



## Safety Data Sheet

According to Regulation (EC) No 2015/830

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This Safety Data Sheet cancels and replaces all preceding SDS for this Product

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

#### 1.1 Product identifier – Christmas Tree

References: Prolitec 1047

Firmenich 190655B

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

The Relevant Identified Use is low concentration air treatment applications using the Prolitec fragrance diffusion system. Use of the Product for any purpose other than the “Relevant Identified Use” is strictly prohibited. Safety Information for the Relevant Identified Use is contained in the Prolitec User Guide and in Sections 8 and 16 of this Safety Data Sheet.

THIS SAFETY DATA SHEET IS DESIGNED FOR EMPLOYEES AND EMERGENCY PERSONNEL WHO EXPERIENCE DIRECT CONTACT AND/OR SUSTAINED EXPOSURE TO THE PURE LIQUID OF THE PRODUCT.

SECTIONS 2-7 AND 9-15 ARE NOT APPLICABLE TO THE USE OF THIS PRODUCT FOR AMBIENT SCENTING, THE “RELEVANT IDENTIFIED USE.”

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

##### **Prolitec Inc.**

1235 W. Canal Street  
Milwaukee, WI 53233 USA  
Tel: +1 414 615 4600  
Email: [sds@prolitec.com](mailto:sds@prolitec.com)

##### **UK Contact**

Ambius  
Unit E Acorn Industrial Estate, Crayford Road  
Crayford, Kent, DA1 4AL  
**UK TEL: +44 (0) 800 085 8744**

#### 1.4 Emergency telephone number

For chemical emergency (spill, leak, exposure or incident)  
Call INFOTRAC: +1-800-535-5053 (inside USA) or +1-352-323-3500 (outside USA).

### SECTION 2 HAZARDS IDENTIFICATION – Applicable only to exposure to the concentrated liquid such as may occur in an accidental spill. Safety information for the Relevant Identified Use as defined in Section 1.2 above is contained in Sections 8 and 16.

#### 2.1 Classification of the substance or mixture

### 2.1.1 Classification according to Regulation (EC) N° 1272/2008 [CLP/GHS] as amended

|   |      |
|---|------|
| Skin Irritation - Cat. 2                | H315 |
| Skin Sensitization - Cat. 1             | H317 |
| Eye Irritation - Cat. 2                 | H319 |
| Environmental Hazard (chronic) - Cat. 2 | H411 |

### 2.1.2 Additional information

Full text of listed statements: See Section 15

## 2.2 Label elements

### Hazard pictograms:



### Signal word:

Warning

### Hazard statements:

|      |  |
|------|--|
| H315 | Causes skin irritation.                          |
| H317 | May cause an allergic skin reaction.             |
| H319 | Causes serious eye irritation.                   |
| H411 | Toxic to aquatic life with long lasting effects. |

### Precautionary statements:

|                |  |
|----------------|--|
| P264           | Wash hands thoroughly after handling.  |
| P273           | Avoid release to the environment.  |
| P302+P352      | IF ON SKIN: Wash with plenty of soap and water.  |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P333+P313      | If skin irritation or rash occurs: Get medical advice/attention.   |

### Supplemental hazard information (EU):

Contains: Cinnamal, Eugenol, Formyl-Dimethylcyclohexene, Butylcyclohexyl Acetate, T-4-, 2-Methylundecanal, Limonene, Dodecanal, Butylphenylmethylpropional, Dimethyl-Cyclohexene- Pentenone, Carene, Delta-3-, Carvacrol, Eucalyptol, Pinene, Beta-, Pinene, Alpha-. May produce an allergic reaction.

### Hazard inducers:

7-Octen-2-ol, 2,6-dimethyl-; 2-Heptanol, 2,6-dimethyl-; Bicyclo[3.1.1]heptane, 6,6-dimethyl-2-methylene-; 2-Propenal, 3-phenyl-

## 2.3 Other hazards

No data available at this time.

## SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

The exact percentage (concentration) of composition has been withheld as a trade secret.

### 3.2 Mixtures

Classifications are for direct contact or sustained exposure to the liquid state of the Product and are not applicable to the Relevant Identified Use of the Product.

