



## ZEN RED

### SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

- 1.1 Product identifier:** ZEN RED
- Other means of identification:**  
Non-applicable
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**  
Relevant uses: Air freshener  
Uses advised against: All uses not specified in this section or in section 7.3
- 1.3 Details of the supplier of the safety data sheet:**  
MB ELIX sp. z oo sp.k.  
ul. Skarżyńskiego 26  
54-530 Wrocław - Poland  
Phone: 0048 71 387 85 33 - Fax: 0048 71 722 29 68  
lab@elix.pl  
<https://airfresh24.com/>
- 1.4 Emergency telephone number:** 0048 71 387 85 33 (8.00-16.00)

### SECTION 2: HAZARDS IDENTIFICATION








- 2.1 Classification of the substance or mixture:**  
**CLP Regulation (EC) No 1272/2008:**  
Classification of this product has been carried out in accordance with CLP Regulation (EC) No 1272/2008.  
Eye Irrit. 2: Eye irritation, Category 2, H319  
Flam. Liq. 2: Flammable liquids, Category 2, H225
- 2.2 Label elements:**  
**CLP Regulation (EC) No 1272/2008** (*Labelling of packages where the contents do not exceed 125 ml*):  
**Danger**
-  
- Hazard statements:**  
Non-applicable
- Precautionary statements:**  
P101: If medical advice is needed, have product container or label at hand.  
P102: Keep out of reach of children.  
P501: Dispose of contents/container according to the separated collection system used in your municipality.
- Supplementary information:**  
Contains ethyl alcohol. EUH208: Contains citronellol, geraniol, linalool, triplal. May produce an allergic reaction.
- UFI:** MY9E-QH1D-8101-M4GR
- 2.3 Other hazards:**  
Product fails to meet PBT/vPvB criteria  
Endocrine-disrupting properties: The product fails to meet the criteria.

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

- 3.1 Substance:**  
Non-applicable
- 3.2 Mixture:**  
**Chemical description:** Mixture composed of chemical products  
**Components:**  
In accordance with Annex II of Regulation (EC) No 1907/2006 (point 3), the product contains:

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continued)**

Identification	Chemical name/Classification	Concentration
CAS: 64-17-5 EC: 200-578-6 Index: 603-002-00-5 REACH: 01-2119457610-43-XXXX	<b>ethanol</b> <sup>(1)</sup> Self-classified	<b>50 - &lt;99 %</b>
	Regulation 1272/2008 Eye Irrit. 2: H319; Flam. Liq. 2: H225 - Danger 	
CAS: 34590-94-8 EC: 252-104-2 Index: Non-applicable REACH: 01-2119450011-60-XXXX	<b>Dipropylene Glycol Methyl Ether</b> <sup>(2)</sup> Not classified	<b>20 - &lt;25 %</b>
	Regulation 1272/2008	
CAS: 60-12-8 EC: 200-456-2 Index: Non-applicable REACH: 01-2119963921-31-XXXX	<b>2-phenylethanol</b> <sup>(1)</sup> Self-classified	<b>2 - &lt;3 %</b>
	Regulation 1272/2008 Acute Tox. 4: H302; Eye Irrit. 2: H319 - Warning 	
CAS: 78-93-3 EC: 201-159-0 Index: 606-002-00-3 REACH: 01-2119457290-43-XXXX	<b>Butanone</b> <sup>(2)</sup> ATP CLP00	<b>0,5 - &lt;0,75 %</b>
	Regulation 1272/2008 Eye Irrit. 2: H319; Flam. Liq. 2: H225; STOT SE 3: H336; EUH066 - Danger 	
CAS: 106-22-9 EC: 203-375-0 Index: 01-2119453995-23-XXX REACH: 01-2119453995-23	<b>citronellol</b> <sup>(1)</sup> Self-classified	<b>0,25 - &lt;0,5 %</b>
	Regulation 1272/2008 Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning 	
CAS: 106-24-1 EC: 203-377-1 Index: Non-applicable REACH: 01-2119552430-49	<b>geraniol</b> <sup>(1)</sup> Self-classified	<b>0,25 - &lt;0,5 %</b>
	Regulation 1272/2008 Eye Dam. 1: H318; Skin Irrit. 2: H315; Skin Sens. 1: H317 - Danger 	
CAS: 78-70-6 EC: 201-134-4 Index: Non-applicable REACH: 01-2119474016-42	<b>linalool</b> <sup>(1)</sup> Self-classified	<b>0,25 - &lt;0,5 %</b>
	Regulation 1272/2008 Eye Irrit. 2: H319; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning 	
CAS: Non-applicable EC: 943-728-2 Index: Non-applicable REACH: 01-2119982384-28	<b>triplal</b> <sup>(1)</sup> Self-classified	<b>0,25 - &lt;0,5 %</b>
	Regulation 1272/2008 Aquatic Chronic 2: H411; Skin Irrit. 2: H315; Skin Sens. 1B: H317 - Warning 	

