

# SAFETY DATA SHEET

**Fragrance 49359354**

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

### 1.1 Product identifier

**Product code** : Fragrance 49359354**Product name** : WHITE FLOWERS

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

Fragrance. Restricted to professional users. Industrial use only.

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

**Supplier's details** : drom fragrances GmbH & Co. KG  
Oberdiller Straße 18  
tel. +49 89 74425-0  
fax. +49 89 7934966  
D-82065 Baierbrunn**e-mail address of person responsible for this SDS** : safety@drom.com

### 1.4 Emergency telephone number

#### National advisory body/Poison Center

**Telephone number** : www.rshm.gov.tr

#### Supplier

**Emergency telephone number (with hours of operation)** : +49 89 74425 288  
9h - 17h (Mo - Fr)

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Skin Irrit. 2, H315

Eye Irrit. 2, H319

Skin Sens. 1, H317

Aquatic Chronic 2, H411

#### Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : R43  
R52/53**Human health hazards** : May cause sensitization by skin contact.**Environmental hazards** : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See Section 16 for the full text of the R phrases or H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

### 2.2 Label elements

**Hazard pictograms** :

## Fragrance 49359354

### SECTION 2: Hazards identification

<b>Signal word</b>	: Warning
<b>Hazard statements</b>	: H319 - Causes serious eye irritation. H315 - Causes skin irritation. H317 - May cause an allergic skin reaction. H411 - Toxic to aquatic life with long lasting effects.
<b><u>Precautionary statements</u></b>	
<b>Prevention</b>	: P280 - Wear protective gloves. Wear eye or face protection. P273 - Avoid release to the environment.
<b>Response</b>	: P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>Storage</b>	: Not applicable.
<b>Disposal</b>	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
<b>Hazardous ingredients</b>	: 2,6-dimethyloct-7-en-2-ol $\alpha$ -methyl-1,3-benzodioxole-5-propionaldehyde 3-p-cumenyl-2-methylpropionaldehyde geraniol 3-methyl-4-(2,6,6-trimethyl-2-cyclohexen-1-yl)-3-buten-2-one 2,4-dimethylcyclohex-3-ene-1-carbaldehyde 2-(4-tert-butylbenzyl)propionaldehyde 7-hydroxycitronellal 4-(4-hydroxy-4-methylpentyl)cyclohex-3-enecarbaldehyde eugenol nerol citronellol 3-(4-tert-butylphenyl)propionaldehyde piperonal
<b>Supplemental label elements</b>	: Not applicable.

#### 2.3 Other hazards

<b>Other hazards which do not result in classification</b>	: None known.
--	---------------

### SECTION 3: Composition/information on ingredients

<b>3.1 Substances</b>	: Not applicable.
-----------------------	-------------------

<b>3.2 Mixtures</b>	: Mixture
---------------------	-----------

Product/ingredient name	Identifiers	%	<b><u>Classification</u></b>		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
2,6-dimethyloct-7-en-2-ol	REACH #: 01-2119457274-37 EC: 242-362-4 CAS: 18479-58-8	12.50	Xi; R38	Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1]
benzyl acetate	REACH #: 01-2119638272-42 EC: 205-399-7 CAS: 140-11-4	5.00	Not classified.	Aquatic Chronic 3, H412	[1]
2-phenylethanol	REACH #: 01-2119963921-31 EC: 200-456-2 CAS: 60-12-8	2.55	Xn; R22 Xi; R36	Acute Tox. 4, H302 Eye Irrit. 2, H319	[1]
linalyl acetate	REACH #: 01-2119454789-19	2.50	Xi; R38	Skin Irrit. 2, H315	[1]

