

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

**1.1 Product Identifier:** Christmas Spiced Room Mist  
**0731522**

**1.2 Uses:** Home fragrance

**1.3 Supplier:** Marks and Spencer  
PO Box 3339  
Chester  
CH99 9QS  
UK

**Telephone:** 01342 870900

**1.4 Emergency telephone:** 01342 870900

## 2. SECTION 2: Hazards Identification

### 2.1 Classification of the mixture

GHS/CLP classification according to EC 1272/2008

Flammable aerosols, category 1.                      H222:                      Extremely flammable aerosol.

### 2.2 Label Elements

Label elements according to EC 1272/2008



**2.2.1** Hazard Pictograms:

**2.2.2** Signal Word: Danger

**2.2.3** Named Substances: None required.

**2.2.4** Hazard Statements: H222: Extremely flammable aerosol.

**2.2.5** Precautionary Statements: P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking.  
P211: Don not spray on open flame or other ignition source.  
P251: Pressurised container: Do not pierce or burn, even after use.  
P410+P412: Protect from sunlight. Do not expose to temperatures exceeding 50°C / 121°F.

**2.2.6** Supplemental Hazard Statements: Use only as directed.  
Do not spray near face and eyes.  
Do not breathe spray. If swallowed seek medical advice and show the container.  
Intentional misuse by deliberately concentrating and inhaling contents can be harmful or fatal.

**2.3** Other Hazards: Does not contain any materials classified as PBT or vPvB in accordance with Annex XIII of EC 1907/2006.

## 3. SECTION 3: Composition/Information on Ingredients

Description of the mixture:

Component	CAS- No.	EC-No.	Index No.	RRN	% w/w	Classification (EC 1272/2008)
A mixture of branched and linear C7-9 alkyl 3-[3-(2H-benzotriazol-2-yl)-5-(1,1-dimethylethyl)-4-hydroxyphenyl]propionates	127519-17-9	407-000-3	607-281-00-4	01-2120060379-51	<0.0100	Aquatic Chronic 2: H411
4-Methyl-8-methylenetricyclo[3.3.1.1.(3.7)]decan-2-ol	122760-84-3	406-330-5	603-123-00-3	01-0000015588-59	<0.0100	Skin Irrit. 2: H315 Skin Sens. 1: H317 Aquatic Chronic 2: H411
Allyl (3-methylbutoxy)acetate	67634-00-8	266-803-5			<0.0100	Acute Tox. 4: H302 Skin Irrit. 2: H315
(2-methoxymethylethoxy)propanol	34590-94-8	252-104-2		01-2119450011-60	<0.0100	
2-Methyl-3-phenylpropan-2-yl butyrate	10094-34-5	233-221-8			<0.1000	Aquatic Chronic 2: H411
Sodium nitrite	7632-00-0	231-555-9	007-010-00-4	01-2119471836-27	0.1000	Ox. Sol. 3: H272 Acute Tox. 3: H301 Aquatic Acute 1: H400
4-Isopropenyl-1-methylcyclohexene	5989-27-5	227-813-5	601-029-00-7	01-2119529223-47	<0.1000	Flam. Liq. 3: H226 Asp. Tox. 1: H304 Skin Irrit. 2: H315 Skin Sens. 1B: H317 Aquatic Acute 1: H400