Contains :

$\geq 7.5 < 10.0\%$

EU Specific Identifiers:

N° REACH: 01-2119976286-24

EC CAS : 0032210-23-4

Cyclohexanol, 4-(1,1-Dimethylethyl)-, Acetate

N° EINECS: 250-954-9

GHS Classification:

Skin Sensitization - Cat. 1B [H317]

$\geq 5.0 < 7.5\%$

EU Specific Identifiers:

EC CAS : 0018479-58-8

7-Octen-2-ol, 2,6-Dimethyl-

N° EINECS: 242-362-4

Skin Irritation - Cat. 2 [H315]

Eye Irritation - Cat.2 [H319]

$\geq 2.5 < 5.0\%$

EU Specific Identifiers:

EC CAS : 0000470-82-6

2-Oxabicyclo[2.2.2]Octane, 1,3,3-Trimethyl-

N° EINECS: 207-431-5

Skin Sensitization - Cat. 1B [H317]

Flammable Liquid - Cat. 3 [H226]

$\geq 2.5 < 5.0\%$

EU Specific Identifiers:

EC CAS : 0013254-34-7

2-Heptanol, 2,6-Dimethyl-

N° EINECS: 236-244-1

Skin Irritation - Cat. 2 [H315]

Eye Irritation - Cat.2 [H319]

$\geq 1.0 < 2.5\%$

EU Specific Identifiers:

EC CAS : 0000080-54-6

Benzenepropanal, 4-(1,1-Dimethylethyl)-.Alpha.-Methyl-

N° EINECS: 201-289-8

Reproductive Toxicity - Cat. 2 [H361]

Skin Sensitization - Cat. 1B [H317]

Acute Toxicity (oral) - Cat. 4 [H302]

Skin Irritation - Cat. 2 [H315]

Environmental Hazard (chronic) - Cat. 3 [H412]

$\geq 1.0 < 2.5\%$

EU Specific Identifiers:

EC CAS : 0000076-22-2

Bicyclo[2.2.1]Heptan-2-One, 1,7,7-Trimethyl-

N° EINECS: 200-945-0

Specific Target Organ Toxicity - Single Exposure - Cat. 2 [H371]

Acute Toxicity (oral) - Cat. 4 [H302]

Acute Toxicity (inhalation) - Cat. 4 [H332]

Flammable Solids - Cat. 2 [H228]

$\geq 1.0 < 2.5\%$

EU Specific Identifiers:

EC CAS : 0000097-53-0

Phenol, 2-Methoxy-4-(2-Propenyl)-

N° EINECS: 202-589-1

Skin Sensitization - Cat. 1B [H317]

Eye Irritation - Cat.2 [H319]

