

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

Date of revision: 18. 04. 2023

Version: 5.0

Replaced version from: 27. 10. 2021

Date of issue: 26. 11. 2012

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

#### 1.1. Product identifier

##### Product Name

KRYSTAL Oil freshener green

##### UFI code

UFI: UT10-F00Q-Q00K-Q6DU

##### Product code

TBOOZ01.

##### Mixture description

Water solution.

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

##### Identified uses

Liquid highly effective agent for perfuming toilets, bathrooms and public spaces.  
Consumer use.

##### Uses advised against

Not known. It is recommended to use it only for the intended use. Other uses may expose users to unpredictable risks.

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

##### CORMEN s.r.o.

Věchnov 73

593 01

Czech Republic

telephone: +420 566 550 961

Fax: +420 566 551 822

e-mail address for a competent person responsible for the SDS: [info@cormen.cz](mailto:info@cormen.cz)

#### 1.4. Emergency telephone number

112 (General emergency phone).

### SECTION 2: Hazards identification

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

The mixture is classified as **hazardous** according to regulation 1272/2008/EC.

**Classification according to 1272/2008/EC**

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

Flam. Liq. 3; H226

Eye Irrit. 2; H319

Full text of classifications and H-phrases: see section 16.

### **The most important adverse physical, human health and environmental effects**

Flammable liquid and vapour. Causes serious eye irritation.

## 2.2. Label elements

### **Hazard pictograms**



### **Signal word**

Warning.

### **Substances of the mixture to be placed on the label**

Not given.

### **Hazard statements**

H226 Flammable liquid and vapour.

H319 Causes serious eye irritation.

### **Precautionary statements**

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313 If eye irritation persists: Get medical advice/attention.

P501 Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### **Supplemental hazard information**

EUH208 - Contains Citronellol, (R)-p-Mentha-1,8-diene,  $\alpha$ -Hexylcinnamaldehyde, Reaction mass of 2,6-Octadien-1-ol, 3,7-dimethyl-, (E) and 2,6-Octadien-1-ol, 3,7-dimethyl-, (Z)-, Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

## 2.3. Other hazards

Mixture does not contain substance(s) meeting the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in accordance with Annex XIII of REACH regulation. The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet (established in accordance with Article 59(1) of REACH regulation. Mixture does not contain the substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### 3.2.1. Substances of a mixture classified as hazardous

Identification of substance	Content wt. %	Classification according to 1272/2008/EC
<b>Propan-2-ol; Isopropyl alcohol; Isopropanol</b>		
CAS Number 67-63-0	≤ 15.0	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336
EC Number 200-661-7		
Index Number 603-117-00-0		
Registration Number 01-2119457558-25-XXXX		
<b>Alcohols, C12-14, ethoxylated</b>		
CAS Number 68439-50-9	< 3.0	Acute Tox. 4; H302 Eye Dam. 1; H318 Aquatic Chronic 3; H412
EC Number not given		
Index Number not given		
Registration Number polymer, not subject to registration		
<b>Citronellol; 3,7-Dimethyloct-6-en-1-ol</b>		
CAS Number 106-22-9	< 0.4	Skin Irrit. 2; H315 Skin Sens. 1B; H317 Eye Irrit. 2; H319
EC Number 203-375-0		
Index Number not given		
Registration Number 01-2119453995-23-XXXX		
<b>(R)-p-Mentha-1,8-diene; d-Limonene</b>		
CAS Number 5989-27-5	< 0.3	Flam. Liq. 3; H226 Asp. Tox. 1; H304 Skin Irrit. 2; H315 Skin Sens. 1B; H317 Aquatic Acute 1; H400 Aquatic Chronic 3; H412 M=1
EC Number 227-813-5		
Index Number 601-096-00-2		
Registration Number not yet available		
<b>(E)-2-Benzylideneoctanal; α-Hexylcinnamaldehyde</b>		
CAS Number 165184-98-5	< 0.3	Skin Sens. 1; H317 Aquatic Acute 1; H400 Aquatic Chronic 2; H411 M=1
EC Number 639-566-4		
Index Number not given		
Registration Number 01-2119533092-50-XXXX		
<b>Reaction mass of 2,6-Octadien-1-ol, 3,7-dimethyl-, (E) and 2,6-Octadien-1-ol, 3,7-dimethyl-, (Z)-; Reaction mass of Geraniol and Nerol</b>		
CAS Number not given	< 0.15	Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Dam. 1; H318
EC Number 906-125-5		
Index Number not given		
Registration Number 01-2119560621-44-XXXX		
<b>Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)</b>		

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

CAS Number	55965-84-9		Acute Tox. 3; H301
EC Number	not given		Acute Tox. 2; H310
Index Number	613-167-00-5	< 0.0011	Skin Corr. 1C; H314
Registration Number	not yet available		Eye Dam. 1; H318
			Skin Sens. 1A; H317
			Acute Tox. 2; H330
			Aquatic Acute 1; H400
			Aquatic Chronic 1; H410
			EUH071
			M=100
			M(Chronic)=100
The substance has specific concentration limits:			
Skin Corr. 1C; H314		$C \geq 0.6 \%$	
Eye Dam. 1; H318		$C \geq 0.6 \%$	
Skin Irrit. 2; H315		$0.06 \% \leq C < 0.6 \%$	
Eye Irrit. 2; H319		$0.06 \% \leq C < 0.6 \%$	
Skin Sens. 1A; H317		$C \geq 0.0015 \%$	
<b>Ethanediol; Ethylene glycol</b>			
CAS Number	107-21-1		
EC Number	203-473-3		Acute Tox. 4; H302
Index Number	603-027-00-1	< 0.001	STOT RE 2; H373
Registration Number	not yet available		

Full text of classifications and H-phrases: see section 16.

### SECTION 4: First aid measures

In all cases keep the victim at physical and mental rest and warm. In case of doubt or if symptoms persist, seek medical attention. Never give anything by mouth if victim is rapidly losing consciousness, unconscious or convulsing. Protect yourself during rescue work.

#### 4.1. Description of first aid measures

##### Inhalation

Interrupt the exposure, move the person to the fresh air. In case of persistent nausea, seek medical advice.

##### Skin contact

Remove contaminated clothing, shoes, and wash affected skin thoroughly with water (preferably lukewarm) and soap. Do not use solvents or thinners. If the problem persists, seek medical advice.

##### Eye contact

Rinse with a gentle stream of water for at least 15 minutes. Keep your eyelids wide open with your thumb and forefinger. If the affected person is wearing contact lenses, remove them before rinsing eyes if it is easy. If pain or redness persists, seek medical advice.

##### Ingestion

Rinse your mouth and then drink plenty of water. Do not induce vomiting. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. Seek medical advice.

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

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

Are not known.

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

Treat symptomatically and supportively.

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

#### ***Suitable extinguishing media***

##### Small fire:

Carbon dioxide CO<sub>2</sub>, dry extinguishing agent, sand or earth, alcohol-resistant foam.

##### Extensive fire:

Framgented water streams (water mist), alcohol-resistant foam.

#### ***Unsuitable extinguishing media***

Solid streams of water may be ineffective.

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

In case of fire extinguishing prevent leakage of water and rest of product into drains. Collect them separately and dispose of safely in accordance with current legislation and applicable local regulations.

