006 respectively. Test performed on humans

A study was designed to determine the concentration of ethanol and its acetaldehyde metabolite in the alveolar air of five volunteers exposed (at rest) at low concentrations of short -term ethanol steam. The volunteers were exhibited for 6 hours, on three different occasions, at about 26, 102 or 991 ppm of ethanol and samples of alveolar air exhausted for analysis were taken. The low -level inhalation of ethanol has determined measurable quantities of acetaldehyde in the alveolar air. The study indicated that about 70 - 80% inhaled ethanol is absorbed.

Using an in vitro method to evaluate the penetration of the ananol through the removed guinea pig, at full thickness, less than 1% of the total dose penetrated the "discovered" skin for a period of 19 hours. The increase in the volume of the dose in the system does not seem to involve an increase in penetration. The penetration has been significantly improved by "occlusion".

A test range of test volumes was used (25 -500 µl)

##### Information on likely routes of exposure

Information not available

##### Delayed and immediate effects as well as chronic effects from short and long-term exposure



## 68281\_ORANGE SKY - Fragrance diffuser with wicks

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture:	Not classified (no significant component)
ATE (Oral) of the mixture:	Not classified (no significant component)
ATE (Dermal) of the mixture:	Not classified (no significant component)

Ethanol

LD50 (Dermal):	17100 mg/kg Specie: coniglio
LD50 (Oral):	10470 mg/kg Specie Ratto at the concentration of 95%
LC50 (Inhalation vapours):	124,7 mg/l/4h Specie: topo at the concentration of 95%

d-limonene

LD50 (Dermal):	> 5000 mg/kg Coniglio
LD50 (Oral):	> 2000 mg/kg Ratto

2,2-dimethyl-1,3-dioxolan-4-ylmethanol

LD50 (Dermal):	> 2000 mg/kg Ratto
LD50 (Oral):	7000 mg/kg Ratto

linalool

LD50 (Dermal):	5610 mg/kg Coniglio
LD50 (Oral):	2790 mg/kg Ratto
LC50 (Inhalation vapours):	> 3,2 mg/l/1h30 Topo

citral

LD50 (Dermal):	2250 mg/kg Coniglio
LD50 (Oral):	6800 mg/kg Ratto
LC50 (Inhalation vapours):	0,68 mg/l/7h Ratto

2,6-di-tert-butyl-p-cresol

LD50 (Dermal):	> 2000 mg/kg Ratto
LD50 (Oral):	> 2000 mg/kg Ratto

pin-2(3)-ene

LD50 (Dermal):	5005 mg/kg Coniglio
LD50 (Oral):	2100 mg/kg Ratto

**68281\_ORANGE SKY - Fragrance diffuser with wicks**SKIN CORROSION / IRRITATION

Does not meet the classification criteria for this hazard class

Ethanol

Test performed on rabbit, no erythema/edema observed. Not irritating.

2,2-dimethyl-1,3-dioxolan-4-ylmethanol

Test: irritating for negative skin

SERIOUS EYE DAMAGE / IRRITATION

Causes serious eye irritation

Ethanol

The data obtained based on the guidelines of the GLP eye irritation study carried out on a rabbit, ascertain that ethanol causes irritation to the eyes. All symptoms are reversible in 14 days. The response was not severe enough to trigger the classification according to the criteria of Directive 67/548, but it was sufficient compared to the corneal and conjunctivals to trigger the classification as an irritating for the reversible eyes (category 2) pursuant to the GHS regulation of EU.

2,2-dimethyl-1,3-dioxolan-4-ylmethanol

Test: irritating for the positive eyes. Signs of eye irritation were observed at 1h, 24h, 48h, 72h, 7D and 14D. All eye reactions have returned to day 21. In this study, 2,2-Dimetyl-1,3-Dioxolan-4-Metanol is irritating for the eyes in male rabbits.

RESPIRATORY OR SKIN SENSITISATION

Sensitising for the skin

Respiratory sensitizationEthanol

It is not bronchoconstritor. Test performed on the chorey of India.

Skin sensitizationEthanol

Not sensitizing. Test performed on the chorey of India.

## 68281\_ORANGE SKY - Fragrance diffuser with wicks

GERM CELL MUTAGENICITY

Does not meet the classification criteria for this hazard class

Ethanol

Negative genetic toxicity in vitro. Tests carried out on the rat.  
Uncertain results in vivo. Tests carried out on mouse.

CARCINOGENICITY

Does not meet the classification criteria for this hazard class

Ethanol

Noaec:> = 1.3 mg/l Air

Tests carried out on the rat. Duration 24 months.