## Fragrance 49359354

## SECTION 3: Composition/information on ingredients

	EC: 204-116-4 CAS: 115-95-7			Eye Irrit. 2, H319	
$\alpha$ -methyl-1,3-benzodioxole-5-propionaldehyde	EC: 214-881-6 CAS: 1205-17-0	1.50	R43 N; R51/53	Skin Sens. 1B, H317 Aquatic Chronic 2, H411	[1]
(Z)-3-hexenyl salicylate	EC: 265-745-8 CAS: 65405-77-8	1.50	N; R50	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
2-(4-tert-butylbenzyl) propionaldehyde	REACH #: 01-2119485965-18 EC: 201-289-8 CAS: 80-54-6	0.50	Repr. Cat. 3; R62  Xn; R22 Xi; R38 R43 N; R51/53	Acute Tox. 4, H302  Skin Irrit. 2, H315 Skin Sens. 1B, H317 Repr. 2, H361f (Fertility) Aquatic Chronic 2, H411	[1]
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	REACH #: 01-2119529224-45 EC: 248-908-8 CAS: 28219-61-6	0.50	Xi; R36  N; R50/53	Eye Irrit. 2, H319  Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]
Oxacyclohexadecen-2-one	REACH #: 01-0000016883-62 EC: 422-320-3 CAS: 34902-57-3 CAS: 111879-80-2 Index: 606-092-00-4	0.50	N; R50/53	Aquatic Acute 1, H400  Aquatic Chronic 1, H410	[1]
4-methyl-3-decen-5-ol	REACH #: 01-2119983528-21 EC: 279-815-0 CAS: 81782-77-6	0.30	N; R50/53	Aquatic Acute 1, H400	[1]
3-(4-tert-butylphenyl) propionaldehyde	REACH #: 01-2119983533-30 EC: 242-016-2 CAS: 18127-01-0	0.30	Repr. Cat. 3; R62  Xi; R38 R43 N; R51/53	Skin Irrit. 2, H315  Skin Sens. 1B, H317 Repr. 2, H361f (Fertility) STOT RE 2, H373 (oral)	[1]
2,6-di-tert-butyl-p-cresol	REACH #: 01-2119555270-46 EC: 204-881-4 CAS: 128-37-0	0.10	N; R50/53  <b>See Section 16 for the full text of the R-phrases declared above.</b>	Aquatic Acute 1, H400  Aquatic Chronic 1, H410  <b>See Section 16 for the full text of the H statements declared above.</b>	[1] [2]

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII

[4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

[5] Substance of equivalent concern

Occupational exposure limits, if available, are listed in Section 8.

**Hydrocarbon. (Content)** : 0%

## Fragrance 49359354

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

##### Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.
- Ingestion** : Irritating to mouth, throat and stomach.
- Over-exposure signs/symptoms** : Not available.

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

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

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

## Fragrance 49359354

### SECTION 5: Firefighting measures

- Hazards from the substance or mixture** : In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide

#### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

### SECTION 6: Accidental release measures

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

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

#### 6.2 Environmental precautions

- : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

#### 6.3 Methods and materials for containment and cleaning up

- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

#### 6.4 Reference to other sections

- : See Section 1 for emergency contact information.  
See Section 8 for information on appropriate personal protective equipment.  
See Section 13 for additional waste treatment information.

## Fragrance 49359354

### SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapor or mist. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

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

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

#### Seveso II Directive - Reporting thresholds (in tonnes)

##### Danger criteria

Category	Notification and MAPP threshold	Safety report threshold
E2: Hazardous to the aquatic environment - Chronic 2	200	500

#### 7.3 Specific end use(s)

- Recommendations** : Industrial use only.

### SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

#### 8.1 Control parameters

##### Occupational exposure limits

Product/ingredient name	Exposure limit values
2,6-di-tert-butyl-p-cresol	NIOSH REL (United States, 10/2013). TWA: 10 mg/m <sup>3</sup> 10 hours.

##### DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
2,6-dimethyloct-7-en-2-ol	DNEL	Long term Inhalation	73.5 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	20.8 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	21.7 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Dermal	12.5 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	12.5 mg/	Consumers	Systemic