<sup>(1)</sup> Substances presenting a health or environmental hazard which meet criteria laid down in Regulation (EU) No. 2020/878

<sup>(2)</sup> Substance with a Union workplace exposure limit

To obtain more information on the hazards of the substances consult sections 11, 12 and 16.

**Other information:**

Identification	Specific concentration limit
ethanol CAS: 64-17-5 EC: 200-578-6	% (w/w) >=50: Eye Irrit. 2 - H319

**SECTION 4: FIRST AID MEASURES**

**4.1 Description of first aid measures:**

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

**By inhalation:**

This product is not classified as hazardous through inhalation. However, in case of intoxication symptoms it is recommended to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

**By skin contact:**

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

**By eye contact:**

Rinse eyes thoroughly with water for at least 15 minutes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, in which case removal could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS for the product.

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**SECTION 4: FIRST AID MEASURES (continued)**

**By ingestion/aspiration:**

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

**SECTION 5: FIREFIGHTING MEASURES**

**5.1 Extinguishing media:**

**Suitable extinguishing media:**

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO<sub>2</sub>).

**Unsuitable extinguishing media:**

IT IS RECOMMENDED NOT to use full jet water as an extinguishing agent.

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

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

**5.3 Advice for firefighters:**

Depending on the magnitude of the fire it may be necessary to use full protective clothing and self-contained breathing apparatus (SCBA). Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

**Additional provisions:**

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Eliminate all sources of ignition. In case of fire, cool the storage containers and tanks for products susceptible to combustion, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1 Personal precautions, protective equipment and emergency procedures:**

**For non-emergency personnel:**

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spill product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inert medium. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

**For emergency responders:**

See section 8.

**6.2 Environmental precautions:**

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

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

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

**6.4 Reference to other sections:**

See sections 8 and 13.

**SECTION 7: HANDLING AND STORAGE**

**7.1 Precautions for safe handling:**

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**SECTION 7: HANDLING AND STORAGE (continued)**

**A.- Precautions for safe manipulation**

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

**B.- Technical recommendations for the prevention of fires and explosions**

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibres, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 2014/34/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

**C.- Technical recommendations to prevent ergonomic and toxicological risks**

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

**D.- Technical recommendations to prevent environmental risks**

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

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

**A.- Technical measures for storage**

Minimum Temp.: 5 °C  
Maximum Temp.: 35 °C  
Maximum time: 36 Months

**B.- General conditions for storage**

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

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

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1 Control parameters:**

Substances whose occupational exposure limits have to be monitored in the workplace (European OEL, not country-specific legislation):

Directive (EU) 2000/39, Directive 2004/37/EC, Directive (EU) 2006/15, Directive (EU) 2009/161, Directive (EU) 2017/164, Directive (EU) 2019/1831:

Identification	Occupational exposure limits		
	IOELV (8h)	50 ppm	308 mg/m <sup>3</sup>
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	IOELV (STEL)		
Butanone CAS: 78-93-3 EC: 201-159-0	IOELV (8h)	200 ppm	600 mg/m <sup>3</sup>
	IOELV (STEL)	300 ppm	900 mg/m <sup>3</sup>

**DNEL (Workers):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
ethanol CAS: 64-17-5 EC: 200-578-6	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	343 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	950 mg/m <sup>3</sup>	Non-applicable
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	283 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	308 mg/m <sup>3</sup>	Non-applicable
2-phenylethanol CAS: 60-12-8 EC: 200-456-2	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	21,2 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	59,9 mg/m <sup>3</sup>	Non-applicable

