

# SAFETY DATA SHEET

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

Date of issue: 07.08.2018

Product code: -

Version: 1.0

Date of revision: -

Replaced version from: -

Page: 1 z 16

Trade Name: **KRYSTAL oil freshener Black Jack Fragrance**

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

### 1.1 Product identifier

*Trade Name* **KRYSTAL oil freshener Black Jack Fragrance**

*Mixture description* An aqueous solution.

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

*Identified uses* Soft, highly effective liquid product for scent in WC, bathrooms and public areas.

*Uses advised against* Only for identified uses.

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

**CORMEN s.r.o.**

Průmyslová 1420

593 01 Bystřice nad Pernštejnem

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

### 1.4 Emergency telephone number

112 (General emergency phone), 998 (fire brigade), 999 (ambulance service).

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

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

Classification according to 1272/2008/EC **Flam. Liq. 3; H226**  
**Eye Dam. 1; H318**  
**Aquatic Chronic 3; H412**

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

**The most important adverse physicochemical, human health and environmental effects**

Flammable liquid and vapour. Causes serious eye damage. Harmful to aquatic life with long lasting effects.

### 2.2 Label elements

*hazard pictograms*



*signal word*

Danger

*components of the mixture to be placed on the label*

Contains alcohols, C12-14, ethoxylated.

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## *hazard statements*

H226 - Flammable liquid and vapour.

H318 - Causes serious eye damage.

H412 - Harmful to aquatic life with long lasting effects.

## *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.

P273 - Avoid release to the environment.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

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

P310 - Immediately call a POISON CENTER/doctor.

P501 - Dispose of contents/container to in accordance with local regulations.

## *supplemental hazard information*

EUH208 - Contains Reaction mass of 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one, 2-(4-tert-Butylbenzyl)propionaldehyde, Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

Composition:  $\geq 30$  % water, 5 - < 15 % iso-propanol, propylene glycol, < 5% nonionic surfactants, preservative, perfumes, 2-(4-tert-Butylbenzyl)propionaldehyde, Citronellol, Hydroxy-methylpentyl cyclohexenecarboxaldehyde, Linalool, Allyl heptanoate, trans- $\alpha$ -Damascone, 4-tert-Butyldihydrocinnamaldehyde, Damascenone, d-Limonene.

## **2.3 Other hazards**

Mixture or its components are not classified as PBT or vPvB, not the date of issue of the safety data sheet kept on the candidate list for Annex XIV of the REACH Regulation.

## **SECTION 3: Composition/information on ingredients**

### **3.2 Mixtures**

#### **3.2.1 Components of a mixture classified as hazardous**

<b>Chemical identity</b>	<b>CAS Number EC Number Index Number</b>	<b>Registration Number</b>	<b>Content (wt. %)</b>	<b>Classification 1272/2008/EC</b>
Propan-2-ol; Isopropyl alcohol; Isopropanol	67-63-0 200-661-7 603-117-00-0	01-2119457558- 25-XXXX	20 - 30	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336
Alcohols, C12-14, ethoxylated	68439-50-9 not given not given	not yet available	< 5.0	Acute Tox. 4; H302 Eye Dam. 1; H318 Aquatic Chronic 3; H412

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Reaction mass of 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one	54464-57-2 915-730-3 not given	01-2119489989-04-XXXX	< 0.5	Skin Irrit. 2; H315 Skin Sens. 1B; H317 Aquatic Chronic 1; H410 M(Chronic) = 1
1,3,4,6,7,8-hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran; galaxolide; (HHCB)	1222-05-5 214-946-9 603-212-00-7	01-2119488227-29-XXXX	< 0,2	Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M=1 M(Chronic)=1
2-(4-tert-Butylbenzyl)propion aldehyde	80-54-6 201-289-8 not given	01-2119485965-18-XXXX	0.5 - 0.6	Acute Tox. 4; H302 Skin Irrit. 2; H315 Skin Sens. 1B; H317 Repr. 2; H361f Aquatic Chronic 3; H412
Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1)*	55965-84-9 not given 613-167-00-5	not yet available	cca. 0.001	Acute Tox. 3; H301 Acute Tox. 3; H311 Skin Corr. 1B; H314 Skin Sens. 1; H317 Acute Tox. 3; H331 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 M=10 M(Chronic)=10