## Fragrance 49359354

## SECTION 8: Exposure controls/personal protection

benzyl acetate	DNEL	Long term Inhalation	21.9 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Inhalation	43.8 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	6.25 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	12.5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	5.5 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Short term Inhalation	11 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Dermal	3.125 mg/kg bw/day	Consumers	Systemic
	DNEL	Short term Dermal	6.25 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	3.125 mg/kg bw/day	Consumers	Systemic
	DNEL	Short term Oral	6.25 mg/kg bw/day	Consumers	Systemic
2-phenylethanol	DNEL	Long term Inhalation	59.9 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	21.2 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	17.7 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Dermal	12.7 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	5.1 mg/kg bw/day	Consumers	Systemic
linalyl acetate	DNEL	Long term Inhalation	2.75 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	2.5 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	8 mg/cm <sup>2</sup>	Workers	Local
	DNEL	Long term Inhalation	0.68 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Oral	0.2 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Dermal	1.25 mg/kg bw/day	Consumers	Systemic
	DNEL	Short term Dermal	8 mg/m <sup>3</sup>	Consumers	Local



## Fragrance 49359354

## SECTION 8: Exposure controls/personal protection

2-(4-tert-butylbenzyl) propionaldehyde	DNEL	Long term Dermal	8 mg/cm <sup>2</sup>	Workers	Local
	DNEL	Long term Dermal	8 mg/cm <sup>2</sup>	Consumers	Local
	DNEL	Long term Inhalation	0.44 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Dermal	0.41 mg/cm <sup>2</sup>	Workers	Local
	DNEL	Long term Dermal	2.075 mg/kg	Workers	Systemic
	DNEL	Long term Inhalation	0.11 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Oral	0.0625 mg/kg	Consumers	Systemic
	DNEL	Long term Dermal	1.0375 mg/kg	Consumers	Systemic
	DNEL	Short term Dermal	0.41 mg/cm <sup>2</sup>	Consumers	Local
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	DNEL	Short term Oral	3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Oral	0.5 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	6 mg/kg	Workers	Systemic
	DNEL	Long term Dermal	1.4 mg/kg bw/day	Workers	-
	DNEL	Short term Inhalation	7 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	7 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	58 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	1.74 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Dermal	8.3 mg/kg bw/day	Workers	Systemic
2,6-di-tert-butyl-p-cresol	DNEL	Long term Dermal	5 mg/kg bw/day	Consumers	Systemic

## PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
2,6-dimethyloct-7-en-2-ol	Fresh water	0.278 mg/l	-
	Marine water	0.278 mg/l	-
	Soil	0.103 mg/kg	-
	Fresh water sediment	0.594 mg/kg	-
	Marine water sediment	0.0594 mg/kg	-



## Fragrance 49359354

## SECTION 8: Exposure controls/personal protection

benzyl acetate	Fresh water	0.004 mg/l	-
	Marine water	0.0004 mg/l	-
	Intermittent release	0.04 mg/l	-
	Sewage Treatment Plant	8.55 mg/l	-
	Fresh water sediment	0.114 mg/kg	-
	Marine water sediment	0.0114 mg/kg	-
	Soil	0.0205 mg/kg	-
2-phenylethanol	Fresh water	0.215 mg/l	-
	Marine water	0.0215 mg/l	-
	Intermittent release	2.15 mg/l	-
	Sewage Treatment Plant	10 mg/l	-
	Fresh water sediment	1.454 mg/kg	-
	Marine water sediment	0.1454 mg/kg	-
	Soil	0.164 mg/kg	-
linalyl acetate	Fresh water	0.011 mg/l	-
	Marine water	0.0011 mg/l	-
	Marine water sediment	0.0609 mg/kg	-
	Soil	0.115 mg/kg	-
	Sewage Treatment Plant	10 mg/l	-
	Intermittent release	0.11 mg/l	-
	Fresh water sediment	0.609 mg/kg	-
2-(4-tert-butylbenzyl)propionaldehyde	Fresh water	0.00204 mg/l	-
	Marine water	0.0002 mg/l	-
	Fresh water sediment	0.269 mg/kg	-
	Marine water sediment	0.0269 mg/kg	-
	Soil	0.0525 mg/kg	-
	Sewage Treatment Plant	10 mg/l	-
	Intermittent release	0.11 mg/l	-
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	Fresh water	0.63 µg/l	-
	Marine water	0.063 µg/l	-
	Fresh water sediment	0.04379 mg/kg dwt	-
	Marine water sediment	0.004379 mg/kg	-