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
Butanone CAS: 78-93-3 EC: 201-159-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	1161 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	600 mg/m <sup>3</sup>	Non-applicable
citronellol CAS: 106-22-9 EC: 203-375-0	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	327,4 mg/kg	Non-applicable
	Inhalation	Non-applicable	10 mg/m <sup>3</sup>	161,6 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
geraniol CAS: 106-24-1 EC: 203-377-1	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	12,5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	161,6 mg/m <sup>3</sup>	Non-applicable
linalool CAS: 78-70-6 EC: 201-134-4	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	3,5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	24,58 mg/m <sup>3</sup>	Non-applicable
triplal CAS: Non-applicable EC: 943-728-2	Oral	Non-applicable	Non-applicable	Non-applicable	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,521 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	1,837 mg/m <sup>3</sup>	Non-applicable

**DNEL (General population):**

Identification		Short exposure		Long exposure	
		Systemic	Local	Systemic	Local
ethanol CAS: 64-17-5 EC: 200-578-6	Oral	Non-applicable	Non-applicable	87 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	206 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	114 mg/m <sup>3</sup>	Non-applicable
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	Oral	Non-applicable	Non-applicable	36 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	121 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	37,2 mg/m <sup>3</sup>	Non-applicable
2-phenylethanol CAS: 60-12-8 EC: 200-456-2	Oral	5,1 mg/kg	Non-applicable	5,1 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	12,7 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	17,7 mg/m <sup>3</sup>	Non-applicable
Butanone CAS: 78-93-3 EC: 201-159-0	Oral	Non-applicable	Non-applicable	31 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	412 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	106 mg/m <sup>3</sup>	Non-applicable
citronellol CAS: 106-22-9 EC: 203-375-0	Oral	Non-applicable	Non-applicable	13,8 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	196,4 mg/kg	Non-applicable
	Inhalation	Non-applicable	10 mg/m <sup>3</sup>	47,8 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>
geraniol CAS: 106-24-1 EC: 203-377-1	Oral	Non-applicable	Non-applicable	13,75 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	7,5 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	47,8 mg/m <sup>3</sup>	Non-applicable
linalool CAS: 78-70-6 EC: 201-134-4	Oral	Non-applicable	Non-applicable	2,49 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	1,25 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	4,33 mg/m <sup>3</sup>	Non-applicable
triplal CAS: Non-applicable EC: 943-728-2	Oral	Non-applicable	Non-applicable	0,312 mg/kg	Non-applicable
	Dermal	Non-applicable	Non-applicable	0,312 mg/kg	Non-applicable
	Inhalation	Non-applicable	Non-applicable	0,543 mg/m <sup>3</sup>	Non-applicable

**PNEC:**

Identification				
ethanol CAS: 64-17-5 EC: 200-578-6	STP	580 mg/L	Fresh water	0,96 mg/L
	Soil	0,63 mg/kg	Marine water	0,79 mg/L
	Intermittent	2,75 mg/L	Sediment (Fresh water)	3,6 mg/kg
	Oral	0,38 g/kg	Sediment (Marine water)	2,9 mg/kg