2,2-dimethyl-1,3-dioxolan-4-ylmethanol

Noael: 1000 mg/kg bw/day, rat

REPRODUCTIVE TOXICITY

Does not meet the classification criteria for this hazard class

Ethanol

Teramogenesis:

Noael: 15 Other: % in drinking water.

Test carried out on mouse.

Reproduction:

Noael: <1 000 mg/kg bw/day (nominal)

Adverse effects on sexual function and fertility

2,2-dimethyl-1,3-dioxolan-4-ylmethanol

Noel: 1000 mg/kg bw/day, rat

Adverse effects on development of the offspring

Ethanol

Noael:> = 20 000 ppm

## 68281\_ORANGE SKY - Fragrance diffuser with wicks

STOT - SINGLE EXPOSURE

Does not meet the classification criteria for this hazard class

Target organs

Ethanol

Nervous system:

Noaec: 19 000 mg/m<sup>3</sup>

Test performed on rat.

Immune system:

Noaec: 40 000 mg/m<sup>3</sup>

Test carried out on rat.

STOT - REPEATED EXPOSURE

Does not meet the classification criteria for this hazard class

Ethanol

Oral:

Loael: 3 200 mg/kg BW/day (current dose received)

Noael: 1 730 mg/kg BW/day (current dose received)

Tests carried out on the rat.

Inhalation:

Noaec: 2.65 mg/l Air

Loae: 13.3 mg/L Air

Tests carried out on the rat.

Target organs

2,2-dimethyl-1,3-dioxolan-4-ylmethanol

Rene: Noaec > 5 mg/l Air (nominal), rat

Route of exposure

2,2-dimethyl-1,3-dioxolan-4-ylmethanol

Oral: Noael 1000 mg/kg BW/Day (Actual Dose Received), rat.

ASPIRATION HAZARD

Does not meet the classification criteria for this hazard class

**11.2. Information on other hazards**

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with human health effects under evaluation.

**SECTION 12. Ecological information**

This product is dangerous for the environment and the aquatic organisms. In the long term, it have negative effects on aquatic environment.

**12.1. Toxicity**

Ethanol

On fish:

LC0: 7.96 g/l (96 -hour test duration). Test carried out on Pimphaales Promolas.

On crustaceans:

LC50: 5 012 mg/l (duration 48h). Test performed on: Ceriodaphnea Dubia.

On invertebrates:

LC50: 454 mg/l (duration 9 days). Test performed on Daphnia Magna.

On algae and cyanobacteria:

EC100: 14200 mg/l (duration 3 days)

Test made on Chlorella Vulgaris.

On microorganisms:

IC50:> 1000 mg/l. Test duration 3 days. Test carried out on active sludge.

On aquatic organisms:

Noec:> 79 mg/l (48h test duration) test carried out on time frog.

On soil:

LC50 = 0.1 - 1mg/cm2 test carried out on Eisenia Foetida.

On earth arthropods:

EC0: 0.02% (duration 10 days). Test carried out on Diptera

On terrestrial plants:

Test carried out on: ALLIUM CEPA (duration 6 days).

EC50 = 11800mg/L

EC10 = 790mg/L

2,2-dimethyl-1,3-dioxolan-4-ylmethanol

Active sludge: EC10> 1 000 mg/l 3 hours

EC50> 1 000 mg/l 3 hours

2,2-dimethyl-1,3-dioxolan-4-ylmethanol

LC50 - for Fish 16700 mg/l/96h Pimephales Promelas

EC50 - for Crustacea > 96 mg/l/48h Daphnia Magna

Chronic NOEC for Crustacea 10 mg/l 21 giorni, Daphnia Magna

Chronic NOEC for Algae / Aquatic Plants 92 mg/l 72 ore

2,6-di-tert-butyl-p-cresol

LC50 - for Fish 0,053 mg/l

EC50 - for Crustacea 0,061 mg/l Daphnia spp.

citral

LC50 - for Fish 6,78 mg/l/96h

EC50 - for Crustacea 6,8 mg/l/48h Daphnia spp.

EC50 - for Algae / Aquatic Plants 103,9 mg/l/72h

d-limonene

LC50 - for Fish 0,72 mg/l/96h

EC50 - for Crustacea < 1 mg/l/48h Daphnia spp.