\*) The substance has specific concentration limits: C ≥ 0.6 %: Skin Corr. 1B; H314, 0.06 % ≤ C < 0.6 %: Skin Irrit. 2; H315, 0.06 % ≤ C < 0.6 %: Eye Irrit. 2; H319, C ≥ 0.0015 %: Skin Sens. 1; H317

## 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. An unconscious person never give anything.

### 4.1 Description of first aid measures

#### **Inhalation**

Break the exposure, transfer the person to the fresh air. In case of persistent nausea, ensure medical advice.

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## ***Skin contact***

Remove contaminated clothing, shoes, and wash 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 help.

## ***Ingestion***

Rinse your mouth and drink afterwards plenty of water. Do not induce vomiting. Do not give milk or alcoholic beverages. Unconscious person never give anything by mouth. Seek medical help.

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

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:

Fragmented water streams (water mist), alcohol resistant foam.

#### ***Extinguishing media which shall not be used for safety reasons***

Solid streams of water may be ineffective.

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

Fire water and the rest of the product must be contained and prevented from being discharged to any waterway, sewer or drain. Collect it separately and dispose of safely in accordance with applicable laws and local regulations.

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

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

Stop further product leak 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 with flooding quantities of water.

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.

### ***6.2 Environmental precautions***



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140.9 mg/l	140.9 mg/l	140.9 mg/l	2251 mg/l	552 mg/kg	552 mg/kg	not given	28 mg/kg	160 mg/kg food
<b>Reaction mass of 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one</b>							CAS: 54464-57-2	
<b>DNEL</b>								
Area of use		Route of exposure		Effect		Exposure time		Value
Workers		Inhalation		Systemic effect		Long term		7.33 mg/m <sup>3</sup>
Workers		Dermal		Systemic effect		Long term		3.6 mg/kg/day
Workers		Dermal		Local effect		Long term		648 µg/cm <sup>2</sup>
General population		Inhalation		Systemic effect		Long term		2.16 mg/m <sup>3</sup>
General population		Dermal		Systemic effect		Long term		2.15 mg/kg/day
General population		Dermal		Local effect		Long term		380 µg/cm <sup>2</sup>
General population		Oral		Systemic effect		Long term		1.25 mg/kg/day
<b>PNEC</b>								
Fresh water	Marine water	Intermittent releases	STP	Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
2.8 µg/l	0.28 µg/l	not given	10 mg/l	3.73 mg/kg	0.75 mg/kg	no effect	2.7 mg/kg	10 mg/kg food
<b>1,3,4,6,7,8-Hexahydro-4,6,6,7,8,8-hexamethylindeno[5,6-c]pyran</b>							CAS: 54464-57-2	
<b>DNEL</b>								
Area of use		Route of exposure		Effect		Exposure time		Value
Workers		Inhalation		Systemic effect		Long term		22 mg/m <sup>3</sup>
Workers		Dermal		Systemic effect		Long term		60 mg/kg/day
General population		Inhalation		Systemic effect		Long term		6.5 mg/m <sup>3</sup>
General population		Dermal		Systemic effect		Long term		36 mg/kg/day
General population		Oral		Systemic effect		Long term		3.8 mg/kg/day
<b>PNEC</b>								
Fresh water	Marine water	Intermittent releases	STP	Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
2.8 µg/l	0.28 µg/l	not given	10 mg/l	3.73 mg/kg	0.75 mg/kg	no effect	2.7 mg/kg	10 mg/kg food
<b>2-(4-tert-Butylbenzyl)propionaldehyde</b>							CAS: 80-54-6	
<b>DNEL</b>								
Area of use		Route of exposure		Effect		Exposure time		Value