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

Identification				
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	STP	4168 mg/L	Fresh water	19 mg/L
	Soil	2,74 mg/kg	Marine water	1,9 mg/L
	Intermittent	190 mg/L	Sediment (Fresh water)	70,2 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	7,02 mg/kg
2-phenylethanol CAS: 60-12-8 EC: 200-456-2	STP	10 mg/L	Fresh water	0,215 mg/L
	Soil	0,164 mg/kg	Marine water	0,021 mg/L
	Intermittent	2,15 mg/L	Sediment (Fresh water)	1,454 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,145 mg/kg
Butanone CAS: 78-93-3 EC: 201-159-0	STP	709 mg/L	Fresh water	55,8 mg/L
	Soil	22,5 mg/kg	Marine water	55,8 mg/L
	Intermittent	55,8 mg/L	Sediment (Fresh water)	284,74 mg/kg
	Oral	1 g/kg	Sediment (Marine water)	284,7 mg/kg
citronellol CAS: 106-22-9 EC: 203-375-0	STP	580 mg/L	Fresh water	0,002 mg/L
	Soil	0,004 mg/kg	Marine water	0 mg/L
	Intermittent	0,024 mg/L	Sediment (Fresh water)	0,026 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,003 mg/kg
geraniol CAS: 106-24-1 EC: 203-377-1	STP	0,7 mg/L	Fresh water	0,011 mg/L
	Soil	0,017 mg/kg	Marine water	0,001 mg/L
	Intermittent	0,108 mg/L	Sediment (Fresh water)	0,115 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,011 mg/kg
linalool CAS: 78-70-6 EC: 201-134-4	STP	10 mg/L	Fresh water	0,2 mg/L
	Soil	0,327 mg/kg	Marine water	0,02 mg/L
	Intermittent	2 mg/L	Sediment (Fresh water)	2,22 mg/kg
	Oral	0,0078 g/kg	Sediment (Marine water)	0,222 mg/kg
triplal CAS: Non-applicable EC: 943-728-2	STP	10 mg/L	Fresh water	0,0075 mg/L
	Soil	0,041 mg/kg	Marine water	0,00075 mg/L
	Intermittent	0,075 mg/L	Sediment (Fresh water)	0,226 mg/kg
	Oral	Non-applicable	Sediment (Marine water)	0,023 mg/kg

**8.2 Exposure controls:**



A.- Individual protection measures, such as personal protective equipment

As a preventative measure it is recommended to use basic Personal Protective Equipment, with the corresponding <<CE marking>> in accordance with Regulation (EU) 2016/425. For more information on Personal Protective Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1. All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection



The use of protection equipment will be necessary if a mist forms or if the occupational exposure limits are exceeded.

C.- Specific protection for the hands

Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory hand protection	Chemical protective gloves (Material: Linear low-density polyethylene (LLDPE), Breakthrough time: > 480 min, Thickness: 0.062 mm)		EN 420:2004+A1:2010	Replace the gloves at any sign of deterioration.

As the product is a mixture of several substances, the resistance of the glove material can not be calculated in advance with total reliability and has therefore to be checked prior to the application.

D.- Ocular and facial protection



Pictogram	PPE	Labelling	CEN Standard	Remarks
 Mandatory face protection	Panoramic glasses against splash/projections.		EN 166:2002 EN ISO 4007:2018	Clean daily and disinfect periodically according to the manufacturer's instructions. Use if there is a risk of splashing.

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**SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continued)**

**E.- Body protection**

Pictogram	PPE	Labelling	CEN Standard	Remarks
	Work clothing			Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 6529:2013, EN ISO 6530:2005, EN ISO 13688:2013, EN 464:1994.
	Anti-slip work shoes		EN ISO 20347:2012	Replace before any evidence of deterioration. For periods of prolonged exposure to the product for professional/industrial users CE III is recommended, in accordance with the regulations in EN ISO 20345:2012 y EN 13832-1:2007

**F.- Additional emergency measures**

Emergency measure	Standards	Emergency measure	Standards
 Emergency shower	ANSI Z358-1 ISO 3864-1:2011, ISO 3864-4:2011	 Eyewash stations	DIN 12 899 ISO 3864-1:2011, ISO 3864-4:2011

**Environmental exposure controls:**

In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D

**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

**9.1 Information on basic physical and chemical properties:**

For complete information see the product datasheet.

**Appearance:**

Physical state at 20 °C: Liquid  
Appearance: Fluid  
Colour:  Red  
Odour: Pleasant  
Odour threshold: Non-applicable \*

**Volatility:**

Boiling point at atmospheric pressure: 97 °C  
Vapour pressure at 20 °C: 4835 Pa  
Vapour pressure at 50 °C: 22998,81 Pa (23 kPa)  
Evaporation rate at 20 °C: Non-applicable \*

**Product description:**

Density at 20 °C: 857,7 kg/m<sup>3</sup>  
Relative density at 20 °C: 0,858  
Dynamic viscosity at 20 °C: Non-applicable \*  
Kinematic viscosity at 20 °C: Non-applicable \*  
Kinematic viscosity at 40 °C: Non-applicable \*  
Concentration: Non-applicable \*  
pH: Non-applicable \*  
Vapour density at 20 °C: Non-applicable \*  
Partition coefficient n-octanol/water 20 °C: Non-applicable \*  
Solubility in water at 20 °C: Non-applicable \*  
Solubility properties: Non-applicable \*

\*Not relevant due to the nature of the product, not providing information property of its hazards.