## 68281\_ORANGE SKY - Fragrance diffuser with wicks

EC50 - for Algae / Aquatic Plants

8 mg/l/72h

linalool

LC50 - for Fish

27,8 mg/l/96h Salmo gairdneri

EC50 - for Crustacea

59 mg/l/48h Daphnia magna

EC50 - for Algae / Aquatic Plants

88,3 mg/l/72h Desmodesmus subspicatus 96h

EC10 for Algae / Aquatic Plants

38,4 mg/l/96h Desmodesmus subspicatus

Chronic NOEC for Fish

&lt; 3,5 mg/l Salmo gairdneri 96h

Chronic NOEC for Crustacea

25 mg/l Daphnia magna 48h

pin-2(3)-ene

LC50 - for Fish

0,28 mg/l/96h Pimephales promelas

EC50 - for Crustacea

0,475 mg/l/48h Daphnia magna

Chronic NOEC for Algae / Aquatic Plants

0,131 mg/l 48 h OECD guideline 201

Ethanol

LC50 - for Fish

14200 mg/l/96h Pimephales Promelas.

EC50 - for Algae / Aquatic Plants

4432 mg/l/72h Durata 7 giorni. Test effettuato su Lemna Gibba.

EC10 for Algae / Aquatic Plants

86 mg/l/10d Durata 4 giorni. Test effettuato su Chlorella Vulgaris.

Chronic NOEC for Fish

250 mg/l Durata test 120 h. Specie Danio Rerio.

Chronic NOEC for Crustacea

96 mg/l Test eseguito su Daphnia Magna.

Chronic NOEC for Algae / Aquatic Plants

280 mg/l Test effettuato su Lemna Gibba. Durata test 7 giorni.

**12.2. Persistence and degradability**

2,2-dimethyl-1,3-dioxolan-4-ylmethanol

Entirely degradable

25 % in 28 giorni

linalool

Rapidly degradable

64.2% (consumo di ossigeno) a 28 giorni

pin-2(3)-ene

Rapidly degradable

68% in 28 giorni (Consumo O2)

Ethanol

Rapidly degradable

84% (consumo di ossigeno) a 20 giorni

**12.3. Bioaccumulative potential**

pin-2(3)-ene

BCF

3,091 -

Ethanol

BCF

1 - Muscoli e tessuti.

**12.4. Mobility in soil**

2,2-dimethyl-1,3-dioxolan-4-ylmethanol

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Partition coefficient: soil/water < 1,25

pin-2(3)-ene

Partition coefficient: soil/water 7,421 l/kg

Ethanol

Partition coefficient: soil/water 10

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

On the basis of available data, the product does not contain any PBT or vPvB in percentage  $\geq$  than 0,1%.

#### 12.6. Endocrine disrupting properties

Based on the available data, the product does not contain substances listed in the main European lists of potential or suspected endocrine disruptors with environmental effects under evaluation.

#### 12.7. Other adverse effects

Information not available

### SECTION 13. Disposal considerations

#### 13.1. Waste treatment methods

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

### SECTION 14. Transport information

#### 14.1. UN number or ID number

ADR / RID, IMDG, IATA: 1993

#### 14.2. UN proper shipping name

ADR / RID: FLAMMABLE LIQUID, N.O.S. (Ethanol; d-limonene)

IMDG: FLAMMABLE LIQUID, N.O.S. (Ethanol; d-limonene)

IATA: FLAMMABLE LIQUID, N.O.S. (Ethanol; d-limonene)

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

ADR / RID: Class: 3 Label: 3



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IMDG: Class: 3 Label: 3



IATA: Class: 3 Label: 3

**14.4. Packing group**

ADR / RID, IMDG, IATA: II

**14.5. Environmental hazards**

ADR / RID: NO

IMDG: NO

IATA: NO

**14.6. Special precautions for user**

ADR / RID:	HIN - Kemler: 33	Limited Quantities: 1 L	Tunnel restriction code: (D/E)
	Special provision: 274, 601, 640D		
IMDG:	EMS: F-E, <u>S-E</u>	Limited Quantities: 1 L	
IATA:	Cargo:	Maximum quantity: 60 L	Packaging instructions: 364
	Passengers:	Maximum quantity: 5 L	Packaging instructions: 353
	Special provision:	A3	

**14.7. Maritime transport in bulk according to IMO instruments**

Information not relevant

**SECTION 15. Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

Seveso Category - Directive 2012/18/EU: P5c

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006Product

Point 3 - 40

Contained substance

Point 75



Regulation (EU) 2019/1148 - on the marketing and use of explosives precursors

not applicable

Substances in Candidate List (Art. 59 REACH)

On the basis of available data, the product does not contain any SVHC in percentage  $\geq$  than 0,1%.