## Fragrance 49359354

**SECTION 8: Exposure controls/personal protection**

2,6-di-tert-butyl-p-cresol		wwt	
	Soil	0.00839 mg/kg	-
	Soil	1.04 mg/kg wwt	Equilibrium Partitioning
	Sewage Treatment Plant	100 mg/l	Assessment Factors
	Sediment	1.29 mg/kg wwt	Equilibrium Partitioning
	Secondary Poisoning	16.7 mg/kg	Assessment Factors
	Marine water	0.4 µg/l	Assessment Factors
	Fresh water	4 µg/l	Assessment Factors

**8.2 Exposure controls**

**Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

**Individual protection measures**

**Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Skin protection**

**Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

**Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

**Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

**Fragrance 49359354****SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****Appearance**

Physical state	: Liquid.	
Color	: Characteristic.	
Odor	: Characteristic.	
Odor threshold	: Not available.	
pH	: Not available.	
Melting point/freezing point	: Not available.	
Initial boiling point and boiling range	: Not available.	
Flash point	: Closed cup: 95°C	
Evaporation rate	: Not available.	
Upper/lower flammability or explosive limits	: Not available.	
Vapor pressure	: 0.08 hPa	
Vapor density	: Not available.	
Density	: 0.979 to 0.989 g/cm <sup>3</sup> [20°C]	
Solubility in water	: Non water-soluble liquid	
Partition coefficient: n-octanol/ water	: Not available.	
Auto-ignition temperature	: Not available.	
Decomposition temperature	: Not available.	
Viscosity	: Kinematic (40°C): <0.07 cm <sup>2</sup> /s	(Estimated.)
Explosive properties	: Not available.	
Oxidizing properties	: Not available.	

**9.2 Other information**

No additional information.

**SECTION 10: Stability and reactivity**

10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	: The product is stable.
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: No specific data.
10.5 Incompatible materials	: No specific data.
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Fragrance 49359354

**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity**

Product/ingredient name	Result	Species	Dose	Exposure
2,6-dimethyloct-7-en-2-ol	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	3600 mg/kg	-
benzyl acetate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	2490 mg/kg	-
2-phenylethanol	LD50 Dermal	Rabbit	2535 mg/kg	-
	LD50 Oral	Rat	1609 mg/kg	-
linalyl acetate	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	13934 mg/kg	-
α-methyl-1,3-benzodioxole-5-propionaldehyde	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	3600 mg/kg	-
(Z)-3-hexenyl salicylate	LD50 Dermal	Rabbit	>5 g/kg	-
2-(4-tert-butylbenzyl)propionaldehyde	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	1390 mg/kg	-
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	LD50 Dermal	Rabbit	4600 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
Oxacyclohexadecen-2-one	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
4-methyl-3-decen-5-ol	LD50 Oral	Rat	8000 mg/kg	-
3-(4-tert-butylphenyl)propionaldehyde	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	2700 mg/kg	-
2,6-di-tert-butyl-p-cresol	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	>5000 mg/kg	-

**Acute toxicity estimates**

Route	ATE value
Oral	63073.3 mg/kg
Dermal	790000 mg/kg

**Irritation/Corrosion**

## Fragrance 49359354

**SECTION 11: Toxicological information**

Product/ingredient name	Result	Species	Score	Exposure	Observation
2,6-dimethyloct-7-en-2-ol	Eyes - Mild irritant	Rabbit	-	7.5 Percent	-
	Skin - Mild irritant	Rabbit	-	4 hours 0.5 Milliliters	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-
2-phenylethanol	Eyes - Mild irritant	Rabbit	-	10 minutes 12 Grams	-
	Eyes - Severe irritant	Rabbit	-	24 hours 750 Micrograms	-
linalyl acetate	Skin - Moderate irritant	Guinea pig	-	24 hours 100 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 100 milligrams	-
2-(4-tert-butylbenzyl) propionaldehyde	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams	-

**Sensitization**

Product/ingredient name	Route of exposure	Species	Result
2-(4-tert-butylbenzyl) propionaldehyde	skin	Mouse	Sensitizing
	skin	Human	Sensitizing

**Mutagenicity**

Product/ingredient name	Test	Experiment	Result
2,6-di-tert-butyl-p-cresol	-	Experiment: In vitro Subject: Bacteria	Negative
	-	Experiment: In vitro Subject: Mammalian-Animal	Negative
	-	Experiment: In vivo Subject: Mammalian-Animal	Negative