In case of fires, hazardous combustion gases are formed: carbon oxides, sulphur oxides, hydrogen sulphide, nitrogen oxides, ammonia, chlorine oxides, hydrogen chloride, chlorine and products of incomplete combustion.

### **5.3. Advice for firefighters**

Stop further leakage of product if possible. Spilled product, which does not burn, cover with sand or foam. Move containers and barrels away from the fire to a safe place, if possible. Cool all affected containers down with flooding quantities of water. If the fire can't be extinguished - evacuate the premises.

In case of fire, wear suitable respiratory protective equipment and fire-fighting suit.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin and eyes, use suitable protective equipment and clothing, see Section 8. Ensure adequate ventilation. At the point of leakage, prevent the movement of unauthorized persons.

### **6.2. Environmental precautions**

Prevent further leakage or spillage if safe to do so. If this cannot be avoided, inform the competent authorities (police and firefighters) immediately.

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

According to the amount of spilled liquid, drain away the substance (large spillage) or in case of small spillage, absorb it with suitable absorbent (vermiculite, dry sand), put into labelled closed containers and dispose of them accordingly to Section 13. Flush residues with water and collect it for waste disposal. Do not use solvents or dispersants unless instructed by an expert or government authority.

If container is damaged, remove the content to the new undamaged container and label it properly again.

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

Refer also to the provisions of sections 7, 8 and 13 of this safety data sheet.

## **SECTION 7: Handling and storage**

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

### 7.1. Precautions for safe handling

Avoid contact with skin and eyes. Personal protection see. Section 8. Ensure good ventilation. Smoking, eating and drinking should be prohibited at the place of use. Keep safety regulations for handling chemicals. Take off contaminated clothing and protective equipment before entering the dining area. Do not use dirty clothing. After work wash yourself carefully with warm water and soap, take a shower. Use protective cream.

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

Store in original, tightly closed containers, in a dry, cool and well-ventilated place at room temperature. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Do not store together with incompatible materials (see subsection 10.5), food, drink and feed.

### 7.3. Specific end use(s)

Instructions for use: Spray into the container for toilet brush, waste bin, artificial flower pots, or similar places from which the scent will be gradually released. Do not use freely in space.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### 8.1.1. Exposure limit value

**Ethandiol** CAS: 107-21-1

Limit values - Eight hours		Limit values - Short-term		Note
52 mg/m <sup>3</sup>	20 ppm	104 mg/m <sup>3</sup>	40 ppm	Skin

#### 8.1.2. Biological limit values

Not determined in EU.

#### 8.1.3. DNEL and PNEC values

**Propan-2-ol** CAS: 67-63-0

#### DNEL

Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	500 mg/m <sup>3</sup>
Workers	Inhalation	Systemic effect	Acute/short term	1 000 mg/m <sup>3</sup>
Workers	Dermal	Systemic effect	Long term	888 mg/kg/day
General population	Inhalation	Systemic effect	Long term	89 mg/m <sup>3</sup>
General population	Inhalation	Systemic effect	Acute/short term	178 mg/m <sup>3</sup>
General population	Dermal	Systemic effect	Long term	319 mg/kg/day
General population	Oral	Systemic effect	Long term	26 mg/kg/day
General population	Oral	Systemic effect	Acute/short term	51 mg/kg/day

#### PNEC

Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
140.9 mg/l	140.9 mg/l	140.9 mg/l	not given	2 251 mg/l

#### PNEC



# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
552 mg/kg	552 mg/kg	not given	28 mg/kg	160 mg/kg food
<b>Citronellol</b>				CAS: 106-22-9
<b>DNEL</b>				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	161.6 mg/m <sup>3</sup>
Workers	Inhalation	Local effect	Long term	10 mg/m <sup>3</sup>
Workers	Inhalation	Local effect	Acute/short term	10 mg/m <sup>3</sup>
Workers	Dermal	Systemic effect	Long term	327.4 mg/kg/day
Workers	Dermal	Local effect	Acute/short term	2 950 µg/cm <sup>2</sup>
General population	Inhalation	Systemic effect	Long term	47.8 mg/m <sup>3</sup>
General population	Inhalation	Local effect	Long term	10 mg/m <sup>3</sup>
General population	Inhalation	Local effect	Acute/short term	10 mg/m <sup>3</sup>
General population	Dermal	Systemic effect	Long term	196.4 mg/kg/day
General population	Dermal	Local effect	Acute/short term	2 950 µg/cm <sup>2</sup>
General population	Oral	Systemic effect	Long term	13.8 mg/kg/day
<b>PNEC</b>				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
0.002 mg/l	0 mg/l	0.024 mg/l	not given	580 mg/l
<b>PNEC</b>				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
0.026 mg/kg	0.003 mg/kg	no effect	0.004 mg/kg	not given
<b>(E)-2-Benzylidenoctanal</b>				CAS: 165184-98-5
<b>DNEL</b>				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	0.078 mg/m <sup>3</sup>
Workers	Inhalation	Local effect	Acute/short term	6.28 mg/m <sup>3</sup>
Workers	Dermal	Systemic effect	Long term	18.2 mg/kg/day
Workers	Dermal	Local effect	Long term	525 µg/cm <sup>2</sup>
Workers	Dermal	Local effect	Acute/short term	525 µg/cm <sup>2</sup>
General population	Inhalation	Systemic effect	Long term	0.019 mg/m <sup>3</sup>
General population	Inhalation	Local effect	Acute/short term	4.71 mg/m <sup>3</sup>
General population	Dermal	Systemic effect	Long term	9.11 mg/kg/day
General population	Dermal	Local effect	Long term	78.7 µg/cm <sup>2</sup>
General population	Dermal	Local effect	Acute/short term	78.7 µg/cm <sup>2</sup>
General population	Oral	Systemic effect	Long term	0.056 mg/kg/day

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

<b>PNEC</b>				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
0.001 mg/l	0 mg/l	0.002 mg/l	not given	10 mg/l
<b>PNEC</b>				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
3.2 mg/kg	0.064 mg/kg	no effect	0.398 mg/kg	6.6 mg/kg food
<b>Reaction mass of 2,6-Octadien-1-ol, 3,7-dimethyl-, (E) and 2,6-Octadien-1-ol, 3,7-dimethyl-, (Z)-</b>				ES: 906-125-5
<b>DNEL</b>				
Area of use	Route of exposure	Effect	Exposure time	Value
Workers	Inhalation	Systemic effect	Long term	14.7 mg/m <sup>3</sup>
Workers	Dermal	Systemic effect	Long term	8.3 mg/kg/day
Workers	Dermal	Local effect	Long term	11 800 µg/cm <sup>2</sup>
General population	Inhalation	Systemic effect	Long term	4.3 mg/m <sup>3</sup>
General population	Dermal	Systemic effect	Long term	5 mg/kg/day
General population	Dermal	Local effect	Long term	11 800 µg/cm <sup>2</sup>
General population	Oral	Systemic effect	Long term	2.5 mg/kg/day
<b>PNEC</b>				
Fresh water	Marine water	Intermittent releases		Sewage Treatment Plant (STP)
		Fresh water	Marine water	
0.011 mg/l	0.001mg/l	0.108 mg/l	not given	0.7 mg/l
<b>PNEC</b>				
Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
0.115 mg/kg	0.011 mg/kg	no effect	0.017 mg/kg	no effect
<b>8.2. Exposure controls</b>				
<b>8.2.1. Appropriate engineering controls</b>				
Use only in well-ventilated areas.				
Observe usual safety precautions for working with chemicals. The degree of effectiveness of personal protective equipment depends on temperature and ventilation levels.				
<b>8.2.2. Individual protection measures, such as personal protective equipment</b>				
Do not eat, drink or smoke. After work, wash thoroughly with warm water and soap and take a shower. Use protective cream. Do not soiled protective equipment to wash, do not use solvents.				
<b>Eye/face protection</b>				
Wear safety goggles or face shield when manufacturing and handling the product (EN 166, EN 149+A1). It is not necessary for normal use, in case of possible contact with the eyes, use protective glasses or a face shield.				
<b>Skin protection - hand protection</b>				



# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

Wear protective gloves when manufacturing and handling the product (EN 374-1, EN 374-2). In normal use it is not necessary to use protective gloves. Wear protective gloves in case of prolonged skin contact.