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Workers	Inhalation	Systemic effect	Long term	0.44 mg/m <sup>3</sup>
Workers	Dermal	Systemic effect	Long term	1.79 mg/kg/day
Workers	Dermal	Local effect	Long term	410 µg/cm <sup>2</sup>
Workers	Dermal	Local effect	Acute/short term	410 µg/cm <sup>2</sup>
General population	Inhalation	Systemic effect	Long term	0.11 mg/m <sup>3</sup>
General population	Dermal	Systemic effect	Long term	0.89 mg/kg/day
General population	Dermal	Local effect	Long term	410 µg/cm <sup>2</sup>
General population	Dermal	Local effect	Acute/short term	410 µg/cm <sup>2</sup>
General population	Oral	Systemic effect	Long term	0.062 mg/kg/day

## PNEC

Fresh water	Marine water	Intermittent releases	STP	Sediment (freshwater)	Sediment (marine water)	Air	Soil	Hazard for predators
0.004 mg/l	0 mg/l	0.024 mg/l	10 mg/l	0.528 mg/kg	0.053 mg/kg	not given	0,103 mg/kg	not given

## 8.2 Exposure controls

### 8.2.1 Exposure reduction (technical measures)

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.

### 8.2.2 Individual protection measures, such as personal protective equipment

#### Respiratory protection

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

#### Hand protection

Chemically resistant protective gloves. As there are no tests, it is not possible to recommend the glove material for this mixture. The selection of the glove material on consideration of the penetration time, permeability and degradation.

#### Eye/face protection

Protective glasses or face shield.

#### Skin protection

Wear suitable protective clothing and footwear.

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.

### 8.2.3 Environmental exposure reduction

Uncontrolled escape of substance/formulation into environment is to be avoided.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance (at 20 C)

liquid, colorless

#### Odour

characteristic

#### Odour threshold

not determined

#### pH (at 20 C)

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<b>Melting point/freezing point</b>	not determined
<b>Boiling point (range)</b>	82 C
<b>Flash point</b>	< 60 C
<b>Evaporation rate</b>	not determined
<b>Flammability</b>	not determined
<b>Explosive limits</b>	<i>lower</i> (% vol.) 2.0 % vol. <i>upper</i> (% vol.) 12.6 % vol.
<b>Vapour pressure (at 20 C)</b>	43 hPa
<b>Vapour density</b>	not determined
<b>Relative density</b>	0.98 (water = 1)
<b>Solubility in water (at 20 C)</b>	soluble
<b>Solubility in organic solvents:</b>	not determined
<b>Partition coefficient: n-octanol/water</b>	not determined
<b>Auto-ignition temperature</b>	371 C
<b>Decomposition temperature</b>	not determined
<b>Viscosity</b>	not determined
<b>Explosive properties</b>	is not classified as explosive
<b>Oxidising properties</b>	is not classified as an oxidant

## 9.2 Other information

<b>Organic solvents</b>	30.0 %
<b>Water</b>	63.8 %
<b>VOC</b>	30.0 %
<b>Content of non-volatile components</b>	5.0 %

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

The mixture is stable under normal conditions of use.

### 10.2 Chemical stability

Stable under recommended storage conditions.

### 10.3 Possibility of hazardous reactions

Not known.

### 10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Do not expose to heat and direct sunlight.

### 10.5 Incompatible materials

Not given

### 10.6 Hazardous decomposition products

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Burning releases carbon oxides, ammonia, nitrogen oxides, chlorine oxides, chlorine, hydrogen chloride, sulphur oxides, hydrogen sulphide and products of incomplete combustion.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

#### **Acute toxicity**

- *LD<sub>50</sub> oral, rat (mg/kg)*

Data for the mixture are not available

≥ 9 848 - calculation according to the additive formula

5 840 - propan-2-ol

> 5 000 - CAS 54464-57-2

> 4 640 - galaxolide (female)

ca. 1 390 - 2-(4-tert-butylbenzyl)propionaldehyde

ATE = 100 - CAS 55965-84-9

- *LD<sub>50</sub> skin, rat or rabbit (mg/kg)*

Data for the mixture are not available

> 2 000 (estimate, low concentration of substance classified as toxic dermal route of exposure)

16.4 ml/kg - propan-2-ol (12 792 mg/kg at density 0.78 g/cm<sup>3</sup>, rabbit)

> 5 000 - CAS 54464-57-2 (rat)

> 10 000 - galaxolide (rat, female)