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**SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES (continued)**

Decomposition temperature: Non-applicable \*

Melting point/freezing point: Non-applicable \*

**Flammability:**

Flash Point: 20 °C

Flammability (solid, gas): Non-applicable \*

Autoignition temperature: 235 °C

Lower flammability limit: Not available

Upper flammability limit: Not available

**Particle characteristics:**

Median equivalent diameter: Non-applicable

**9.2 Other information:**

**Information with regard to physical hazard classes:**

Explosive properties: Non-applicable \*

Oxidising properties: Non-applicable \*

Corrosive to metals: Non-applicable \*

Heat of combustion: Non-applicable \*

Aerosols-total percentage (by mass) of flammable components: Non-applicable \*

**Other safety characteristics:**

Surface tension at 20 °C: Non-applicable \*

Refraction index: Non-applicable \*

\*Not relevant due to the nature of the product, not providing information property of its hazards.

**SECTION 10: STABILITY AND REACTIVITY**

**10.1 Reactivity:**

No hazardous reactions are expected because the product is stable under recommended storage conditions. See section 7.

**10.2 Chemical stability:**

Chemically stable under the conditions of storage, handling and use.

**10.3 Possibility of hazardous reactions:**

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

**10.4 Conditions to avoid:**

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

**10.5 Incompatible materials:**

Acids	Water	Oxidising materials	Combustible materials	Others
Avoid strong acids	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

**10.6 Hazardous decomposition products:**

Contains substances which require external energy for spontaneous decomposition. Form explosive peroxides when distilled, evaporated or otherwise concentrated.

**SECTION 11: TOXICOLOGICAL INFORMATION**

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

The experimental information related to the toxicological properties of the product itself is not available

**SECTION 11: TOXICOLOGICAL INFORMATION (continued)**

Contains glycols. It is recommended not to breathe the vapours for prolonged periods of time due to the possibility of effects that are hazardous to the health .

**Dangerous health implications:**

In case of exposure that is repetitive, prolonged or at concentrations higher than the recommended occupational exposure limits, adverse effects on health may result, depending on the means of exposure:

A- Ingestion (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, however, it contains substances classified as dangerous for consumption. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met. However, it does contain substances classified as dangerous for this effect. For more information see section 3.

B- Inhalation (acute effect):

- Acute toxicity : Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for inhalation. For more information see section 3.
- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

C- Contact with the skin and the eyes (acute effect):

- Contact with the skin: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for skin contact. For more information see section 3.
- Contact with the eyes: Produces eye damage after contact.

D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.  
IARC: Benzyl acetate (3); (r)-p-mentha-1,8-diene (3); eugenol (3); ethanol (1); propan-2-ol (3); C.I.Acrid Red 27 (3)
- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensitising effects. For more information see section 3.
- Cutaneous: Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous with sensitising effects. For more information see section 3.

F- Specific target organ toxicity (STOT) - single exposure:

Based on available data, the classification criteria are not met. However, it contains substances classified as dangerous for inhalation. For more information see section 3.

G- Specific target organ toxicity (STOT)-repeated exposure:

- Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- Skin: Based on available data, the classification criteria are not met. However, it does contain substances which are classified as dangerous due to repetitive exposure. For more information see section 3.