						Aquatic Chronic 1: H410
2-Propenyl cyclohexylpropionate	2705-87-5	220-292-5		01-2119976355-27	<0.0100	Acute Tox. 4: H302 Acute Tox. 4: H312 Skin Sens. 1B: H317 Acute Tox. 4: H332 Aquatic Chronic 1: H410
Sodium Benzoate	532-32-1	208-534-8		01-2119460683-35	0.4000	Eye Irrit. 2: H319
Benzyl acetate	140-11-4	205-399-7		01-2119638272-42	<0.1000	Aquatic Chronic 3: H412
Decanal	112-31-2	203-957-4		01-2119967771-26	<0.0100	Eye Irrit. 2: H319
2-Hydroxy-4-Methoxybenzophenone	131-57-7	205-031-5		01-2119976330-39	<0.0100	Skin Irrit. 2: H315 Eye Irrit. 2: H319 STOT SE 3 RTI: H335
4-Allyl-2-methoxyphenol acetate	93-28-7	202-235-6			<0.1000	Acute Tox. 4: H302
Ethyl butyrate	105-54-4	203-306-4			<0.0100	Flam. Liq. 3: H226
4-Allyl-2-methoxyphenol	97-53-0	202-589-1		01-2119971802-33	<0.1000	Skin Sens. 1B: H317 Eye Irrit. 2: H319
Ethanol	64-17-5	200-578-6	603-002-00-5	01-2119457610-43	3.5000	Fl. Liq. 2: H225 Eye Irrit. 2: H319
Isobutane	75-28-5	200-857-2	601-004-00-0	01-2119485395-27	7.2000	Flam. Gas 1: H220
2-tert-Butylcyclohexyl acetate	88-41-5	201-828-7		01-2119970713-33	<0.1000	Aquatic Chronic 2: H411
4,11,11-Trimethyl-8-methylenebicyclo[7.2.0]undec-4-ene	87-44-5	201-746-1			<0.1000	Asp. Tox. 1: H304
2H-Chromen-2-one	91-64-5	202-086-7		01-2119949300-45	<0.0100	Acute Tox. 4: H302 Skin Sens. 1B: H317 STOT RE 2: H373
1,1'-Oxybenzene	101-84-8	202-981-2		01-2119472545-33	<0.0100	Aquatic Chronic 2: H411
Butane	106-97-8	203-448-7	601-004-00-0	01-2119474691-32	16.2000	Flam. Gas 1: H220
Propane	74-98-6	200-827-9	601-003-00-5	01-2119486944-21	6.6000	Flam. Gas 1: H220

See section 16 for full text of classifications.

#### 4. SECTION 4: First Aid Measures

##### 4.1 Description of first aid measures

Inhalation:	In high concentrations may cause asphyxiation. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. Remove victim to fresh air wearing self-contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing has stopped.
Eye Contact:	Rinse the eye with water immediately. Remove contact lenses, if present and easy to do. Continue rinsing. Flush thoroughly with water for at least 15 minutes. Get medical assistance. If medical assistance is not available continue to flush with water.
Skin contact:	Contact with evaporating liquid may cause frostbite or freezing of the skin.
Ingestion:	Not considered a likely route of exposure.

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

Inhalation:	Respiratory arrest. Vapours have a narcotic effect and may cause headache, fatigue, dizziness and nausea.
Eye Contact:	Can cause damage due to rapid evaporative cooling.
Skin Contact:	Can cause damage due to rapid evaporative cooling.
Ingestion:	Not considered a likely route of exposure.

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

Inhalation:	Apply artificial respiration if breathing has stopped. Get immediate medical attention.
Eye Contact:	Flush with water. Get medical attention
Skin Contact:	Thaw frosted parts with lukewarm water. Do not rub the affected area. Get medical attention
Ingestion:	Not considered a likely route of exposure.

#### 5. SECTION 5: Fire fighting measures

5.1	Extinguishing media:	Water spray or fog. Dry powder. Foam. <b>Do not use carbon dioxide</b>
5.2	Special hazards:	Heat may cause the containers to explode.
5.3	Advice for fire-fighters:	Stop leak if it is safe to do so. Do not extinguish flames at leak because the possibility of uncontrolled explosive re-ignition exists. Continue water spray from a protected position until container stays cool. Use extinguishers to contain the fire. Use water spray to keep containers close to the fire cool. Isolate the source of the fire or let it burn out.

#### 6. SECTION 6: Accidental release measures

- 6.1** Personal precautions, protective equipment and emergency procedure:  
Evacuate area. Provide adequate ventilation. Consider the risk of potentially explosive atmospheres. Eliminate all ignition sources if safe to do so. Monitor the concentration of the released product. Prevent from entering sewers, basements, or any place where its accumulation can be dangerous. Wear self-contained breathing apparatus when entering area unless the atmosphere is proved to be safe (EN 137 Respiratory protective devices – Self-contained open-circuit compressed air breathing apparatus will full face mask).
- 6.2** Environmental precautions:  
Inform fire brigade of large spillages. Prevent further leakage or spillage if safe to do so.
- 6.3** Methods and material for containment and cleaning up:  
Provide adequate ventilation. Eliminate sources of ignition.
- 6.4** Reference to other sections:  
See section 8 and 13.