Substances subject to authorisation (Annex XIV REACH)

None

Substances subject to exportation reporting pursuant to Regulation (EU) 649/2012:

None

Substances subject to the Rotterdam Convention:

None

Substances subject to the Stockholm Convention:

None

Healthcare controls

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

**15.2. Chemical safety assessment**

A chemical safety assessment has been performed for the following contained substances

Ethanol

**SECTION 16. Other information**

Text of hazard (H) indications mentioned in section 2-3 of the sheet:

<b>Flam. Liq. 2</b>	Flammable liquid, category 2
<b>Flam. Liq. 3</b>	Flammable liquid, category 3
<b>Acute Tox. 4</b>	Acute toxicity, category 4
<b>Asp. Tox. 1</b>	Aspiration hazard, category 1
<b>Eye Irrit. 2</b>	Eye irritation, category 2
<b>Skin Irrit. 2</b>	Skin irritation, category 2
<b>Skin Sens. 1</b>	Skin sensitization, category 1
<b>Skin Sens. 1B</b>	Skin sensitization, category 1B
<b>Aquatic Acute 1</b>	Hazardous to the aquatic environment, acute toxicity, category 1
<b>Aquatic Chronic 1</b>	Hazardous to the aquatic environment, chronic toxicity, category 1
<b>Aquatic Chronic 3</b>	Hazardous to the aquatic environment, chronic toxicity, category 3

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<b>H225</b>	Highly flammable liquid and vapour.
<b>H226</b>	Flammable liquid and vapour.
<b>H302</b>	Harmful if swallowed.
<b>H304</b>	May be fatal if swallowed and enters airways.
<b>H319</b>	Causes serious eye irritation.
<b>H315</b>	Causes skin irritation.
<b>H317</b>	May cause an allergic skin reaction.
<b>H400</b>	Very toxic to aquatic life.
<b>H410</b>	Very toxic to aquatic life with long lasting effects.
<b>H412</b>	Harmful to aquatic life with long lasting effects.

## LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- ATE: Acute Toxicity Estimate
- CAS: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE: Identifier in ESIS (European archive of existing substances)
- CLP: Regulation (EC) 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: Regulation (EC) 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value
- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA: Time-weighted average exposure limit
- TWA STEL: Short-term exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

## GENERAL BIBLIOGRAPHY

1. Regulation (EC) 1907/2006 (REACH) of the European Parliament
2. Regulation (EC) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 2020/878 (II Annex of REACH Regulation)
4. Regulation (EC) 790/2009 (I Atp. CLP) of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament
10. Regulation (EU) 2015/1221 (VII Atp. CLP) of the European Parliament
11. Regulation (EU) 2016/918 (VIII Atp. CLP) of the European Parliament
12. Regulation (EU) 2016/1179 (IX Atp. CLP)
13. Regulation (EU) 2017/776 (X Atp. CLP)
14. Regulation (EU) 2018/669 (XI Atp. CLP)
15. Regulation (EU) 2019/521 (XII Atp. CLP)
16. Delegated Regulation (UE) 2018/1480 (XIII Atp. CLP)

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- 17. Regulation (EU) 2019/1148
- 18. Delegated Regulation (UE) 2020/217 (XIV Atp. CLP)
- 19. Delegated Regulation (UE) 2020/1182 (XV Atp. CLP)
- 20. Delegated Regulation (UE) 2021/643 (XVI Atp. CLP)
- 21. Delegated Regulation (UE) 2021/849 (XVII Atp. CLP)
- 22. Delegated Regulation (UE) 2022/692 (XVIII Atp. CLP)

- The Merck Index. - 10th Edition
- Handling Chemical Safety
- INRS - Fiche Toxicologique (toxicological sheet)
- Patty - Industrial Hygiene and Toxicology
- N.I. Sax - Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA website
- Database of SDS models for chemicals - Ministry of Health and ISS (Istituto Superiore di Sanità) - Italy

**Note for users:**

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product.

This document must not be regarded as a guarantee on any specific product property.

The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations. The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

**CALCULATION METHODS FOR CLASSIFICATION**

Chemical and physical hazards: Product classification derives from criteria established by the CLP Regulation, Annex I, Part 2. The data for evaluation of chemical-physical properties are reported in section 9.

Health hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 3, unless determined otherwise in Section 11.

Environmental hazards: Product classification is based on calculation methods as per Annex I of CLP, Part 4, unless determined otherwise in Section 12.

**Changes to previous review:**

The following sections were modified:

02 / 03 / 08 / 09 / 11 / 12 / 14 / 15 / 16.