H- Aspiration hazard:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

**Other information:**

Non-applicable

**Specific toxicology information on the substances:**

Identification	Acute toxicity		Genus
	LD50 oral	LD50 dermal	
2-phenylethanol CAS: 60-12-8 EC: 200-456-2	LD50 oral	1610 mg/kg	Rat
	LD50 dermal	2100 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
ethanol CAS: 64-17-5 EC: 200-578-6	LD50 oral	6200 mg/kg	Rat
	LD50 dermal	20000 mg/kg	Rabbit
	LC50 inhalation	124,7 mg/L (4 h)	Rat

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**SECTION 11: TOXICOLOGICAL INFORMATION (continued)**

Identification	Acute toxicity		Genus
	Route	Dose	
Butanone CAS: 78-93-3 EC: 201-159-0	LD50 oral	4000 mg/kg	Rat
	LD50 dermal	6400 mg/kg	Rabbit
	LC50 inhalation	23,5 mg/L (4 h)	Rat
citronellol CAS: 106-22-9 EC: 203-375-0	LD50 oral	3450 mg/kg	Rat
	LD50 dermal	2650 mg/kg	
	LC50 inhalation	Non-applicable	
geraniol CAS: 106-24-1 EC: 203-377-1	LD50 oral	4200 mg/kg	Rat
	LD50 dermal	5100 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
linalool CAS: 78-70-6 EC: 201-134-4	LD50 oral	3500 mg/kg	Rat
	LD50 dermal	5610 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	
triplal CAS: Non-applicable EC: 943-728-2	LD50 oral	3900 mg/kg	Rat
	LD50 dermal	>5000 mg/kg	Rabbit
	LC50 inhalation	Non-applicable	

**11.2 Information on other hazards:**

**Endocrine disrupting properties**

Endocrine-disrupting properties: The product fails to meet the criteria.

**Other information**

Non-applicable

**SECTION 12: ECOLOGICAL INFORMATION**

The experimental information related to the eco-toxicological properties of the product itself is not available

**12.1 Toxicity:**

**Acute toxicity:**

Identification	Concentration		Species	Genus
	Route	Dose		
ethanol CAS: 64-17-5 EC: 200-578-6	LC50	11000 mg/L (96 h)	Alburnus alburnus	Fish
	EC50	9268 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	1450 mg/L (192 h)	Microcystis aeruginosa	Algae
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	LC50	10000 mg/L (96 h)	Pimephales promelas	Fish
	EC50	1919 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	Non-applicable		

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**SECTION 12: ECOLOGICAL INFORMATION (continued)**

Identification	Concentration		Species	Genus
2-phenylethanol CAS: 60-12-8 EC: 200-456-2	LC50	Non-applicable		
	EC50	330 mg/L (24 h)	Daphnia magna	Crustacean
	EC50	490 mg/L (72 h)	Scenedesmus subspicatus	Algae
Butanone CAS: 78-93-3 EC: 201-159-0	LC50	3220 mg/L (96 h)	Pimephales promelas	Fish
	EC50	5091 mg/L (48 h)	Daphnia magna	Crustacean
	EC50	4300 mg/L (168 h)	Scenedesmus quadricauda	Algae
triplal CAS: Non-applicable EC: 943-728-2	LC50	>1 - 10 (96 h)		Fish
	EC50	>1 - 10 (48 h)		Crustacean
	EC50	>1 - 10 (72 h)		Algae

**Chronic toxicity:**

Identification	Concentration		Species	Genus
ethanol CAS: 64-17-5 EC: 200-578-6	NOEC	250 mg/L	Danio rerio	Fish
	NOEC	2 mg/L	Ceriodaphnia dubia	Crustacean
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	NOEC	Non-applicable		
	NOEC	0,5 mg/L	Daphnia magna	Crustacean

**12.2 Persistence and degradability:**

Identification	Degradability		Biodegradability	
ethanol CAS: 64-17-5 EC: 200-578-6	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	89 %
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	BOD5	Non-applicable	Concentration	Non-applicable
	COD	0 g O2/g	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	73 %
2-phenylethanol CAS: 60-12-8 EC: 200-456-2	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	14 days
	BOD5/COD	Non-applicable	% Biodegradable	87 %
Butanone CAS: 78-93-3 EC: 201-159-0	BOD5	2,03 g O2/g	Concentration	Non-applicable
	COD	2,31 g O2/g	Period	20 days
	BOD5/COD	0,88	% Biodegradable	89 %
geraniol CAS: 106-24-1 EC: 203-377-1	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	21 days
	BOD5/COD	Non-applicable	% Biodegradable	70 %
linalool CAS: 78-70-6 EC: 201-134-4	BOD5	Non-applicable	Concentration	100 mg/L
	COD	Non-applicable	Period	28 days
	BOD5/COD	Non-applicable	% Biodegradable	90 %