## 7. SECTION 7: Handling and storage

- 7.1** Precautions for safe handling: Assess the risk of a potentially explosive atmosphere and the need for suitable equipment. Take precautionary measures against static discharges. Keep away from ignition sources. Provide electrical earthing of equipment and electrical equipment usable in explosive atmospheres. Use only non-sparking tools. The substance must be handled in accordance with good industrial hygiene and safety procedures. Protect containers from physical damage; do not drag, roll, slide or drop. Observe all regulations and local requirements regarding storage of containers. Do not eat, drink or smoke when using. Store in accordance with local/regional/international regulations. Never use direct flame or electrical heating devices to raise the pressure of a container.
- 7.2** Conditions for safe storage  
Storage conditions: Store in original containers; protect from sources of heat and ignition. Containers should not stored in conditions likely to encourage corrosion.  
Storage premises: All electrical equipment in the storage area should be compatible with the risk of a potentially explosive atmosphere.
- 7.3** Incompatible materials: Keep away from combustible material and oxidants.  
Specific end use: Home fragrance.

## 8. SECTION 8: Exposure controls/personal protection

- 8.1** Control parameters

### Occupational Exposure Limits

Substance	WEL-STEL mg/m <sup>3</sup>	WEL-STEL ppm	WEL_TWA mg/m <sup>3</sup>	WEL-TWA ppm
Butane	600	1450	750	1810
Ethanol			1920	1000
(2-methoxymethylethoxy)propanol			308	50
1,1'-Oxydibenzene			7.1	1

### DNELs/DMELs

Substance	Type	Exposure	Value	Population	Effects
Benzyl acetate	DNEL	Long term inhalation	21.9 mg/m <sup>3</sup>	Workers	Systemic
Benzyl acetate	DNEL	Short term inhalation	43.8 mg/m <sup>3</sup>	Workers	Systemic
Benzyl acetate	DNEL	Long term dermal	6.25 mg/kg bw/day	Workers	Systemic
Benzyl acetate	DNEL	Short term dermal	12.5 mg/kg bw/day	Workers	Systemic
Benzyl acetate	DNEL	Long term inhalation	5.5 mg/m <sup>3</sup>	Consumers	Systemic
Benzyl acetate	DNEL	Short term inhalation	11 mg/m <sup>3</sup>	Consumers	Systemic
Benzyl acetate	DNEL	Long term dermal	3.125 mg/kg bw/day	Consumers	Systemic
Benzyl acetate	DNEL	Short term dermal	6.25 mg/kg bw/day	Consumers	Systemic
Benzyl acetate	DNEL	Long term oral	3.125 mg/kg bw/day	Consumers	Systemic

Benzyl acetate	DNEL	Short term oral	6.25 mg/kg bw/day	Consumers	Systemic
Ethanol	DNEL	Short term inhalation	1900 mg/m <sup>3</sup>	Workers	Local
Ethanol	DNEL	Long term dermal	343 mg/kg bw/day	Workers	Systemic
Ethanol	DNEL	Long term inhalation	950 mg/m <sup>3</sup>	Workers	Systemic
Ethanol	DNEL	Short term inhalation	950 mg/m <sup>3</sup>	Consumers	Local
Ethanol	DNEL	Long term dermal	206 mg/kg bw/day	Consumers	Systemic
Ethanol	DNEL	Long term inhalation	114 mg/m <sup>3</sup>	Consumers	Systemic
Ethanol	DNEL	Long term oral	87 mg/kg bw/day	Consumers	Systemic
2H-Chromen-2-one	DNEL	Long term inhalation	6.78 mg/m <sup>3</sup>	Workers	Systemic
2H-Chromen-2-one	DNEL	Long term dermal	0.39 mg/kg bw/day	Consumers	Systemic
2H-Chromen-2-one	DNEL	Long term inhalation	1.69 mg/m <sup>3</sup>	Consumers	Systemic
2H-Chromen-2-one	DNEL	Long term oral	0.39 mg/kg bw/day	Consumers	Systemic
4-Allyl-2-methoxyphenol	DNEL	Long term inhalation	21.2 mg/m <sup>3</sup>	Workers	Systemic
4-Allyl-2-methoxyphenol	DNEL	Long term dermal	6 mg/kg bw/day	Workers	Systemic
4-Allyl-2-methoxyphenol	DNEL	Long term inhalation	5.22 mg/m <sup>3</sup>	Consumers	Systemic
4-Allyl-2-methoxyphenol	DNEL	Long term dermal	3 mg/kg bw/day	Consumers	Systemic
4-Allyl-2-methoxyphenol	DNEL	Long term oral	3 mg/kg bw/day	Consumers	Systemic