**Reproductive toxicity**

Product/ingredient name	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
2-(4-tert-butylbenzyl) propionaldehyde	-	Positive	-	Dog - Male	Oral	-
2,6-di-tert-butyl-p-cresol	Negative	-	-	Rat - Male, Female	Oral: 100 mg/kg	-

**Specific target organ toxicity (repeated exposure)**

Product/ingredient name	Category	Route of exposure	Target organs
3-(4-tert-butylphenyl)propionaldehyde	Category 2	Oral	Not determined

**Potential acute health effects**

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation. May cause an allergic skin reaction.

## Fragrance 49359354

### SECTION 11: Toxicological information

**Ingestion** : Irritating to mouth, throat and stomach.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Eye contact** : Adverse symptoms may include the following:  
pain or irritation  
watering  
redness

**Inhalation** : No specific data.

**Skin contact** : Adverse symptoms may include the following:  
irritation  
redness

**Ingestion** : No specific data.

#### Delayed and immediate effects and also chronic effects from short and long term exposure

##### Short term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

##### Long term exposure

**Potential immediate effects** : Not available.

**Potential delayed effects** : Not available.

##### Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
2,6-di-tert-butyl-p-cresol	Chronic NOAEL Oral	Rat	25 mg/kg	28 days; 7 days per week

**General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

**Carcinogenicity** : No known significant effects or critical hazards.

**Mutagenicity** : No known significant effects or critical hazards.

**Teratogenicity** : No known significant effects or critical hazards.

**Developmental effects** : No known significant effects or critical hazards.

**Fertility effects** : No known significant effects or critical hazards.

**Interactive effects** : Not available.

##### Toxicokinetics

**Absorption** : Not available.

**Distribution** : Not available.

**Metabolism** : Not available.

**Elimination** : Not available.

**Other information** : Not available.

### SECTION 12: Ecological information

#### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
2,6-dimethyloct-7-en-2-ol	Acute EC50 3.88 mg/l	Algae	96 hours
	Acute LC50 5.7 mg/l	Daphnia	48 hours
	Acute LC50 4.81 mg/l	Fish	96 hours
benzyl acetate	Acute EC50 17 mg/l	Daphnia	48 hours
	Acute EC50 855 mg/l	Micro-organism	3 hours

## Fragrance 49359354

## SECTION 12: Ecological information

2-phenylethanol	Acute IC50 114 mg/l	Algae	72 hours
	Acute LC50 4000 µg/l Fresh water	Fish - Oryzias latipes - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 52 mg/l	Algae	72 hours
	Acute EC50 287 mg/l	Daphnia	48 hours
	Acute LC50 460 mg/l	Fish	96 hours
linalyl acetate	Acute EC50 15 mg/l	Daphnia	48 hours
	Acute LC50 11 mg/l	Fish	96 hours
	Chronic NOEC 9.6 mg/l	Algae	72 hours
α-methyl-1,3-benzodioxole-5-propionaldehyde	Acute EC50 8.3 mg/l	Daphnia	48 hours
(Z)-3-hexenyl salicylate	Acute EC50 0.61 mg/l	Algae	72 hours
2-(4-tert-butylbenzyl) propionaldehyde	Acute EC50 29.16 mg/l	Algae - Scenedesmus subspicatus	72 hours
	Acute EC50 10.7 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 2.04 mg/l	Fish - Brachydanio rerio	96 hours
	Acute EC50 0.6 mg/l	Algae	96 hours
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	Acute EC50 0.79 mg/l	Daphnia	48 hours
	Acute LC50 0.78 mg/l	Fish	96 hours
	Acute EC50 >0.96 mg/l	Daphnia	48 hours
Oxacyclohexadecen-2-one	Acute LC50 >0.8 mg/l	Fish	96 hours
	Acute EC50 0.4 mg/l	Daphnia	48 hours
4-methyl-3-decen-5-ol	Acute LC50 3 mg/l	Fish	96 hours
	Acute EC50 6.3 mg/l	Daphnia	48 hours
3-(4-tert-butylphenyl) propionaldehyde	Acute EC50 0.61 mg/l	Daphnia	48 hours
2,6-di-tert-butyl-p-cresol	Acute EC50 >10000 mg/l	Micro-organism	3 hours