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**ZEN RED**

**SECTION 12: ECOLOGICAL INFORMATION (continued)**

**12.3 Bioaccumulative potential:**

Identification	Bioaccumulation potential	
ethanol CAS: 64-17-5 EC: 200-578-6	BCF	3
	Pow Log	-0.31
	Potential	Low
Dipropylene Glycol Methyl Ether CAS: 34590-94-8 EC: 252-104-2	BCF	1
	Pow Log	-0.06
	Potential	Low
2-phenylethanol CAS: 60-12-8 EC: 200-456-2	BCF	6
	Pow Log	1.36
	Potential	Low
Butanone CAS: 78-93-3 EC: 201-159-0	BCF	3
	Pow Log	0.29
	Potential	Low
geraniol CAS: 106-24-1 EC: 203-377-1	BCF	110
	Pow Log	3.56
	Potential	High
linalool CAS: 78-70-6 EC: 201-134-4	BCF	
	Pow Log	2.97
	Potential	

**12.4 Mobility in soil:**

Identification	Absorption/desorption		Volatility	
ethanol CAS: 64-17-5 EC: 200-578-6	Koc	1	Henry	4,61E-1 Pa·m <sup>3</sup> /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	2,339E-2 N/m (25 °C)	Moist soil	Yes
2-phenylethanol CAS: 60-12-8 EC: 200-456-2	Koc	Non-applicable	Henry	Non-applicable
	Conclusion	Non-applicable	Dry soil	Non-applicable
	Surface tension	3,807E-2 N/m (25 °C)	Moist soil	Non-applicable
Butanone CAS: 78-93-3 EC: 201-159-0	Koc	30	Henry	5,77 Pa·m <sup>3</sup> /mol
	Conclusion	Very High	Dry soil	Yes
	Surface tension	2,396E-2 N/m (25 °C)	Moist soil	Yes

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

Product fails to meet PBT/vPvB criteria

**12.6 Endocrine disrupting properties:**

Endocrine-disrupting properties: The product fails to meet the criteria.

**SECTION 12: ECOLOGICAL INFORMATION (continued)**

**12.7 Other adverse effects:**

Not described

**SECTION 13: DISPOSAL CONSIDERATIONS**

**13.1 Waste treatment methods:**

Code	Description	Waste class (Regulation (EU) No 1357/2014)
07 01 04*	other organic solvents, washing liquids and mother liquors	Dangerous

**Type of waste (Regulation (EU) No 1357/2014):**

HP3 Flammable, HP4 Irritant — skin irritation and eye damage

**Waste management (disposal and evaluation):**

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommend disposal down the drain. See paragraph 6.2.

**Regulations related to waste management:**

In accordance with Annex II of Regulation (EC) No 1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014

**SECTION 14: TRANSPORT INFORMATION**

**Transport of dangerous goods by land:**

With regard to ADR 2021 and RID 2021:



- 14.1 UN number or ID number:** UN1993
- 14.2 UN proper shipping name:** FLAMMABLE LIQUID, N.O.S. (ethanol)
- 14.3 Transport hazard class(es):** 3  
Labels: 3
- 14.4 Packing group:** II
- 14.5 Environmental hazards:** No
- 14.6 Special precautions for user**  
Special regulations: 274, 601, 640D  
Tunnel restriction code: D/E  
Physico-Chemical properties: see section 9  
Limited quantities: 1 L
- 14.7 Maritime transport in bulk according to IMO instruments:** Non-applicable

**Transport of dangerous goods by sea:**

With regard to IMDG 39-18:

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**SECTION 14: TRANSPORT INFORMATION (continued)**



<b>14.1 UN number or ID number:</b>	UN1993
<b>14.2 UN proper shipping name:</b>	FLAMMABLE LIQUID, N.O.S. (ethanol)
<b>14.3 Transport hazard class(es):</b>	3
Labels:	3
<b>14.4 Packing group:</b>	II
<b>14.5 Marine pollutant:</b>	No
<b>14.6 Special precautions for user</b>	
Special regulations:	274
EmS Codes:	F-E, S-E
Physico-Chemical properties:	see section 9
Limited quantities:	1 L
Segregation group:	Non-applicable
<b>14.7 Maritime transport in bulk according to IMO instruments:</b>	Non-applicable