|   |   |
|---|---|
| <p>&gt;= 1.0 &lt; 2.5%</p> <p>EU Specific Identifiers:<br/>           EC CAS : 0094333-88-7<br/>           Bulnesia Sarmienti, Ext., Acetate<br/>           N° EINECS: 305-067-2</p>                              | <p>Skin Irritation - Cat. 2 [H315]</p>  |
| <p>&gt;= 1.0 &lt; 2.5%</p> <p>EU Specific Identifiers:<br/>           EC CAS : 0000127-91-3<br/>           Bicyclo[3.1.1]Heptane, 6,6-Dimethyl-2-Methylene-<br/>           N° EINECS: 204-872-5</p>               | <p>Aspiration Hazard - Cat. 1 [H304]<br/>           Skin Sensitization - Cat. 1B [H317]<br/>           Skin Irritation - Cat. 2 [H315]<br/>           Environmental Hazard (acute) - Cat. 1 [H400]<br/>           Environmental Hazard (chronic) - Cat. 1 [H410]<br/>           Flammable Liquid - Cat. 3 [H226]</p>  |
| <p>&gt;= 0.5 &lt; 1.0%</p> <p>EU Specific Identifiers:<br/>           EC CAS : 0000104-55-2<br/>           2-Propenal, 3-Phenyl-<br/>           N° EINECS: 203-213-9</p>  | <p>Skin Sensitization - Cat. 1A [H317]<br/>           Acute Toxicity (dermal) - Cat. 4 [H312]<br/>           Skin Irritation - Cat. 2 [H315]<br/>           Eye Irritation - Cat.2 [H319]</p>   |
| <p>&gt;= 0.5 &lt; 1.0%</p> <p>EU Specific Identifiers:<br/>           EC CAS : 0068039-49-6<br/>           3-Cyclohexene-1-Carboxaldehyde, 2,4-Dimethyl-<br/>           N° EINECS: 268-264-1</p>                  | <p>Skin Sensitization - Cat. 1B [H317]<br/>           Skin Irritation - Cat. 2 [H315]<br/>           Environmental Hazard (chronic) - Cat. 2 [H411]</p>   |
| <p>&gt;= 0.1 &lt; 0.5%</p> <p>EU Specific Identifiers:<br/>           EC CAS : 0000080-56-8<br/>           Bicyclo[3.1.1]Hept-2-Ene, 2,6,6-Trimethyl-<br/>           N° EINECS: 201-291-9</p>                     | <p>Aspiration Hazard - Cat. 1 [H304]<br/>           Skin Sensitization - Cat. 1B [H317]<br/>           Acute Toxicity (oral) - Cat. 4 [H302]<br/>           Skin Irritation - Cat. 2 [H315]<br/>           Environmental Hazard (acute) - Cat. 1 [H400]<br/>           Environmental Hazard (chronic) - Cat. 1 [H410]<br/>           Flammable Liquid - Cat. 3 [H226]</p> |
| <p>&gt;= 0.1 &lt; 0.5%</p> <p>EU Specific Identifiers:<br/>           EC CAS : 0000079-92-5<br/>           Bicyclo[2.2.1]Heptane, 2,2-Dimethyl-3-Methylene-<br/>           N° EINECS: 201-234-8</p>               | <p>Eye Irritation - Cat.2 [H319]<br/>           Environmental Hazard (acute) - Cat. 1 [H400]<br/>           Environmental Hazard (chronic) - Cat. 1 [H410]<br/>           Flammable Solids - Cat. 2 [H228]</p>  |
| <p>&gt;= 0.1 &lt; 0.5%</p> <p>EU Specific Identifiers:<br/>           N° REACH: 01-2119969443-29<br/>           EC CAS : 0000110-41-8<br/>           Undecanal, 2-Methyl-<br/>           N° EINECS: 203-765-0</p> | <p>Skin Sensitization - Cat. 1B [H317]<br/>           Skin Irritation - Cat. 2 [H315]<br/>           Environmental Hazard (acute) - Cat. 1 [H400]<br/>           Environmental Hazard (chronic) - Cat. 1 [H410]</p>   |

>= 0.1 < 0.5%  
EU Specific Identifiers:  
EC CAS : 0000112-54-9  
Dodecanal  
N° EINECS: 203-983-6

Skin Sensitization - Cat. 1B [H317]  
Skin Irritation - Cat. 2 [H315]  
Eye Irritation - Cat.2 [H319]

>= 0.1 < 0.5%  
EU Specific Identifiers:  
EC CAS : 0000499-75-2  
Phenol, 2-Methyl-5-(1-Methylethyl)-  
N° EINECS: 207-889-6

Skin Sensitization - Cat. 1B [H317]  
Acute Toxicity (oral) - Cat. 4 [H302]  
Skin Irritation - Cat. 2 [H315]  
Eye Irritation - Cat.2 [H319]

>= 0.1 < 0.5%  
EU Specific Identifiers:  
EC CAS : 0000469-61-4  
1h-3a,7-Methanoazulene, 2,3,4,7,8,8a-  
Hexahydro- 3,6,8,8-Tetramethyl-, [3r-  
(3.Alpha.,3a.Beta.,7.Beta.,8a.Alpha.)]-  
N° EINECS: 207-418-4

Aspiration Hazard - Cat. 1 [H304]  
Environmental Hazard (acute) - Cat. 1 [H400]  
Environmental Hazard (chronic) - Cat. 1 [H410]