## 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
2,6-dimethyloct-7-en-2-ol	OECD 301B Ready Biodegradability - CO <sub>2</sub> Evolution Test	72 % - Readily - 28 days	-	-
benzyl acetate	OECD 301B Ready Biodegradability - CO <sub>2</sub> Evolution	92 % - Readily - 28 days	-	-



## Fragrance 49359354

## SECTION 12: Ecological information

	Test			
2-phenylethanol	OECD 301B Ready Biodegradability - CO <sub>2</sub> Evolution Test	79 % - Readily - 28 days	-	-
linalyl acetate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	75 % - Readily - 28 days	-	-
$\alpha$ -methyl-1,3-benzodioxole-5 -propionaldehyde	OECD 301B Ready Biodegradability - CO <sub>2</sub> Evolution Test	29 % - Not readily - 28 days	-	-
(Z)-3-hexenyl salicylate	OECD 301F Ready Biodegradability - Manometric Respirometry Test	89 % - Readily - 28 days	-	-
2-(4-tert-butylbenzyl) propionaldehyde	OECD 301F Ready Biodegradability - Manometric Respirometry Test	84 % - Readily - 28 days	-	Activated sludge
2-ethyl-4-(2,2,3-trimethyl- 3-cyclopenten-1-yl)-2-buten- 1-ol	OECD 301D Ready Biodegradability - Closed Bottle Test	5 % - Not readily - 28 days	-	-
Oxacyclohexadecen-2-one	OECD 301F Ready Biodegradability - Manometric Respirometry Test	97 % - Readily - 28 days	-	-
4-methyl-3-decen-5-ol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	73 % - Readily - 28 days	-	-
3-(4-tert-butylphenyl) propionaldehyde	OECD 301F Ready Biodegradability - Manometric Respirometry Test	65 % - Readily - 28 days	-	-

## Fragrance 49359354

## SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
2,6-dimethyloct-7-en-2-ol	-	-	Readily
benzyl acetate	-	-	Readily
2-phenylethanol	-	-	Readily
linalyl acetate	-	-	Readily
$\alpha$ -methyl-1,3-benzodioxole-5-propionaldehyde	-	-	Not readily
(Z)-3-hexenyl salicylate	-	-	Readily
2-(4-tert-butylbenzyl) propionaldehyde	-	-	Readily
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	-	-	Not readily
Oxacyclohexadecen-2-one	-	-	Readily
4-methyl-3-decen-5-ol	-	-	Readily
3-(4-tert-butylphenyl) propionaldehyde	-	-	Readily
2,6-di-tert-butyl-p-cresol	-	-	Not readily

## 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
2,6-dimethyloct-7-en-2-ol	3.25	64.8	low
benzyl acetate	1.49	8	low
2-phenylethanol	1.36	-	low
linalyl acetate	3.9	173.9	low
$\alpha$ -methyl-1,3-benzodioxole-5-propionaldehyde	1.368	-	low
(Z)-3-hexenyl salicylate	4.8	-	high
2-(4-tert-butylbenzyl) propionaldehyde	4.2	349.8	low
2-ethyl-4-(2,2,3-trimethyl-3-cyclopenten-1-yl)-2-buten-1-ol	4.3	667	high
Oxacyclohexadecen-2-one	5.45	-	high
4-methyl-3-decen-5-ol	3.9	-	low
3-(4-tert-butylphenyl) propionaldehyde	3.2	-	low
2,6-di-tert-butyl-p-cresol	4.17	330 to 1800	high

## 12.4 Mobility in soil

## Fragrance 49359354

**SECTION 12: Ecological information**

**Soil/water partition coefficient ( $K_{oc}$ )** : Not available.

**Mobility** : Not available.

**12.5 Results of PBT and vPvB assessment**

**PBT** : Not applicable.

**vPvB** : Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

**SECTION 13: Disposal considerations**

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

**13.1 Waste treatment methods****Product**

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : The classification of the product may meet the criteria for a hazardous waste.