The selection of the glove material on consideration of the breakthrough time, permeability, degradation and next relevant factors; other chemicals that may come into contact, physical requirements (cut and puncture protection, dexterity, thermal protection), possible body reactions to the glove material and the glove supplier's instructions and specifications. In case of repeated use of gloves, clean and keep them in a well-ventilated place before taking off.

### **Skin protection - other**

In normal use is not necessary, in case of prolonged contact with the product, wear protective working clothing (EN ISO 13688) and protective footwear (EN ISO 20346).

### **Respiratory protection**

Not necessary in case of compliance concentration limits (if they were exceeded, use a respirator against organic vapour, EN 14387). In the event of an accident or a fire use self-contained breathing apparatus.

### **Thermal hazards**

In normal use is not necessary protective equipment to be worn for materials that represent a thermal hazard.

### **8.2.3. Environmental exposure controls**

Uncontrolled release of the mixture into environment is to be avoided. Keep the emission limits according to national legislation.

## **SECTION 9: Physical and chemical properties**

### **9.1. Information on basic physical and chemical properties**

#### **Mixture**

<b>Physical state</b>	Liquid.
<b>Colour</b>	Green.
<b>Odour</b>	Characteristic.
<b>Melting point/freezing point</b>	Not determined.
<b>Boiling point or initial boiling point and boiling range</b>	82 °C.
<b>Flammability</b>	The mixture is classified as flammable liquid according to the value of the flash point.
<b>Lower explosion limit</b>	Not determined for the mixture, values are given for substances classified as flammable liquids.
<b>Upper explosion limit</b>	Not determined for the mixture, values are given for substances classified as flammable liquids.
<b>Flash point</b>	> 34 - < 60 ° C (according to the determination of the flash point of a similar mixture).
<b>Auto-ignition temperature</b>	Not determined.
<b>Decomposition temperature</b>	Not determined, the mixture does not contain self-reactive substances or organic peroxides.
<b>pH</b>	7 (20 °C).

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

<b><i>Kinematic viscosity</i></b>	Not determined, the mixture does not contain a substance classified as aspiration toxic, or the sum of the concentrations of substances classified as aspiration toxic is less than 10 wt. %.
<b><i>Solubility</i></b>	Complete miscible.
<b><i>Partition coefficient n-octanol/water (log value)</i></b>	Does not apply to mixture.
<b><i>Vapour pressure</i></b>	43 hPa.
<b><i>Density and/or relative density</i></b>	0.97 g/cm <sup>3</sup> (20 °C).
<b><i>Relative vapour density</i></b>	Not determined.
<b><i>Particle characteristics</i></b>	Does not apply to liquid.
<b>Propan-2-ol</b> CAS: 67-63-0	
<b><i>Physical state</i></b>	Liquid.
<b><i>Colour</i></b>	Colopurless.
<b><i>Odour</i></b>	Not determined.
<b><i>Melting point/freezing point</i></b>	-88.5 °C (literature).
<b><i>Boiling point or initial boiling point and boiling range</i></b>	82.3 °C (literature).
<b><i>Flammability</i></b>	Highly flammable liquid.
<b><i>Lower explosion limit</i></b>	2 vol. % (literature).
<b><i>Upper explosion limit</i></b>	13 vol. % (literature).
<b><i>Flash point</i></b>	11.7 °C (literature).
<b><i>Auto-ignition temperature</i></b>	399 - 455.6 °C (literature).
<b><i>Decomposition temperature</i></b>	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
<b><i>pH</i></b>	Not determined.
<b><i>Kinematic viscosity</i></b>	Not determined, it is not a hydrocarbon or a chlorinated hydrocarbon.
<b><i>Solubility</i></b>	Miscible with water.
<b><i>Partition coefficient n-octanol/water (log value)</i></b>	log Pow = 0.05 (25 °C, literature).
<b><i>Vapour pressure</i></b>	Not determined.
<b><i>Density and/or relative density</i></b>	785.5 kg/m <sup>3</sup> (20 °C, literature).
<b><i>Relative vapour density</i></b>	Not determined.
<b><i>Particle characteristics</i></b>	Does not apply to liquid.
<b>Citronellol</b> CAS: 106-22-9	
<b><i>Physical state</i></b>	Liquid.
<b><i>Colour</i></b>	Colourless.
<b><i>Odour</i></b>	Not determined.
<b><i>Melting point/freezing point</i></b>	< -20 °C.

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

<b>Boiling point or initial boiling point and boiling range</b>	223.8 °C.
<b>Flammability</b>	The substance is not classified as flammable, pyrophoric or emit flammable gases under standard conditions.
<b>Lower explosion limit</b>	Not determined.
<b>Upper explosion limit</b>	Not determined.
<b>Flash point</b>	107 °C (EU method A.9).
<b>Auto-ignition temperature</b>	240 °C (DIN 51794).
<b>Decomposition temperature</b>	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
<b>pH</b>	Not determined.
<b>Kinematic viscosity</b>	Not determined, it is not a hydrocarbon or a chlorinated hydrocarbon.
<b>Solubility</b>	307 mg/l (25 °C, OECD 105).
<b>Partition coefficient n-octanol/water (log value)</b>	log Pow = 3.41 (25 °C, EU method A.8).
<b>Vapour pressure</b>	1 hPa (67 °C).
<b>Density and/or relative density</b>	854.9 kg/m <sup>3</sup> (20 °C).
<b>Relative vapour density</b>	Not determined.
<b>Particle characteristics</b>	Does not apply to liquid.
<b>(E)-2-Benzylidenooctanal</b> CAS: 165184-98-5	
<b>Physical state</b>	Liquid.
<b>Colour</b>	Yellow.
<b>Odour</b>	Jasmine.
<b>Melting point/freezing point</b>	ca. 17.6 °C (OECD 102).
<b>Boiling point or initial boiling point and boiling range</b>	ca. 310.8 °C (OECD 103).
<b>Flammability</b>	The substance is not classified as flammable, pyrophoric or emit flammable gases under standard conditions.
<b>Lower explosion limit</b>	Not determined.
<b>Upper explosion limit</b>	Not determined.
<b>Flash point</b>	ca. 151 °C.
<b>Auto-ignition temperature</b>	ca. 235.5 °C (EU method A.15).
<b>Decomposition temperature</b>	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
<b>pH</b>	Not determined.
<b>Kinematic viscosity</b>	Not determined, it is not a hydrocarbon or a chlorinated hydrocarbon.