>= 0.1 < 0.5%  
EU Specific Identifiers:  
EC CAS : 0013466-78-9  
Bicyclo[4.1.0]Hept-3-Ene, 3,7,7-Trimethyl-  
N° EINECS: 236-719-3

Aspiration Hazard - Cat. 1 [H304]  
Skin Sensitization - Cat. 1 [H317]  
Skin Irritation - Cat. 2 [H315]  
Environmental Hazard (acute) - Cat. 1 [H400]  
Environmental Hazard (chronic) - Cat. 1 [H410]  
Flammable Liquid - Cat. 3 [H226]

>= 0.1 < 0.5%  
EU Specific Identifiers:  
N° REACH: 01-2120735847-42  
EC CAS : 0056973-85-4  
4-Penten-1-One, 1-(5,5-Dimethyl-1-Cyclohexen-  
1- Yl)-  
N° EINECS: 260-486-7

Skin Sensitization - Cat. 1B [H317]  
Environmental Hazard (chronic) - Cat. 2 [H411]

>= 0.1 < 0.5%  
EU Specific Identifiers:  
EC CAS : 0000138-86-3  
Limonene  
N° EINECS: 205-341-0  
N° Index : 601-029-00-7

Aspiration Hazard - Cat. 1 [H304]  
Skin Sensitization - Cat. 1B [H317]  
Skin Irritation - Cat. 2 [H315]  
Environmental Hazard (acute) - Cat. 1 [H400]  
Environmental Hazard (chronic) - Cat. 1 [H410]  
Flammable Liquid - Cat. 3 [H226]

0 < 0.1%  
EU Specific Identifiers:  
EC CAS : 0000475-20-7  
1,4-Methanoazulene, Decahydro-4,8,8-Trimethyl-  
9- Methylene-, [1s-  
(1.Alpha.,3a.Beta.,4.Alpha.,8a.Beta.)]-  
N° EINECS: 207-491-2

Aspiration Hazard - Cat. 1 [H304]  
Skin Sensitization - Cat. 1B [H317]  
Environmental Hazard (acute) - Cat. 1 [H400]  
Environmental Hazard (chronic) - Cat. 1 [H410]

## **SECTION 4 FIRST AID MEASURES**

### **4.1 Description of first aid measures**

As in all cases of potential poisoning, obtain medical advice immediately.

#### In the case of eye contact:

Irrigate copiously with water for at least 10 minutes. Obtain medical advice if any irritation persists.

#### In the case of inhalation:

In case of situations other than the Relevant Identified Use: Remove the affected individual to fresh air environment. Obtain medical advice immediately if irritation persists.

#### In the case of skin contact:

Remove contaminated clothes. Wash skin with large volumes of water (or soap and water). If irritation persists, or any sign of tissue damage is apparent, obtain medical advice immediately.

#### In the case of ingestion:

In the event of accidental ingestion, rinse mouth with water. Give up to 1 tumbler (half pint) of milk. Do not induce vomiting. Obtain medical advice immediately.

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

No information available on the product

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

None known.

## **SECTION 5 FIRE FIGHTING MEASURES**

### **5.1 Extinguishing media**

Use adequate extinguishers with foam, carbon dioxide or dry chemical.

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

None known.

### **5.3 Advice for firefighters**

Do not use a high pressure water stream. In case of insufficient ventilation, wear suitable respiratory equipment.

## **SECTION 6 ACCIDENTAL RELEASE MEASURES**

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

#### **6.1.1 For Non-emergency personnel:**

Use protective gloves when handling a spillage. Do not smoke. Avoid naked flames or other potential sources of ignition such as electrical equipment. Avoid contact with skin or eyes and inhalation of vapor. Use normal washing routines. Ensure adequate ventilation in working areas following a spill. Follow First Aid Measures in 4 above.

#### **6.1.2 For emergency responders:**

Follow the recommendation in 6.1

### **6.2 Environmental Precautions**

Do not discharge into drains, soil or the aquatic environment.

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

#### **6.3.1 For containment:**

Small spills can be wiped up with a cloth or paper. For larger spills, use standard absorbents such as saw dust, sand or vermiculite.