#### PNECs

Substance	Compartment Detail	Value	Method Detail
Ethanol	Fresh water	0.96 mg/l	
Ethanol	Marine water	0.79 mg/l	
Ethanol	Sediment	3.6 mg/kg	
Ethanol	Soil	0.63 mg/kg	
2H-Chromen-2-one	Fresh water	19 µg/l	Assessment factors
2H-Chromen-2-one	Marine water	1.9 µg/l	Assessment factors
2H-Chromen-2-one	Intermittent release	14.5 µg/l	Assessment factors
2H-Chromen-2-one	Sediment, fresh water	0.15 mg/kg dwt	
2H-Chromen-2-one	Sediment, marine water	0.015 mg/kg dwt	
2H-Chromen-2-one	Soil	0.018 mg/kg dwt	
2H-Chromen-2-one	Sewage Treatment Plant	6.4 mg/l	
4-Allyl-2-methoxyphenol	Fresh water	1.13 µg/l	
4-Allyl-2-methoxyphenol	Marine water	0.113 µg/l	
4-Allyl-2-methoxyphenol	Intermittent release	11.3 µg/l	
4-Allyl-2-methoxyphenol	Sediment, fresh water	0.081 mg/kg	
4-Allyl-2-methoxyphenol	Sediment, marine water	0.0081 mg/kg	
4-Allyl-2-methoxyphenol	Soil	0.0155 mg/kg dwt	

## 8.2

### Exposure controls

#### Precautionary measures:

#### Protection for respiratory tract:

Give adequate ventilation to the premises where the product is stored and/or handled. Keep self-contained breathing apparatus readily available for emergency use. PPE should be selected based on the task being performed. Conduct a risk assessment for each work area.

Use a suitable air-purifying or air-fed respirator if anticipated exposure levels indicate a possible hazard or exceed safe working limits.

Protection for hands:	Wear working gloves if moving large containers. Guideline: EN 388 Protective gloves against mechanical risks.
Protection for eyes:	Safety eyewear, goggles or face-shield to EN 166 to avoid exposure to liquid splashes. Guideline: EN 166 Personal eye protection.
Protection for skin:	Wear fire/flame resistant/retardant clothing. Guideline: ISO/TR 2801:2007 Clothing for protection against heat and flame.

## 9. SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance:	Colourless liquefied gas.
Odour:	Spiced citrus odour.
pH:	Not determined.
Melting point:	Not determined.
Initial boiling point and boiling range:	-10°C
Flash point:	Not applicable to gasses and gas mixtures.
Evaporation rate:	Not applicable to gasses and gas mixtures.
Vapour pressure:	2.73 bar at 20°C (as propellant)
Density:	Not determined.
Solubility in water:	Not determined.
Partition co-efficient: n-octanol/water:	Not determined.
Auto ignition temperature:	Not applicable
Viscosity:	Not determined.
Explosive properties:	Not applicable
Oxidising properties:	Not applicable
Other information	Gas/vapour is heavier than air and may accumulate in confined spaces, particularly at or below ground level.

## 10. SECTION 10: Stability and reactivity

10.1	Reactivity:	None known other than those specified below.
10.2	Chemical stability:	Stable under normal conditions
10.3	Possibility of hazardous reactions:	Can form a potentially explosive atmosphere in air. May react violently with oxidants.
10.4	Conditions to avoid:	Keep away from heat, hot surfaces, open flames and other ignition sources. No smoking.
10.5	Incompatible materials:	Oxidisers.
10.6	Hazardous decomposition products:	May form carbon monoxide and unidentified organic compounds through incomplete combustion.

## 11. SECTION 11: Toxicological information

This preparation has not been subject to toxicological testing as an entity; therefore no specific LD50/LC50 values have been determined. The toxicological information available relating to the ingredients and their concentrations enables the evaluation of this preparation.