**Transport of dangerous goods by air:**

With regard to IATA/ICAO 2021:



<b>14.1 UN number or ID number:</b>	UN1993
<b>14.2 UN proper shipping name:</b>	FLAMMABLE LIQUID, N.O.S. (ethanol)
<b>14.3 Transport hazard class(es):</b>	3
Labels:	3
<b>14.4 Packing group:</b>	II
<b>14.5 Environmental hazards:</b>	No
<b>14.6 Special precautions for user</b>	
Physico-Chemical properties:	see section 9
<b>14.7 Maritime transport in bulk according to IMO instruments:</b>	Non-applicable

**SECTION 15: REGULATORY INFORMATION**

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

Regulation (EC) No 528/2012: contains a preservative to protect the initial properties of the treated article. Contains ethanol.

Candidate substances for authorisation under the Regulation (EC) No 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) No 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: ethanol (Product-type 1, 2, 4, 6) ; geraniol (Product-type 18, 19)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

**Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII REACH, etc ....):**

Shall not be used in:

- ornamental articles intended to produce light or colour effects by means of different phases, for example in ornamental lamps and ashtrays,
- tricks and jokes,
- games for one or more participants, or any article intended to be used as such, even with ornamental aspects.

**Specific provisions in terms of protecting people or the environment:**

It is recommended to use the information included in this safety data sheet as a basis for conducting workplace-specific risk assessments in order to establish the necessary risk prevention measures for the handling, use, storage and disposal of this product.

**Other legislation:**

The product could be affected by sectorial legislation

**15.2 Chemical safety assessment:**

The supplier has not carried out evaluation of chemical safety.

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## SECTION 16: OTHER INFORMATION

### Legislation related to safety data sheets:

The SDS shall be supplied in an official language of the country where the product is placed on the market. This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) No 1907/2006 (COMMISSION REGULATION (EU) 2020/878).

### Modifications related to the previous Safety Data Sheet which concerns the ways of managing risks.:

Non-applicable

### Texts of the legislative phrases mentioned in section 2:

H319: Causes serious eye irritation.

H225: Highly flammable liquid and vapour.

### Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

### CLP Regulation (EC) No 1272/2008:

Acute Tox. 4: H302 - Harmful if swallowed.

Aquatic Chronic 2: H411 - Toxic to aquatic life with long lasting effects.

Eye Dam. 1: H318 - Causes serious eye damage.

Eye Irrit. 2: H319 - Causes serious eye irritation.

Flam. Liq. 2: H225 - Highly flammable liquid and vapour.

Skin Irrit. 2: H315 - Causes skin irritation.

Skin Sens. 1: H317 - May cause an allergic skin reaction.

Skin Sens. 1B: H317 - May cause an allergic skin reaction.

STOT SE 3: H336 - May cause drowsiness or dizziness.

### Classification procedure:

Eye Irrit. 2: Calculation method

Flam. Liq. 2: Calculation method (2.6.4.3)

### Advice related to training:

Minimal training is recommended in order to prevent industrial risks for staff using this product and to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

### Principal bibliographical sources:

<http://echa.europa.eu>

<http://eur-lex.europa.eu>

### Abbreviations and acronyms:

ADR: European agreement concerning the international carriage of dangerous goods by road

IMDG: International maritime dangerous goods code

IATA: International Air Transport Association

ICAO: International Civil Aviation Organisation

COD: Chemical Oxygen Demand

BOD5: 5day biochemical oxygen demand

BCF: Bioconcentration factor

LD50: Lethal Dose 50

LC50: Lethal Concentration 50

EC50: Effective concentration 50

LogPOW: Octanolwater partition coefficient

Koc: Partition coefficient of organic carbon

UFI: unique formula identifier

IARC: International Agency for Research on Cancer

The information contained in this safety data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this safety data sheet only refers to this product, which should not be used for needs other than those specified.

- END OF SAFETY DATA SHEET -