#### **6.3.2 For cleaning up:**

Use cloth or paper for spills from the smaller cartridges. If a larger cartridge is spilled use an absorbent such as saw dust, vermiculite or sand. Dispose of clean up materials in accordance with government regulations.

### **6.4 References to other sections**

Please see also sections 4, 5, 7 and 16 for further information.

## **SECTION 7 HANDLING AND STORAGE**

### **7.1 Precautions for safe handling**

Avoid contact with skin and eyes.  
No smoking; avoid sources of ignition.  
Avoid exposing to high temperature during processing  
Do not ingest or apply to skin.  
Follow good personal washing routines.  
Always reseal any cartridge removed from an appliance.  
Keep cartridges in an upright position after unsealing.  
Where the product is handled, maintain adequate ventilation.  
Wear adequate protective gloves and eye protection.

#### **7.1.1 Protective measures**

Keep strict control of dust accumulation. Maintain adequate ventilation, avoid naked flames and other sources of ignition.

#### **7.1.2 Advice on general occupational hygiene**

Use good washing routines.

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

Store in cartridges positioned upright in a master carton in a place without exposure to sunlight at room temperature.

### **7.3 Specific end uses**

Environmental fragrance. See Relevant Identified Use.

## **SECTION 8 EXPOSURE CONTROLS**

### **8.1 Control parameters:**

Maximum airborne concentration restrictions for 8 hours continuous inhalation.

0000076-22-2 : Bornan-2-one  
UK EH40 WEL Data

UK. EH40 Workplace Exposure Limits (WELs)  
Occupational Exposure Limit data. Short Term Exposure Limit (STEL): 19 mg/m<sup>3</sup>  
Occupational Exposure Limit data. Short Term Exposure Limit (STEL): 3 ppm  
Occupational Expo

Also see Section 16.3

## 8.2 Exposure controls

Avoid exposing to high temperatures; maintain adequate ventilation.

### 8.2.1 Appropriate engineering controls

Maintain adequate ventilation where product is handled.  
In the Relevant Identified Use – use only as directed.

### 8.2.2 Environmental exposure controls

In the Relevant Identified Use, use as directed.  
In handling of the liquid, minimize release into the environment.

### 8.2.3 Personal Protection

In the Relevant Identified Use and in handling the cartridges, personal protective wear is not required. In the bulk handling of the liquid or in accidental spill clean-up, protective gloves and safety glasses are required.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on the basic physical and chemical properties

|   |                           |
|---|---------------------------|
| (a) Appearance :                              | LIQUID                    |
| (b) Color :                                   | Colourless to Pale Yellow |
| (c) Odor :                                    | Strong perfume            |
| (d) pH :                                      | Not Available             |
| (e) Melting Point/Freezing Point range °C :   | Not Available             |
| (f) Initial Boiling Point/range °C :          | Not Available             |
| (g) Flash Point :                             | 76°C / 168.8°F            |
| (h) Evaporation Rate:                         | Not Available             |
| (i) Flammability (solid/gas) :                | Not Available             |
| (j) Explosive properties (ST class) :         | Not Available             |
| (k) Vapor Pressure (Pa) :                     | 0.2 mm Hg @ 20°C          |
| (l) Vapor Density :                           | Not applicable            |
| (m) Relative Density :                        | 0.906                     |
| (n) Water Solubility :                        | Not Applicable            |
| (o) Partition coefficient (n-octanol/water) : | Not Applicable            |
| (p) Auto Ignition Temperature :               | Not Available             |
| (q) Decomposition Temperature :               | Not Available             |
| (r) Viscosity :                               | Not Available             |
| (s) Explosive Properties :                    | Not Available             |
| (t) Oxidizing Properties :                    | Not an oxidizing agent    |

### 9.2 Other information

None



## SECTION 10 STABILITY AND REACTIVITY

### 10.1 Reactivity

No known reaction with water.

### 10.2 Chemical stability

Presents no significant reactivity hazard. Normally stable even at elevated temperatures and pressures. Does not undergo explosive decomposition. It is not pyrophoric or an oxygen donor. Does not combine with other organic materials to form explosive mixtures. Will not undergo hazardous exothermic polymerization.