> 2 000 - 2-(4-tert-butylbenzyl)propionaldehyde (rat)

ATE = 300 - CAS 55965-84-9

- *LC<sub>50</sub> inhalation, rat (mg/l, 4 h)*

Data for the mixture are not available

> 20 (estimate, low concentration of substance classified as toxic inhalation route of exposure)

> 10 000 ppm - propan-2-ol (vapour, 6 h)

ATE = 0,5 - CAS 55965-84-9 (aerosol)

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

A slight effect, the classification criteria are not fulfilled

not irritant - mean erythema score = 0 and oedema = 0 - propan-2-ol (rabbit, OECD 404)

not irritant - CAS 54464-57-2 (OECD 439)

not irritant - mean erythema score = 1 and oedema = 0.3 - galaxolide (rabbit, OECD 404)

classified as irritant - mean erythema score = 2.0 and edema = 2.6 not reversible after 7 days - 2-(4-tert-butylbenzyl)propionaldehyde (rabbit, OECD 404)

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

Causes severe eye damage.

classified as irritant for the eyes, total score = 1.89 - propan-2-ol (rabbit, 72 hr., OECD 405).

not classified as eye irritant - CAS 54464-57-2 ((Q)SAR method)

not irritating to the eyes, the mean score of corneal opacity = 0, iritis = 0, conjunctival redness = 0, conjunctival edema = 0 - galaxolide (rabbit, 72 hrs., OECD 405).

not irritating to the eyes, the mean score of corneal opacity = 0, iritis = 0, conjunctival redness = 0.7 (fully reversible after 3 days), conjunctival edema = 0 - 2-(4-tert-butylbenzyl)propionaldehyde (rabbit, 72 h., OECD 405).

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

Contains Reaction mass of 1-(1,2,3,4,5,6,7,8-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,4,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one and 1-(1,2,3,5,6,7,8,8a-octahydro-2,3,8,8-tetramethyl-2-naphthyl)ethan-1-one, 2-(4-tert-Butylbenzyl)propionaldehyde, Reaction mass of: 5-chloro-2-methyl-4-isothiazolin-3-one [EC no. 247-500-7] and 2-methyl-2H-isothiazol-3-one [EC no. 220-239-6] (3:1). May produce an allergic reaction.

not skin sensitising - propan-2-ol (guinea pig, OECD 406)

skin sensitising - CAS 54464-57-2 (mouse, OECD 429)

not skin sensitising - galaxolide (guinea pig, maximatization test)

skin sensitising in category 1B - 2-(4-tert-butylbenzyl)propionaldehyde (guinea pig, OECD 406)

## ***Carcinogenicity***

Not containing these substances (or less than the classification limit)

NOAEL = 5000 ppm - propan-2-ol (testicular tumors, rat, male, vapour, OECD 451)

## ***Germ cell mutagenicity***

Not containing these substances (or less than the classification limit)

negative - propan-2-ol (OECD 476, OECD 471)

negative - CAS 54464-57-2 (OECD 471, OECD 473, OECD 476)

negative - galaxolide (OECD 471, OECD 473, OECD 482)

negative - 2-(4-tert-butylbenzyl)propionaldehyde (OECD 471, OECD 473, OECD 476)

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## **Reproductive toxicity**

Not containing these substances (or less than the classification limit)

NOAEL = 853 mg/kg/day - propan-2-ol (rat, OECD 415)

NOAEL = 20 mg/kg/day - galaxolide (oral, rat, female, generation P0, OECD 426)

NOAEL = 20 mg/kg/day - galaxolide (oral, rat, generation F1, OECD 426)

NOAEL = 25 mg/kg/day - 2-(4-tert-butylbenzyl)propionaldehyde (oral, rat, male, OECD 408)

LOAEL = 50 mg/kg/day - 2-(4-tert-butylbenzyl)propionaldehyde (spermatocorcle and testicular atrophy, oral, rat, male, OECD 408)

## **Specific target organ toxicity – single exposure**

Not classified

## **Specific target organ toxicity – repeated exposure**

Not classified

toxic effect at a concentration greater than 5 000 ppm - propan-2-ol (rat, vapour, kidney, 98 d, OECD 413)