### 11.1 Information on toxicological effects

#### Acute toxicity

Substance	Result	Species	Dose	Exposure
Butane	LC <sub>50</sub> Inhalation	Rat	658 mg/l	4 hours
2-Hydroxy-4-Methoxybenzophenone	LD <sub>50</sub> Oral	Rat	7400 mg/kg	
2-Hydroxy-4-Methoxybenzophenone	LD <sub>50</sub> Dermal	Rabbit	>16000 mg/kg	
Benzyl acetate	LD <sub>50</sub> Dermal	Rabbit	>5 g/kg	
Benzyl acetate	LD <sub>50</sub> Oral	Rat	2490 mg/kg	
2-Propenyl cyclohexylpropionate	LD <sub>50</sub> Dermal	Rabbit	1600 mg/kg	
2-Propenyl cyclohexylpropionate	LD <sub>50</sub> Oral	Rat	585 mg/kg	
(2-methoxymethylethoxy)propanol	LC <sub>50</sub> Inhalation Vapour	Rat	55 - 60 mg/l	4 hours
(2-methoxymethylethoxy)propanol	LD <sub>50</sub> Dermal	Rabbit	13000 - 14000 mg/kg	
(2-methoxymethylethoxy)propanol	LD <sub>50</sub> Dermal	Rat	9500 mg/kg	
(2-methoxymethylethoxy)propanol	LD <sub>50</sub> Oral	Rat	5135 mg/kg	
Sodium benzoate	LD <sub>50</sub> Oral	Rat	>2000 mg/kg	
Sodium benzoate	LD <sub>50</sub> Dermal	Rabbit	>2000 mg/kg	
Ethanol	LD <sub>50</sub> Oral	Rat	>2000 mg/kg	
Ethanol	LD <sub>50</sub> Dermal	Rabbit	>2000 mg/kg	

Ethanol	LC <sub>50</sub> Inhalation Vapour	Mouse	>20 mg/l	4 hours
Isobutane	LC <sub>50</sub> Inhalation	Rat	570000 ppm	15 minutes
Sodium nitrite	LD <sub>50</sub> Oral	Rat	157.9 mg/kg	
Sodium nitrite	LD <sub>50</sub> Oral	Mouse	175 mg/kg	
2-tert-Butylcyclohexyl acetate	LD <sub>50</sub> Dermal	Rabbit	>5000 mg/kg	
2-tert-Butylcyclohexyl acetate	LD <sub>50</sub> Oral	Rat	4600 mg/kg	
2H-Chromen-2-one	LD <sub>50</sub> Oral	Rat	293 mg/kg	
4-Allyl-2-methoxyphenol	LD <sub>50</sub> Oral	Guinea Pig	2130 mg/kg	
4-Allyl-2-methoxyphenol	LD <sub>50</sub> Oral	Mouse	3 g/kg	
4-Allyl-2-methoxyphenol	LD <sub>50</sub> Oral	Rat	2680 mg/kg	

#### Acute toxicity estimates

Route	ATE Value
Oral	>5000 mg/kg
Dermal	>5000 mg/kg
Inhalation	>20 mg/l/h

#### Irritation/Corrosion

Substance	Result	Species	Score	Exposure	Observation
(2-methoxymethylethoxy)propanol	Eyes - Mild irritant	Human		8 mg	
(2-methoxymethylethoxy)propanol	Eyes - Mild irritant	Rabbit		24 hours 500 mg	
(2-methoxymethylethoxy)propanol	Skin - Mild irritant	Rabbit		500 mg	
Sodium nitrite	Eyes - Irritant	Rabbit		24 hours	

#### Sensitization

Substance	Route of exposure	Species	Result
Ethanol	Skin	Guinea Pig	Not sensitizing
2-Hydroxy-4-Methoxybenzophenone	Skin	Guinea Pig	Not sensitizing

#### Germ cell mutagenicity

Substance	Test	Experiment	Result
2-Hydroxy-4-Methoxybenzophenone	OECD 471 Bacterial reverse mutation test	In vitro Bacteria	Negative

#### Carcinogenicity

Substance	Where listed	Group	Comments
Sodium nitrite	IARC	2A	Probably carcinogenic to humans

#### Reproductive toxicity

Substance	Maternal toxicity	Fertility	Development toxin	Species	Dose	Exposure
No data available						

#### Specific target organ toxicity

Substance	Exposure	Category	Route	Target organs
(2-methoxymethylethoxy)propanol	Repeated	2	Oral	Not determined
Ethanol	Repeated	N/A	Oral	Not determined

#### Aspiration hazard

Substance	Result
No data available	

#### Potential chronic health effects

Substance	Result	Species	Dose	Exposure
Isobutane	Sub-acute NOAEL Inhalation	Rat	21394 mg/m <sup>3</sup>	

General:

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.