### 10.3 Possibility of hazardous reactions

Not known.

### 10.4 Conditions to avoid

Avoid contact with oxidizing agents.  
Avoid temperatures above 5° C below the flash point.  
Do not heat cartridge or closed containers.

### 10.5 Incompatible materials

Avoid oxidizing agents.

### 10.6 Hazardous decomposition products

Contact with water or storage under recommended conditions for one year should not produce dangerous decomposition products.

## SECTION 11 TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicological effects

This mixture has not been subjected to toxicological testing as an entity. According to available data on the constituents, the health classification criteria are met.

(a) acute toxicity

Calculated LD50 Oral: LD50 > 2000 mg/kg bw

(b) skin corrosion/irritation

Skin Irritation - Cat. 2

(c) serious eye damage/irritation

Eye Irritation - Cat. 2

(d) respiratory or skin sensitisation

Skin Sensitization - Cat. 1

(e) germ cell mutagenicity

Not applicable

(f) carcinogenicity

Not applicable

(g) reproductive toxicity

Not applicable

(h) STOT-single exposure  
Not applicable

(i) STOT-repeated exposure  
Not applicable

(j) aspiration hazard  
Not applicable

## **SECTION 12 ECOLOGICAL INFORMATION**

This mixture has not been subjected to eco-toxicological testing as an entity. According to available data on the constituents, the environmental classification criteria are met.

### **12.1 Toxicity**

Environmental Hazard (chronic) - Cat. 2

### **12.2 Persistence and biodegradability**

No data available.

### **12.3 Bioaccumulative potential**

No data available.

### **12.4 Mobility in soil**

No data available.

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

Not applicable.

### **12.6 Other adverse effects**

No data available.

## **SECTION 13 DISPOSAL CONSIDERATIONS**

### **13.1 Waste treatment methods**

Best means of disposal of any product is through its proper use according to instructions. Disposal must be in accordance with local, state and national requirements.

This product is dangerous for the environment. Do not discharge to sewers, drains or water courses. This product must be disposed of as hazardous waste. The empty container may be disposed of as controlled waste in accordance with appropriate regulations. The containers are recyclable in some countries equipped to recycle Polypropylene.

## **SECTION 14 TRANSPORT INFORMATION**

In case of accidental spillage or fire during transport, refer to instructions given under points 5, 6, 7 and 8 above.

- 14.1 UN number:** 3082  
IMDG Not regulated per 2.10.2.7  
IATA Not regulated per Special Provision 197
- 14.2 Proper Shipping Name:** ENVIRONMENTALLY HAZARDOUS SUBSTANCE,  
LIQUID, N.O.S. (ALPHA CEDRENE)
- 14.3 Class:** 9 (not regulated – limited qty exemption)
- 14.4 Packing Group:** III (not regulated – limited qty exemption)
- 14.5 Environmental hazard:** Yes  
Marine Pollutant: Yes  
Sea Segregation group: Not applicable.
- 14.6 Special Precautions for user:** Refer to section 7.
- 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:** Not applicable.

**Limited Quantity Exemptions** This product is classified as a Marine Pollutant (Environmentally Hazardous Substance) in accordance with the IMDG Code and the UN Model Regulations. The individual inner packages do not exceed 5 liters and the master or outer carton does not exceed 30 kilograms (IMDG Code 2.10.2.7; ICAO Special Instruction A197, 49CFR 171.4(c)(2)) so is shipped unregulated. Shipment may be regulated if contents are removed from inner packaging and combined into containers exceeding 5 L or 5 kg. Transport is pursuant to IATA and IMO Limited Quantity exemptions.



**Note for transport**

Local, state or national requirements may apply to the carriage of this product.

**SECTION 15 REGULATORY INFORMATION**

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

**European Regulations**

Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.

Commission Regulation (EU) 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

**15.2 Chemical safety assessment**

No data available at this time.