NOAEL - 150 mg/kg - CAS 54464-57-2 (oral, rat, 28 d, OECD 407)

NOAEL = 150 mg/kg/day - galaxolide (oral, rat, 90 d, OECD 408)

NOEL = 5 mg/kg/day - 2-(4-tert-butylbenzyl)propionaldehyde (plasma cholinesterase, oral, 90 days, OECD 408)

NOAEL = 25 mg/kg/day - 2-(4-tert-butylbenzyl)propionaldehyde (systemic toxicity, rat, oral, 90 days, OECD 408)

NOAEL = 1000 mg/kg/day - 2-(4-tert-butylbenzyl)propionaldehyde (systemic toxicity, rat dermal)

## **Aspiration hazard**

Not classified

## **Other information**

See section 2 and 4.

## **SECTION 12: Ecological information**

### **12.1 Toxicity**

#### **Fish**

Data for the mixture are not available

LC<sub>50</sub>, 96 hrs., Pimephales promelas: 9 640 mg/l - propan-2-ol

LC<sub>50</sub>, 96 hrs., Lepomis macrochirus: 1.3 mg/l - CAS 54464-57-2

NOEC, 30 d., Danio rerio: 0.16 mg/l - CAS 54464-57-2

LC<sub>50</sub>, 96 hrs., Oryzias latipes): 0.95 mg/l - galaxolide

NOEC, 36 d., Pimephales promelas: 0.068 mg/l - galaxolide

LC<sub>50</sub>, 96 hrs., Danio rerio: 2.04 mg/l - 2-(4-tert-butylbenzyl)propionaldehyde

NOEC, 21 d., Oncorhynchus mykiss: > 200 µg/l - 2-(4-tert-butylbenzyl)propionaldehyde

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**Daphnia** Data for the mixture are not available  
EC<sub>50</sub>, 48 hrs., Daphnia Magna: > 10 000 mg/l - propan-2-ol  
logNOEC, 16 d., Daphnia Magna: 3.37 - propan-2-ol  
EC<sub>50</sub>, 48 hrs., Daphnia Magna: 1.38 mg/l - CAS 54464-57-2  
NOEC, 21 d., Daphnia Magna: 0.028 mg/l - CAS 54464-57-2  
EC<sub>50</sub>, 48 hrs., Daphnia Magna: 0.3 mg/l - galaxolide  
NOEC, 21 d., Daphnia Magna: 111 µg/l - galaxolide  
EC<sub>50</sub>, 48 hrs., Daphnia Magna: 10.7 mg/l - 2-(4-tert-butylbenzyl)propionaldehyde

**Algae** Data for the mixture are not available  
threshold toxicity, 7 d., Scenedesmus quadricauda: 1 800 mg/l - propan-2-ol  
EC<sub>50</sub>, 72 hrs., Desmodesmus subspicatus: > 2.6 mg/l - CAS 54464-57-2  
NOEC, 72 hrs., Desmodesmus subspicatus: ≥ 2.6 mg/l - CAS 54464-57-2  
EC<sub>50</sub>, 72 hrs., Pseudokirchneriella subcapitata: 0.201 mg/l - galaxolide (growth rate)  
EC<sub>50</sub>, 72 hrs., Pseudokirchneriella subcapitata: 0.723 mg/l - galaxolide (biomass)

## 12.2 Persistence and degradability

Data for the mixture are not available  
readily biodegradable: 53 % after 5 days - propan-2-ol (EU method C.5 and C.6)  
BOD<sub>5</sub> / COD ≥ 0.5 - propan-2-ol  
BOD - Biological Oxygen Demand  
COD - Chemical Oxygen Demand  
not readily biodegradable: 0 % after 28 days - CAS 54464-57-2 (O<sub>2</sub> consumption, OECD 301 C)  
not readily biodegradable: 11 % after 28 days - CAS 54464-57-2 (test substance, OECD 301 C)  
not readily biodegradable: ca. 2 % after 28 days - galaxolide (CO<sub>2</sub> evolution, OECD 301 B)  
readily biodegradable: 80.7% after 28 days - 2-(4-tert-butylbenzyl)propionaldehyde (CO<sub>2</sub> evolution, OECD 301 B)