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

<b>Solubility</b>	1.57 - 1.68 mg/l (20 °C, pH = 4 – 7, OECD 105).
<b>Partition coefficient n-octanol/water (log value)</b>	ca. 5.3 (24 °C, OECD 117).
<b>Vapour pressure</b>	0.068 Pa (25 °C, OECD 104).
<b>Density and/or relative density</b>	ca. 0.95 g/cm <sup>3</sup> (20 °C, OECD 109).
<b>Relative vapour density</b>	Not determined.
<b>Particle characteristics</b>	Does not apply to liquid.
Reaction mass of 2,6-Octadien-1-ol, 3,7-dimethyl-, (E) and 2,6-Octadien-1-ol, 3,7-dimethyl-, (Z)- ES: 906-125-5	
<b>Physical state</b>	Liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Not determined.
<b>Melting point/freezing point</b>	-15 °C (geraniol, literature).
<b>Boiling point or initial boiling point and boiling range</b>	229 - 230 °C (geraniol, literature).
<b>Flammability</b>	The substance is not classified as flammable, pyrophoric or emit flammable gases under standard conditions.
<b>Lower explosion limit</b>	Not determined.
<b>Upper explosion limit</b>	Not determined.
<b>Flash point</b>	108 °C (geraniol, EU method A.9).
<b>Auto-ignition temperature</b>	250 °C (geraniol, EU method A.15).
<b>Decomposition temperature</b>	Not determined, it is not a self-reactive substance or an organic peroxide or a substance that may decompose.
<b>pH</b>	Not determined.
<b>Kinematic viscosity</b>	Not determined, it is not a hydrocarbon or a chlorinated hydrocarbon.
<b>Solubility</b>	100 mg/l (geraniol, 25 °C, literature).
<b>Partition coefficient n-octanol/water (log value)</b>	log Pow = 2.7 (20 °C, OECD 117).
<b>Vapour pressure</b>	Not determined.
<b>Density and/or relative density</b>	D <sub>4</sub> <sup>20</sup> = 0.89 (geraniol, literature).
<b>Relative vapour density</b>	Not determined.
<b>Particle characteristics</b>	Does not apply to liquid.
<b>9.2. Other information</b>	
<b>9.2.1. Information with regard to physical hazard classes</b>	
<b>Mixture</b>	
<b>Explosives</b>	

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

Data for the mixture are not available.

The mixture does not contain substances classified as explosives or oxidising, or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### **Flammable gases**

It is not gas.

### **Aerosols**

It is not aerosol.

### **Oxidising gases**

It is not gas.

### **Gases under pressure**

It is not gas.

### **Flammable liquids**

Data for the mixture are not available.

The mixture is classified as flammable liquid category 3 according to the value of the flash point.

### **Flammable solids**

It is not solid.

### **Self-reactive substances and mixtures**

Data for the mixture are not available.

The mixture does not contain substances classified as self-reactive substances or explosives or organic peroxides or oxidising, or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### **Pyrophoric liquids**

Data for the mixture are not available.

The mixture does not contain substances classified as pyrophoric liquids or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### **Pyrophoric solids**

It is not solid.

### **Self-heating substances and mixtures**

Data for the mixture are not available.

The mixture does not contain substances classified as self-heating or pyrophoric substances or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### **Substances and mixtures, which emit flammable gases in contact with water**

Data for the mixture are not available.

The mixture does not contain substances classified as substances, which emit flammable gases in contact with water or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### **Oxidising liquids**

Data for the mixture are not available.

The mixture does not contain substances classified as oxidising liquids or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### **Oxidizing solids**

It is not solid.

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

### **Organic peroxides**

Data for the mixture are not available.

The mixture does not contain substances classified as organic peroxides or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### **Corrosive to metals**

Data for the mixture are not available.

The mixture does not contain substances classified as corrosive to metals or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### **Desensitised explosives**

Data for the mixture are not available.

The mixture does not contain substances classified as explosives or desensitised explosives, or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### **Propan-2-ol**

CAS: 67-63-0

### **Explosives**

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive properties.

Pure propan-2-ol is autoxidated by air and light to form an explosive cyclic triacetone triperoxide, which settles to the bottom of the vessel as a white sediment. In the event of such a finding, the container must be handled immediately and pyrotechnics called.

### **Flammable gases**

It is not gas.

### **Aerosols**

It is not aerosol.

### **Oxidising gases**

It is not gas.

### **Gases under pressure**

It is not gas.

### **Flammable liquids**

The substance is classified as flammable liquid category 2 according to the value of the flash point and boiling point.

### **Flammable solids**

It is not solid.

### **Self-reactive substances and mixtures**

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive or self-reactive properties.

### **Pyrophoric liquids**

Data for the substance are not available.

The substance is stable in air, there is no spontaneous ignition.

### **Pyrophoric solids**

It is not solid.



# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

### ***Self-heating substances and mixtures***

Data for the substance are not available.  
The substance is not classified as self-heating.

### ***Substances and mixtures, which emit flammable gases in contact with water***

Data for the substance are not available.  
The chemical structure of the substance does not contain metals or metalloids.  
The substance is miscible with water and forms a stable mixture with it.

### ***Oxidising liquids***

Data for the substance are not available.  
It is an organic substance that does not contain oxygen, fluorine or chlorine, or these elements are chemically bounded only to carbon or hydrogen.

### ***Oxidizing solids***

It is not solid.

### ***Organic peroxides***

Data for the substance are not available.  
The substance does not contain a bivalent group -O-O- with at least one organic radical.

### ***Corrosive to metals***

Data for the substance are not available.  
The substance is not classified as corrosive to metal.

### ***Desensitised explosives***

Data for the substance are not available.  
The substance does not contain chemical groups associated with explosive properties.

**Citronellol**

CAS: 106-22-9

### ***Explosives***

Data for the substance are not available.  
The substance does not contain chemical groups associated with explosive properties.

### ***Flammable gases***

It is not gas.

### ***Aerosols***

It is not aerosol.

### ***Oxidising gases***

It is not gas.

### ***Gases under pressure***

It is not gas.

### ***Flammable liquids***

The substance is not classified as flammable liquid according to the value of the flash point and boiling point.

### ***Flammable solids***

It is not solid.

### ***Self-reactive substances and mixtures***

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive or self-reactive properties.

### ***Pyrophoric liquids***

Data for the substance are not available.

The substance is stable in air, there is no spontaneous ignition.

### ***Pyrophoric solids***

It is not solid.

### ***Self-heating substances and mixtures***

Data for the substance are not available.

The substance is not classified as self-heating.

### ***Substances and mixtures, which emit flammable gases in contact with water***

Data for the substance are not available.

The chemical structure of the substance does not contain metals or metalloids.

The substance is miscible with water and forms a stable mixture with it.

### ***Oxidising liquids***

Data for the substance are not available.

It is an organic substance that does not contain oxygen, fluorine or chlorine, or these elements are chemically bounded only to carbon or hydrogen.