### 15.3 Full text of phrases used under section 2

|                |  |
|----------------|--|
| H315           | Causes skin irritation.  |
| H317           | May cause an allergic skin reaction.   |
| H319           | Causes serious eye irritation.   |
| H411           | Toxic to aquatic life with long lasting effects.   |
| P264           | Wash hands thoroughly after handling.  |
| P273           | Avoid release to the environment.  |
| P280           | Wear protective gloves and eye 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. |
| P302+P352      | IF ON SKIN: Wash with plenty of soap and water.  |
| P333+P313      | If skin irritation or rash occurs: Get medical advice/attention.   |
| P391           | Collect spillage.  |
| P363           | Wash contaminated clothing before reuse.   |
| P337           | If eye irritation persists: Get medical advice/attention.  |

### 15.4 Full text of phrases used under section 3

|      |   |
|------|---|
| H226 | Flammable liquid and vapour.                          |
| H228 | Flammable solid.                                      |
| H302 | Harmful if swallowed.                                 |
| H304 | May be fatal if swallowed and enters airways.         |
| H315 | Causes skin irritation.                               |
| H317 | May cause an allergic skin reaction.                  |
| H319 | Causes serious eye irritation.                        |
| H332 | Harmful if inhaled.                                   |
| H361 | Suspected of damaging fertility or the unborn child.  |
| H371 | May cause damage to organs.                           |
| 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.    |

## SECTION 16 OTHER SAFETY INFORMATION

### 16.1 Revisions

17-June-2013: Version 1.1 – First version validated for publication  
27-Jan-2014: Version 1.2 – Updates to sections 1, 16  
27-May-2015: Version 1.3 – Updates to sections 2, 3, 14, 16  
18-July-2016: Version 1.4 – Updates to sections 2, 3, 16  
22-December-2016: Version 1.5 – Updates to Sections 1, 2, 3, 4, 8, 15, 16  
31-March-2019: Version 2.0 – Updates to Sections 2, 3, 8, 9, 11, 12, 14, 15

### 16.2 Key literature references and sources of data

**Research Institute for Fragrance Materials (RIFM)**

**OECD SIDS Organization for Economic Cooperation and Development (OECD),**  
United States Environmental Protection Agency. Voluntary Testing Program for High Volume Chemicals

### **COUNCIL DIRECTIVE 98/24/EC of 7 April 1998**

The protection of the health and safety of workers from the risks related to chemical agents at work (fourteenth individual Directive within the meaning of Article 16(1) of Directive 89/391/EEC)

### **EUROPEAN COMMISSION, Recommendation from the Scientific Committee for Occupational Exposure Limits, February, 2013 (SCOEL)**

#### **EU IUCLID International Uniform Chemical Information Data Base**

European Chemicals Agency European Commission Council Directive 98/24/EC – the first and the second lists of IOELs and amending Directives 91/322/EEC and 2000/39/EC. (98/24/EC)

#### **American Congress of Governmental and Industrial Hygienist (“ACGIH”)**

Threshold Limited Values (TLV) and Biological Exposure Indices (BEI) including TLV – TWA (time-weighted average; TLV–STEL (short term exposure limit); and TLV-C (ceiling). (ACGIH)

#### **Institut National de Recherche et de Sécurité (INRS)**

*Valeurs limites d'exposition professionnelle (Occupational Exposure Limits or OELs) aux agents chimiques en France*, Aide-mémoire technique ED 984. Comité Scientifique pour la Surveillance des Atmosphères de Travail (Scientific Committee for Surveillance of the Workplace), working under the High Council for the Prevention of Occupational Hazards Environment.

#### **U.S. Department of Labor, Occupational Safety and Health Administration (OSHA)**

29 CFR 1910.1200 Subpart Z, Table Z-1 TLV-TWA maximum continuous exposure limits.

#### **US State of California, Environmental Protection Agency**

Office of Health Hazard Assessment (OEHHA), Safe Drinking Water and Toxic Enforcement Act of 1986. Maximum continuous exposure TLV-TWA Limits.