**European waste catalogue (EWC)**




Waste code	Waste designation
16 03 05*	organic wastes containing dangerous substances

**Packaging**

**Methods of disposal** : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

**SECTION 14: Transport information**

	ADR/RID	IMDG	IATA
<b>14.1 UN number</b>	UN3082	UN3082	UN3082
<b>14.2 UN proper shipping name</b>	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( $\alpha$ -methyl-1,3-benzodioxole-5-propionaldehyde, (Z)-3-hexenyl salicylate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( $\alpha$ -methyl-1,3-benzodioxole-5-propionaldehyde, (Z)-3-hexenyl salicylate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. ( $\alpha$ -methyl-1,3-benzodioxole-5-propionaldehyde, (Z)-3-hexenyl salicylate)
<b>14.3 Transport hazard class(es)</b>	9 	9 	9 
<b>14.4 Packing group</b>	III	III	III

## Fragrance 49359354

**SECTION 14: Transport information**

<b>14.5 Environmental hazards</b>	Yes.	Marine pollutant	Yes.
<b>Additional information</b>	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.  <b>Tunnel code</b> (E)	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

**14.6 Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not applicable.

**SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**  
[EU Regulation \(EC\) No. 1907/2006 \(REACH\)](#)

[Annex XIV - List of substances subject to authorization](#)

**Annex XIV**

None of the components are listed.

**Substances of very high concern**

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
2-(4-tert-butylbenzyl) propionaldehyde	-	-	-	Repr. 2, H361f (Fertility)
3-(4-tert-butylphenyl) propionaldehyde	-	-	-	Repr. 2, H361f (Fertility)

**Registration status**

**All components are listed** : Australia inventory (AICS)  
 China inventory (IECSC)  
 New Zealand Inventory of Chemicals (NZIoC)  
 Philippines inventory (PICCS)  
 United States inventory (TSCA 8b)  
 Europe inventory (EINECS/ELINCS/NLP)  
 Canada inventory (DSL)

## Fragrance 49359354

### SECTION 15: Regulatory information

**15.2 Chemical Safety Assessment** : This product contains substances for which Chemical Safety Assessments are still required.

### SECTION 16: Other information

Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** :

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number
- vPvB = Very Persistent and Very Bioaccumulative

#### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Chronic 2, H411	Calculation method

**Full text of abbreviated H statements** :

- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H361f Suspected of damaging fertility.  
(Fertility)
- H373 May cause damage to organs through prolonged or repeated exposure if  
(oral) swallowed.
- 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.

**Full text of classifications [CLP/GHS]** :

- Acute Tox. 4, H302 ACUTE TOXICITY (oral) - Category 4
- Aquatic Acute 1, H400 AQUATIC HAZARD (ACUTE) - Category 1
- Aquatic Chronic 1, H410 AQUATIC HAZARD (LONG-TERM) - Category 1
- Aquatic Chronic 2, H411 AQUATIC HAZARD (LONG-TERM) - Category 2
- Aquatic Chronic 3, H412 AQUATIC HAZARD (LONG-TERM) - Category 3
- Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
- Repr. 2, H361f (Fertility) TOXIC TO REPRODUCTION (Fertility) - Category 2
- Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2
- Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1
- Skin Sens. 1B, H317 SKIN SENSITIZATION - Category 1B
- STOT RE 2, H373 (oral) SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (oral) - Category 2

**Full text of abbreviated R phrases** :

- R62- Possible risk of impaired fertility.
- R22- Harmful if swallowed.
- R36- Irritating to eyes.
- R38- Irritating to skin.
- R43- May cause sensitization by skin contact.
- R50- Very toxic to aquatic organisms.
- R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Fragrance 49359354****SECTION 16: Other information**

**Full text of classifications [DSD/DPD]** : Repr. Cat. 3 - Toxic to reproduction category 3  
Xn - Harmful  
Xi - Irritant  
N - Dangerous for the environment

**Date of printing** : 2015-06-03.

**Date of issue/ Date of revision** : 2015-06-03.

**Date of previous issue** : 2015-03-02.

**Version** : 1.01

**Notice to reader**

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.