### ***Oxidizing solids***

It is not solid.

### ***Organic peroxides***

Data for the substance are not available.

The substance does not contain a bivalent group -O-O- with at least one organic radical.

### ***Corrosive to metals***

Data for the substance are not available.

The substance is not classified as corrosive to metal.

### ***Desensitised explosives***

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive properties.

**(E)-2-Benzylidenooctanal**

CAS: 165184-98-5

### ***Explosives***

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive properties.

### ***Flammable gases***

It is not gas.

### ***Aerosols***

It is not aerosol.

### ***Oxidising gases***

It is not gas.

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

<b><i>Gases under pressure</i></b>
It is not gas.
<b><i>Flammable liquids</i></b>
The substance is not classified as flammable liquid according to the value of the flash point and boiling point.
<b><i>Flammable solids</i></b>
It is not solid.
<b><i>Self-reactive substances and mixtures</i></b>
Data for the substance are not available. The substance does not contain chemical groups associated with explosive or self-reactive properties.
<b><i>Pyrophoric liquids</i></b>
Data for the substance are not available. The substance is stable in air, there is no spontaneous ignition.
<b><i>Pyrophoric solids</i></b>
It is not solid.
<b><i>Self-heating substances and mixtures</i></b>
Data for the substance are not available. The substance is not classified as self-heating.
<b><i>Substances and mixtures, which emit flammable gases in contact with water</i></b>
Data for the substance are not available. The chemical structure of the substance does not contain metals or metalloids. The substance is miscible with water and forms a stable mixture with it.
<b><i>Oxidising liquids</i></b>
Data for the substance are not available. It is an organic substance that does not contain oxygen, fluorine or chlorine, or these elements are chemically bounded only to carbon or hydrogen.
<b><i>Oxidizing solids</i></b>
It is not solid.
<b><i>Organic peroxides</i></b>
Data for the substance are not available. The substance does not contain a bivalent group -O-O- with at least one organic radical.
<b><i>Corrosive to metals</i></b>
Data for the substance are not available. The substance is not classified as corrosive to metal.
<b><i>Desensitised explosives</i></b>
Data for the substance are not available. The substance does not contain chemical groups associated with explosive properties.
<b>Reaction mass of 2,6-Octadien-1-ol, 3,7-dimethyl-, (E) and 2,6-Octadien-1-ol, 3,7-dimethyl-, (Z)-</b>
ES: 906-125-5
<b><i>Explosives</i></b>

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

Data for the substance are not available.

The substance contains chemical groups associated with explosive properties, but the calculated oxygen balance is less than -200.

Calculated oxygen balance = -290.

### **Flammable gases**

It is not gas.

### **Aerosols**

It is not aerosol.

### **Oxidising gases**

It is not gas.

### **Gases under pressure**

It is not gas.

### **Flammable liquids**

The substance is not classified as flammable liquid according to the value of the flash point and boiling point.

### **Flammable solids**

It is not solid.

### **Self-reactive substances and mixtures**

Data for the substance are not available.

The substance does not contain chemical groups associated with explosive or self-reactive properties.

### **Pyrophoric liquids**

Data for the substance are not available.

The substance is stable in air, there is no spontaneous ignition.

### **Pyrophoric solids**

It is not solid.

### **Self-heating substances and mixtures**

Data for the substance are not available.

The substance is not classified as self-heating.

### **Substances and mixtures, which emit flammable gases in contact with water**

Data for the substance are not available.

The chemical structure of the substance does not contain metals or metalloids.

The substance is miscible with water and forms a stable mixture with it.

### **Oxidising liquids**

Data for the substance are not available.

It is an organic substance that does not contain oxygen, fluorine or chlorine, or these elements are chemically bounded only to carbon or hydrogen.

### **Oxidizing solids**

It is not solid.

### **Organic peroxides**

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

Data for the substance are not available.

The substance does not contain a bivalent group -O-O- with at least one organic radical.

### **Corrosive to metals**

Data for the substance are not available.

The substance is not classified as corrosive to metal.

### **Desensitised explosives**

Data for the substance are not available.

The substance is not classified as explosive.

### **9.2.2. Other safety characteristics**

<b>Mechanical sensitivity</b>	Not determined, it is not an explosive substance.
<b>Self-accelerating polymerisation temperature</b>	Not determined, it is not a polymerising substance.
<b>Formation of explosible dust/air mixtures</b>	Not determined, it is not a dust.
<b>Acid/alkaline reserve</b>	Not determined, pH is in the range 4 - 10.
<b>Evaporation rate</b>	Not determined.
<b>Miscibility</b>	Not determined.
<b>Conductivity</b>	Not determined.
<b>Corrosiveness</b>	Not determined.
<b>Gas group</b>	Not determined, it is not gas.
<b>Redox potential</b>	Not determined.
<b>Radical formation potential</b>	Not determined.
<b>Photocatalytic properties</b>	Not determined.

## **SECTION 10: Stability and reactivity**

### **10.1. Reactivity**

The mixture is stable under normal conditions of use. There aren't any hazardous reaction.

### **10.2. Chemical stability**

Stable under recommended storage conditions.

### **10.3. Possibility of hazardous reactions**

Hazardous reactions aren't known under normal conditions of use.

### **10.4. Conditions to avoid**

Protect from frost.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

### **10.5. Incompatible materials**

Strong oxidizing agents.

### **10.6. Hazardous decomposition products**

They do not form under normal use. Burning releases carbon oxides, sulphur oxides, hydrogen sulphide, nitrogen oxides, ammonia, chlorine oxides, hydrogen chloride, chlorine and products of incomplete combustion.

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

### SECTION 11: Toxicological information

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

##### Mixture

##### **Acute toxicity**

The mixture is not classified as toxic for all routes of exposure.

##### **Oral**

Data for the mixture are not available.

ATE<sub>mixture</sub> > 2 000 mg/kg (estimate, low concentration of substances classified as toxic oral route of exposure).

##### **Dermal**

Data for the mixture are not available.

ATE<sub>mixture</sub> > 2 000 mg/kg (estimate, low concentration of substance classified as toxic dermal route of exposure).

##### **Inhalation**

Data for the mixture are not available.

ATE<sub>mixture</sub> > 20 mg/l (estimate, low concentration of substance classified as toxic inhalation route of exposure).

##### **Skin corrosion/irritation**

Data for the mixture are not available.

The mixture is not classified as skin irritant based on the general/specific concentration limits of substance(s).

##### **Serious eye damage/irritation**

Data for the mixture are not available.

The mixture is classified as eye irritant based on the general/specific concentration limits of substance(s).

##### **Respiratory or skin sensitisation**

Data for the mixture are not available.

The mixture is not classified as a skin sensitizing according to the general/specific concentration limits of substance(s).

EUH208 - Contains Citronellol, (R)-p-Mentha-1,8-diene,  $\alpha$ -Hexylcinnamaldehyde, Reaction mass of 2,6-Octadien-1-ol, 3,7-dimethyl-, (E) and 2,6-Octadien-1-ol, 3,7-dimethyl-, (Z)-, Reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1). May produce an allergic reaction.

##### **Germ cell mutagenicity**

Data for the mixture are not available.

The mixture does not contain substances classified as mutagenicity or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

##### **Carcinogenicity**

Data for the mixture are not available.