#### **German Federal Ministry of Labor and Social Affairs (BMAS)**

TRGS 900 Arbeitsplatzgrenzwert (Occupational Exposure Limits) Ausschuss für Gefahrstoffe - AGS-Geschäftsführung - BAuA

**Decreto Legislativo del Governo n.277, 15/08/1991 Decreto Legislativo n.66, 25/02/2000, Decreto Ministeriale 26/02/2004** <http://www.ambiente.it/sicurezza/legislazione/leggi/2004/dm26-2-2004.htm>

**Bundesanstalt für Arbeitsschutz und Arbeitsmedizin**; Federal Institute for Occupational Safety and Health, Dortmund, Germany

#### **Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT), Spain**

Límites de exposición profesional para agentes químicos en España.

**Safework Australia** <http://hsis.safeworkaustralia.gov.au/HazardousSubstance> and Guidance on the Interpretation of Workplace Exposure Standards for Airborne Contaminants published by Safework 10 May 2013.

## **16.3 Workplace safety information for Relevant Identified Use**

The ACGIH, the EU, EU member states, and other national organizations including those listed in 16.2 above have established occupational exposure limits (OELs) limits for concentrations of hazardous substances in workplace air (“Limits”). The Limits value is the limit of the time-weighted average of the concentration of a substance in the air within the breathing zone of a worker over a specified reference period which is usually 40 hours per week over 40 years. The Limits, depending on their source, are also called Indicated Occupational Exposure Limit (IOEL) or Threshold Limit Value (TLV-TWA).

16.3.1 The Product may contain substances which are subject to workplace Limits. (Please refer to Section 8.1.)

16.3.2 Workplace Safety Evaluation

If fragrance mixture contains a substance subject to workplace limitations, the restricted ingredients are listed in See Section 8.1. The Relevant Identified Use of the Product has been evaluated for continuous inhalation safety considering: (A) the average airborne concentration (reported as parts per million PPM) of the total mixture when the scent effect is assessed by humans as “Intolerable;” (B) the volume by weight of the substance (reported as a %) of the weight of the total mixture represented by the substance as a proportion of the mixture; (C) the maximum average potential airborne concentration of the substance; and (D) the lowest safe limit according to the sources listed in 16.2. The safety evaluation formula is  $A \text{ (ppm)} \times B \text{ (\%)} = C$ , which is then compared to the OEL Limits in D with a resulting margin of safety (MoS) of at least 50.

16.3.3 Workplace Safety Determination

If fragrance mixture contains a substance subject to workplace limitations (See Section 8.1), the Relevant Identified Use of the Product is estimated to not exceed the Limits established by the organizations listed in 16.2.

16.3.4 Ozone

The Formulation contains no ozone and the Relevant Identified Use does not generate ozone. The Formulation contains no toxic chemical or chemicals subject to reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986.

16.3.5 Fire and Explosion Information

Used as directed in the Relevant Identified Use, there is no material risk of ignition resulting in fire or explosion.

16.3.6 IFRA Analysis and Safety Determination for Skin Contact

| <u>FRAGRANCE</u> | <u>IFRA CLASS</u> | <u>IFRA ANALYSIS</u> |
|------------------|-------------------|----------------------|
| Christmas Tree   | 11                | Not restricted       |

IFRA Class 11 includes:

- Air Fresheners and Fragrancing of all types (plug-ins, solid substrate, membrane delivery, ambient, electrical) excluding aerosol products.
- Liquid refills for air fresheners (cartridge systems).

Based on safety data generated by the Research Institute for Fragrance Materials (“RIFM” [www.RIFM.org](http://www.RIFM.org)), its vendors and the open scientific literature. This data is evaluated in accordance with the principles laid down in Annex 1 to the International Fragrance Association (“IFRA” [www.ifraorg.org](http://www.ifraorg.org)) Code of Practice. Annex 1 requires consideration of possible effects in the skin, including skin irritation and sensitization with special attention paid to the effect of sunlight, should ingredients absorb ultra-violet radiation. Systemic toxicity should be considered in relation to the quantities used and likelihood of entering the body. Also considered is a history of safe-use of the ingredients at the concentration levels which may occur in the event of accidental release taking into account any reports of adverse effects reported by dermatologists or other medical professionals.