## 12.3 Bioaccumulative potential

Data for the mixture are not available  
log Pow = 0.05 - propan-2-ol (25 °C)  
BCF = 600 - CAS 54464-57-2  
log Pow = 5.65 - CAS 54464-57-2  
BCF = 498 - 2 507 - galaxolide  
BCF = 274.3 l/kg - 2-(4-tert-butylbenzyl)propionaldehyde  
log Pow = 4.2 - 2-(4-tert-butylbenzyl)propionaldehyde (24 °C)

## 12.4 Mobility in soil

Data for the mixture are not available  
log K<sub>oc</sub> = 4.12 - CAS 54464-57-2  
log K<sub>oc</sub> = 4,87 - galaxolide (OECD 106)

## 12.5 Results of PBT and vPvB assessment

Mixture or its components are not classified as a PBT or a vPvB.

## 12.6 Other adverse effects

no data available

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## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

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

Delete according to the applicable European and local regulations (eg. in a hazardous waste incinerator). Never remove flushing into sewer! Do not contaminate ponds or ditches with chemical or used container. Residual amounts and solutions to a licensed disposal company.

For classifying the waste and the removal of waste producer responsibility.

Possible waste code 07 06 01\* - aqueous washing liquids and mother liquors (mixture), 15 01 10\* - packaging containing residues of or contaminated by dangerous 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**

None known.

#### **Waste legislation**

Directive 2008/98/EC

## SECTION 14: Transport information

### 14.1 UN number

1993

### 14.2 UN proper shipping name

- ADR/RID/IMDG/IATA

FLAMMABLE LIQUID, 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 Transport in bulk according to Annex II of Marpol and the IBC Code

not available

### Marking according to ADR



### ADR/RID

- classification code

F1

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- labels	3
- hazard identification code	30 or -
- tunnel restriction code	D/E or E (ADR), - (RID)
- limited quantities	5 l
- excepted quantities	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1 000 ml
- transport category	3

## IMDG

- Emergency Schedules (EmS)	F-E/S-E
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## SECTION 15: Regulatory information

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

Regulation No. 1907/2006/ES, REACH.

Regulation No. 1272/2008/ES, CLP.

### 15.2 Chemical safety assessment

No data available.

## SECTION 16: Other information

### Reason for alteration

First edition.

### Key or legend to abbreviations and acronyms used in the safety data sheet

Acute Tox. 3	Acute toxicity, cat. 3
Acute Tox. 4	Acute toxicity, cat. 4
Aquatic Acute 1	Hazardous to the aquatic environment, acute, cat. 1
Aquatic Chronic 1	Hazardous to the aquatic environment, chronic, cat. 1
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic, cat. 3
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
Repr. 2	Reproductive toxicity, cat. 2
Skin Corr. 1B	Skin corrosion, cat. 1B
Skin Irrit. 2	Skin irritation, cat. 2
Skin Sens. 1	Skin sensitization, cat. 1
Skin Sens. 1B	Skin sensitization, cat. 1B
STOT SE 3	Specific target organ toxicity after single exposure, cat. 3
M	Multiplying factor

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PBT	Persistent, bioaccumulative, toxic chemical
vPvB	Very persistent and very bioaccumulative chemical
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
CLP	regulation No. 1272/2008/EC
REACH	regulation No. 1907/2006/EC
ADR	Accord Dangereuses Route
RID	Regulation concerning the International Carriage of Dangerous Goods by Rail
IMDG	International Maritime Dangerous Goods
ICAO/IATA	International Air Transport Association
VOC	volatile organic compound

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

European legislation, chemical databases and tables, tests, registration dossier of compounds.

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

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H301	Toxic if swallowed.
H302	Harmful if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H336	May cause drowsiness or dizziness.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life.
H410	Very 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.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P501	Dispose of contents/container to in accordance with local national regulation.

### **Training advice**

According to MSDS.

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### ***Relevant information for classification***

According to additional method of CLP. Classification according to data from the manufacturer. The mixture does not have a harmonized classification in the EU. Use only for the purposes designated by the manufacturer, will prevent health and environmental risks.

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