The mixture does not contain substances classified as carcinogenicity or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

##### **Reproductive toxicity**

Data for the mixture are not available.

The mixture does not contain substances classified as toxic for reproduction or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

##### **STOT – single exposure**



# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

Data for the mixture are not available.

The mixture is not classified as toxic for specific target organs in a single exposure in category 3 according to the recommended concentration limits of substance(s).

### **STOT – repeated exposure**

Data for the mixture are not available.

The mixture is not classified as toxic for specific target organs in a repeated exposure according to the general/specific concentration limits of substance(s).

### **Aspiration hazard**

Data for the mixture are not available.

The mixture does not contain substances classified as aspiration hazard or the concentration of substance(s) is lower than the limit for inclusion in Section 3.

### **Other information**

See section 2 and 4.

### **Propan-2-ol**

CAS: 67-63-0

### **Acute toxicity**

**Oral** Based on available data, the classification criteria are not met.  
LD<sub>50</sub> = 5 840 mg/kg (rat, OECD 401).

**Dermal** Based on available data, the classification criteria are not met.  
LD<sub>50</sub> = 16.4 ml/kg (12 792 mg/kg at a density of 0.78 g/cm<sup>3</sup>, rabbit, OECD 402).

**Inhalation** Based on available data, the classification criteria are not met.  
LC<sub>50</sub> > 10 000 ppm (vapour, 6 h, OECD 403).

### **Skin corrosion/irritation**

Based on available data, the classification criteria are not met.  
Mean erythema score = 0 and oedema = 0 (rabbit, OECD 404).

### **Serious eye damage/irritation**

The substance is classified as eye irritant.  
Total mean irritation score = 1.89 (rabbit, 72 h, OECD 405).

### **Respiratory or skin sensitisation**

Based on available data, the classification criteria are not met.  
Not skin sensitising (guinea pig, OECD 406).

### **Germ cell mutagenicity**

Based on available data, the classification criteria are not met.  
Negative (OECD 471, OECD 476).

### **Carcinogenicity**

Based on available data, the classification criteria are not met.  
NOAEL = 5 000 ppm (testicular tumors, rat, male, vapour, OECD 451).

### **Reproductive toxicity**

Based on available data, the classification criteria are not met.  
NOAEL = 853 mg/kg/day (rat, oral, generation P0, OECD 415).

### **STOT – single exposure**

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

The substance may cause drowsiness or dizziness.

### **STOT – repeated exposure**

Based on available data, the classification criteria are not met.

NOEC = 500 ppm (specific toxic effect, rat, vapour, 104 weeks, OECD 451).

NOAEC = 5 000 ppm (specific exposure-related adverse reaction, rat, vapour, 104 weeks, OECD 451).

NOEC = 5 000 ppm (effects of oncogenicity, rat, vapour, 104 weeks, OECD 451).

### **Aspiration hazard**

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm<sup>2</sup>/s or less at 40 °C.

**Citronellol**

CAS: 106-22-9

### **Acute toxicity**

#### **Oral**

Based on available data, the classification criteria are not met.

LD<sub>50</sub> = 3 450 mg/kg (rat, literature).

#### **Dermal**

Based on available data, the classification criteria are not met.

LD<sub>50</sub> = 2 650 mg/kg (rat, literature).

#### **Inhalation**

Data for the substance are not available.

### **Skin corrosion/irritation**

The substance is classified as skin irritant.

Primary dermal irritation index PDII = 3.67 - 4.22 (max. 8, not fully reversible after 7 days) (rabbit, 72 hrs., OECD 404).

### **Serious eye damage/irritation**

The substance is classified as eye irritant.

Total irritation score = 30.5 (max. 39, not fully reversible after 8 days), mean score of corneal opacity = 1 (not fully reversible after 8 days), iritis = 0.28 (fully reversible after 8 days), conjunctival erythema = 1.72 (not fully reversible after 8 days), conjunctival edema = 1.44 (not fully reversible after 8 days) (rabbit, 72 hours, OECD 405).

### **Respiratory or skin sensitisation**

The substance is classified as skin sensitising in category 1B (mouse, OECD 429).

### **Germ cell mutagenicity**

Based on available data, the classification criteria are not met.

Negative (OECD 476).

### **Carcinogenicity**

Based on available data, the classification criteria are not met.

NOAEL > 2 000 mg/kg/day (read-across (71% geranyl acetate and 29% citronellyl acetate), carcinogenicity, rat, oral, two-generation test).

NOAEL = 1 000 mg/kg/day (read-across (71% geranyl acetate and 29% citronellyl acetate), systemic toxicity, rat, oral, two-generation test).

### **Reproductive toxicity**

Based on available data, the classification criteria are not met.

NOAEL = 300 mg/kg/day (reproductive performance and fertility, dermal, rat, generation P0, OECD 421).

### **STOT – single exposure**

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

Data for the substance are not available.

### **STOT – repeated exposure**

Data for the substance are not available.

### **Aspiration hazard**

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm<sup>2</sup>/s or less at 40 °C.

**(E)-2-Benzylidenoctanal**

CAS: 165184-98-5

### **Acute toxicity**

#### **Oral**

Based on available data, the classification criteria are not met.  
LD<sub>50</sub> = ca. 3 100 mg/kg (rat, male, OECD 401).

#### **Dermal**

Based on available data, the classification criteria are not met.  
LD<sub>50</sub> > 3 000 mg/kg (rabbit, female, OECD 402).

#### **Inhalation**

Based on available data, the classification criteria are not met.  
LC<sub>50</sub> > 5 mg/l (vapour, rat, 4 hrs., no death is observed, OECD 403).

### **Skin corrosion/irritation**

Based on available data, the classification criteria are not met.  
Mean erythema score = 2 and oedema = 1.56 (fully reversible after 11 days, rabbit, 72 hrs., EU method B.4).

### **Serious eye damage/irritation**

Based on available data, the classification criteria are not met.  
Mean score of corneal opacity = 0, iritis = 0, conjunctival redness = 0.33 (fully reversible after 2 days), conjunctival oedema = 0 (rabbit, 72 hrs., EU method B.5).

### **Respiratory or skin sensitisation**

The substance is classified as skin sensitising in category 1 (mouse, OECD 429).

### **Germ cell mutagenicity**

Based on available data, the classification criteria are not met.  
Negative (OECD 471, OECD 476).

### **Carcinogenicity**

Data for the substance are not available.

### **Reproductive toxicity**

Based on available data, the classification criteria are not met.  
NOAEL ≥ 100 mg/kg/day (rat, oral, generation P0, OECD 421).  
NOAEL ≥ 100 mg/kg/day (rat, oral, F1 generation, OECD 421).

### **STOT – single exposure**

Data for the substance are not available.

### **STOT – repeated exposure**

Based on available data, the classification criteria are not met.  
NOAEL ≥ 100 mg/kg/day (rat, oral, OECD 421).  
NOAEL = 125 mg/kg/day (systemic effect, rat, female, dermal, 90 d., OECD 411).

### **Aspiration hazard**

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm<sup>2</sup>/s or less at 40 °C.

Reaction mass of 2,6-Octadien-1-ol, 3,7-dimethyl-, (E) and 2,6-Octadien-1-ol, 3,7-dimethyl-, (Z)- ES: 906-125-5

### Acute toxicity

**Oral** Based on available data, the classification criteria are not met.  
LD<sub>50</sub> = 3 600 mg/kg (geraniol, rat, literature).

**Dermal** Based on available data, the classification criteria are not met.  
LD<sub>50</sub> > 5 000 mg/kg (geraniol, rabbit, literature).

**Inhalation** Data for the substance are not available.

### Skin corrosion/irritation

The substance is classified as skin irritant.

Mean erythema scores = 2, 2.08, 1.92 (not fully reversible after 7 days) and edema = 1.67, 1.25, 1 (not fully reversible after 7 days), primary dermal irritation index PDII = 3.67, 3, 33, 2.92 (max. 8, not fully reversible after 7 days) (geraniol, rabbit, 72 hours, OECD 404).

### Serious eye damage/irritation

The substance is classified as seriously damaging to the eyes (geraniol, rabbit, 72 hrs., OECD 405).

### Respiratory or skin sensitisation

The substance is classified as skin sensitising in category 1 (geraniol, mouse, OECD 429).

### Germ cell mutagenicity

Based on available data, the classification criteria are not met.  
Negative (geraniol, bacterial reverse mutation assay, OECD 476).  
Negative (nerol, OECD 471).

### Carcinogenicity

Data for the substance are not available.

### Reproductive toxicity

Based on available data, the classification criteria are not met.  
NOAEL = 300 mg/kg/day (systemic effects, rat, oral, generation P0, OECD 421).  
NOAEL = 1 000 mg/kg/day (fertility, rat, orally, generation P0, OECD 421).  
NOAEL = 100 mg/kg/day (rat, oral, generation F1, OECD 421).

### STOT – single exposure

Data for the substance are not available.

### STOT – repeated exposure

Based on available data, the classification criteria are not met.  
NOAEL > 550 mg/kg/day (geraniol, rat, oral, literature).

### Aspiration hazard

The substance is not a hydrocarbon or a chlorinated hydrocarbon with a kinematic viscosity of 20.5 mm<sup>2</sup>/s or less at 40 °C.

## 11.2. Information on other hazards

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

Mixture does not contain substance(s) meeting the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in accordance with Annex XIII of REACH regulation. The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet and given in the list (established in accordance with Article 59(1) for having endocrine disrupting properties of REACH regulation.

Mixture does not contain the substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. There is no other relevant information on adverse health effects that is not required according to the classification criteria set out in CLP Regulation.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Mixture

Data for the mixture are not available.

#### Acute aquatic toxicity

The mixture is not classified as acute aquatic toxicity based on calculation according to the summation method.

category 1

$\Sigma < 0.71$

#### Chronic aquatic toxicity

The mixture is not classified as chronic aquatic toxicity based on calculation according to the summation method.

category

1

2

3

4

$\Sigma$

< 0.11

< 1.4

< 17.3

< 3.6011

#### Propan-2-ol

CAS: 67-63-0

The substance is not classified as hazardous for the aquatic environment.

#### Fish

LC<sub>50</sub>, 96 hrs., Pimephales promelas: 9 640 - 10 000 mg/l (mortality, OECD 203)

#### Crustaceans

EC<sub>50</sub>, 24 hrs., Daphnia Magna: > 10 000 mg/l (mobility, OECD 202)

logNOEC, 16 d., Daphnia Magna: 3.37 (growth, NOEC = 2 344 µmol/l = 140.9 mg/l)

#### Algae

Threshold toxicity, 7 d., Scenedesmus quadricauda: 1.800 mg/l

#### Citronellol

CAS: 106-22-9

The substance is not classified as hazardous for the aquatic environment.

#### Fish

LC<sub>50</sub>, 96 hrs., Leuciscus idus: 14.66 mg/l (mortality).

NOEC, 96 hrs., Leuciscus idus: 4.6 mg/l (mortality).

#### Crustaceans

EC<sub>50</sub>, 48 hrs., Daphnia Magna: 17.48 mg/l (mobility).

NOEC, 48 hrs., Daphnia Magna: 3.1 mg/l (mobility).

#### Algae

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

EC <sub>50</sub> , 72 hrs., Scenedesmus subspicatus: 2.4 mg/l (growth rate, OECD 201). EC <sub>20</sub> , 72 hrs., Scenedesmus subspicatus: 1.1 mg/l (growth rate, OECD 201).	
<b>(E)-2-Benzylidenoctanal</b>	CAS: 165184-98-5
The substance is classified as Aquatic Acute 1; H400 (M = 1) and Aquatic Chronic 2; H411.	
<b>Fish</b>	
LC <sub>50</sub> , 96 hrs., Pimephales promelas: ca. 1.7 mg/l (mortality, OECD 203). NOEC, 96 hrs., Pimephales promelas: ca. 0.93 mg/l (mortality, OECD 203).	
<b>Crustaceans</b>	
EC <sub>50</sub> , 48 hrs., Daphnia Magna: 0.36 - 0.59 mg/l (OECD 202). NOEC, 21 d., Daphnia Magna: 63 µg/l (growth and reproduction, OECD 211).	
<b>Algae</b>	
EC <sub>50</sub> , 72 hrs., Desmodesmus subspicatus: > 0.065 mg/l (growth rate, OECD 201). NOEC, 72 hrs., Desmodesmus subspicatus: 0.065 mg/l (biomass, OECD 201).	
<b>Reaction mass of 2,6-Octadien-1-ol, 3,7-dimethyl-, (E) and 2,6-Octadien-1-ol, 3,7-dimethyl-, (Z)-</b>	ES: 906-125-5
The substance is not classified as hazardous for the aquatic environment.	
<b>Fish</b>	
LC <sub>50</sub> , 96 hrs., Danio rerio: ca. 22 mg/l (geraniol, mortality, OECD 203). NOEC, 96 hrs., Danio rerio: 10 mg/l (geraniol, mortality, OECD 203).	
<b>Crustaceans</b>	
EC <sub>50</sub> , 48 hrs., Daphnia Magna: 10.8 mg/l (mobility, OECD 202). NOEC, 48 hrs., Daphnia Magna: 4 mg/l (mobility, OECD 202).	
<b>Algae</b>	
EC <sub>50</sub> , 72 hrs., Desmodesmus subspicatus: 13.1 mg/l (growth rate, OECD 201). EC <sub>10</sub> , 72 hrs., Desmodesmus subspicatus: 3.77 mg/l (growth rate, OECD 201). NOEC, 72 hrs., Desmodesmus subspicatus: 1 mg/l (growth rate, OECD 201).	
<b>12.2. Persistence and degradability</b>	
<b>Mixture</b>	
Data for the mixture are not available.	
<b>Propan-2-ol</b>	CAS: 67-63-0
Readily biodegradable: 53 % after 5 days (CO <sub>2</sub> evolution, OECD 301 B).	
<b>Citronellol</b>	CAS: 106-22-9
Readily biodegradable: 80 - 90 % after 28 days (O <sub>2</sub> consumption, OECD 301 F).	
<b>(E)-2-Benzylidenoctanal</b>	CAS: 165184-98-5
Readily biodegradable: ca. 97 % after 28 days (O <sub>2</sub> consumption, OECD 301 F).	
<b>Reaction mass of 2,6-Octadien-1-ol, 3,7-dimethyl-, (E) and 2,6-Octadien-1-ol, 3,7-dimethyl-, (Z)-</b>	ES: 906-125-5
Readily biodegradable: 90 - 100 % after 3 days (removal of dissolved organic carbon, OECD 301 A).	



# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

### 12.3. Bioaccumulative potential

#### Mixture

Data for the mixture are not available.

#### Propan-2-ol

CAS: 67-63-0

log Pow = 0.05 (25 °C).

#### Citronellol

CAS: 106-22-9

BCF = 82.59 l/kg.

log Pow = 3.41 (25 °C, EU method A.8).

#### (E)-2-Benzylidenoctanal

CAS: 165184-98-5

log Pow = ca. 5.3 (24 °C, OECD 117).

#### Reaction mass of 2,6-Octadien-1-ol, 3,7-dimethyl-, (E) and 2,6-Octadien-1-ol, 3,7-dimethyl-, (Z)-

ES: 906-125-5

log Pow = 2.7 (20 °C, OECD 117).

### 12.4. Mobility in soil

#### Mixture

Data for the mixture are not available.

#### Propan-2-ol

CAS: 67-63-0

Data for the substance are not available.

#### Citronellol

CAS: 106-22-9

Koc = 70.79 (calculation).

#### (E)-2-Benzylidenoctanal

CAS: 165184-98-5

log Koc = 4.2 (25 °C, OECD 121).

#### Reaction mass of 2,6-Octadien-1-ol, 3,7-dimethyl-, (E) and 2,6-Octadien-1-ol, 3,7-dimethyl-, (Z)-

ES: 906-125-5

log Koc = 1.85 (geraniol, calculation).

### 12.5. Results of PBT and vPvB assessment

Mixture does not contain substance(s) meeting the criteria for persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB) in accordance with Annex XIII of REACH Regulation. The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet (established in accordance with Article 59(1) of REACH Regulation.

### 12.6. Endocrine disrupting properties

The mixture and its substances are not mentioned on the Candidate list for possible inclusion in Annex XIV of REACH at the date of the revision of the safety data sheet (established in accordance with Article 59(1) of REACH Regulation. Mixture does not contain the substance(s) identified as having endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

### 12.7. Other adverse effects

Data are not available.

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

##### **Disposal methods of the substance or mixture and the contaminated packaging**

Dispose according to the applicable European and local regulations (eg. in a hazardous waste incinerator). **Do not empty unused product into drainage systems.** Do not contaminate ponds or ditches with the product or used container. Hand over the residual amounts and solutions to a licensed disposal company. Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

##### **Possible waste code**

07 06 01\* - aqueous washing liquids and mother liquors (mixture), 15 01 10\* - packaging containing residues of or contaminated by hazardous substances (contaminated packaging), 15 01 02 - plastic packaging (clear packaging).

##### **Physical/chemical properties that may affect waste treatment options**

Flammability.

##### **Special precautions recommended for waste management**

Not known.

##### **Waste legislation**

Directive 2008/98/EC on waste and repealing certain Directives, as amended.

### SECTION 14: Transport information

#### 14.1. UN number or ID number

UN 1987

#### 14.2. UN proper shipping name

ALCOHOLS, N.O.S. (Propan-2-ol).

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

3

#### 14.4. Packing group

III

#### 14.5. Environmental hazards

It is not dangerous for the environment during transport.

#### 14.6. Special precautions for user

Not given.

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

Not available.

#### 14.8. Other information

##### **Labeling according to ADR**

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green



### Additional data for ADR/RID

Classification code	F1
Labels	3
Hazard identification code	30
Tunnel restriction code	D/E (ADR), - (RID)
Limited quantities	5l
Excepted quantities	Maximum net quantity per inner packaging: 30 ml. Maximum net quantity per outer packaging: 1 000 ml.
Transport category	3

### Additional data for IMDG

Emergency Schedules (EmS)	F-E, S-D.
---------------------------	-----------

## SECTION 15: Regulatory information

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

Regulation No. 1907/2006/EC, concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals, as amended (REACH)

Regulation No. 1272/2008/EC, on Classification, Labelling and Packaging of substances and mixtures, as amended (CLP)

### 15.2. Chemical safety assessment

Has not been carried out for mixture.

## SECTION 16: Other information

### Reason for the revision of the safety data sheet

Change in the composition of the mixture in section 3 and related changes in the other sections.

### Key or legend to abbreviations and acronyms

Acute Tox. 2	Acute toxicity, cat. 2
Acute Tox. 3	Acute toxicity, cat. 3
Acute Tox. 4	Acute toxicity, cat. 4
Asp. Tox. 1	Aspiration hazard, cat. 1
Aquatic Acute 1	Acute aquatic hazard, cat. 1
Aquatic Chronic 1	Chronic aquatic hazard, cat. 1
Aquatic Chronic 2	Chronic aquatic hazard, cat. 2
Aquatic Chronic 3	Chronic aquatic hazard, cat. 3

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

Eye Dam. 1	Serious eye damage, cat. 1
Eye Irrit. 2	Eye irritation, cat. 2
Flam. Liq. 2	Flammable liquid, cat. 2
Flam. Liq. 3	Flammable liquid, cat. 3
Skin Corr. 1C	Skin corrosion, cat. 1C
Skin Irrit. 2	Skin irritation, cat. 2
Skin Sens. 1A	Skin sensitization, cat. 1A
Skin Sens. 1B	Skin sensitization, cat. 1B
Skin Sens. 1	Skin sensitization, cat. 1
STOT RE 2	Specific target organ toxicity - repeated exposure, cat. 2
STOT SE 3	Specific target organ toxicity - single exposure, cat. 3
M	Multiplying factor
ADR	Accord Dangereuses Route
CLP	Regulation No. 1272/2008/EC, on Classification, Labelling and Packaging of substances and mixtures
DNEL	Derived No Effect Level
ICAO/IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
PBT	Persistent, bioaccumulative, toxic substance
PNEC	Predicted No Effect Concentration
REACH	Regulation No. 1907/2006/EC, concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulation concerning the International Carriage of Dangerous Goods by Rail
STOT	Specific target organ toxicity
vPvB	Very persistent and very bioaccumulative substance

### **Sources of key data used to compile the Safety Data Sheet**

European legislation, manufacturer's safety data sheet, registration dossier of substances.

### **List of H- and P- phrases**

EUH071	Corrosive to the respiratory tract.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H310	Fatal in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

# SAFETY DATA SHEET

according to Regulation No. 1907/2006 of the European Parliament and of the Council, as subsequently amended

## KRYSTAL Oil freshener green

H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H336	May cause drowsiness or dizziness.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
P102	Keep out of reach of children.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.
P501	Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

### **Training advice**

According to SDS.

### **Other information**

Classification according to data from the manufacturer. The mixture is classified using calculation methods according to Regulation CLP and tests. Use only for the purposes designated by the manufacturer, will prevent health and environmental risks.

The information in this SDS was obtained from sources, which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

The safety data sheet is created in accordance with Regulation No. 2020/878/EC. There is no additional information in accordance with the local and national legislation of the Member State in the European Union, in the safety data sheet.

The safety data sheet was created by company LACHEPRA s.r.o.