## 12. SECTION 12: Ecological information

This product has not been subjected to ecological testing as an entity; therefore no specific values have been determined. The ecological information available relating to the ingredients and their concentrations enables the evaluation of this preparation.

### 12.1 Toxicity

Substance	Result	Species	Exposure
2-Hydroxy-4-Methoxybenzophenone	Acute LC <sub>50</sub> 20.4 mg/l	Fish	96 hours
2-Hydroxy-4-Methoxybenzophenone	Acute EC <sub>50</sub> 12.9 mg/l	Daphnia	48 hours
2-Hydroxy-4-Methoxybenzophenone	Acute EC <sub>50</sub> 1.4 mg/l	Algae	72 hours
2-Hydroxy-4-Methoxybenzophenone	Acute EC <sub>50</sub> >10000 mg/l	Micro-organism	30 minutes
Benzyl acetate	Acute EC <sub>50</sub> 17 mg/l	Daphnia	48 hours
Benzyl acetate	Acute EC <sub>50</sub> 855 mg/l	Micro-organsim	3 hours
Benzyl acetate	Acute LC <sub>50</sub> 114 mg/l	Algae	72 hours
Benzyl acetate	Acute LC <sub>50</sub> 4000 µg/l Fresh water	Fish - Oryzias latipes - Juvenile	96 hours
Benzyl acetate	Chronic NOEC 52 mg/l	Algae	72 hours
2-Propenyl cyclohexylpropionate	Acute EC <sub>50</sub> 3.8 mg/l	Daphnia	48 hours
2-Propenyl cyclohexylpropionate	Acute LC <sub>50</sub> 0.13 mg/l	Fish	96 hours
(2-methoxymethylethoxy)propanol	Acute EC <sub>50</sub> 969 mg/l	Algae - Scenedesmus subspicatus	96 hours
(2-methoxymethylethoxy)propanol	Acute LC <sub>50</sub> 1919 mg/l	Daphnia	48 hours
(2-methoxymethylethoxy)propanol	Acute LC <sub>50</sub> >10000 mg/l	Fish - Pimephales promelas	96 hours
Sodium benzoate	Acute LC <sub>50</sub> >100 mg/l	Fish	96 hours
Sodium benzoate	Acute LC <sub>50</sub> >100 mg/l	Daphnia	96 hours
Ethanol	Acute LC <sub>50</sub> >100 mg/l	Fish - Leuciscus idus	48 hours
Ethanol	Acute EC <sub>50</sub> >100 mg/l	Daphnia - Daphnia magna	48 hours
Ethanol	Acute EC <sub>50</sub> >100 mg/l	Algae - Selenastrum capricornutum	48 hours
Propane	Acute LC <sub>50</sub> 49.9 mg/l	Fish	96 hours
Propane	Acute EC <sub>50</sub> 27.1 mg/l	Daphnia - Daphnia magna	48 hours
Propane	Acute EC <sub>50</sub> 11.9 mg/l	Algae	72 hours
Isobutane	Acute LC <sub>50</sub> 27.98 mg/l	Fish	96 hours
Sodium nitrite	Acute LC <sub>50</sub> 0.94 - 1.92 mg/l	Fish - Oncorhynchus mykiss	96 hours
Sodium nitrite	Acute EC <sub>50</sub> 12.5 mg/l	Daphnia - Daphnia magna	48 hours
Sodium nitrite	Acute NOEC 100mg/l	Algae - Desmodesmus subspicatus	72 hours
2-tert-Butylcyclohexyl acetate	Acute EC <sub>50</sub> 17 mg/l	Aquatic plants	72 hours
2-tert-Butylcyclohexyl acetate	Acute EC <sub>50</sub> 17 mg/l	Daphnia	48 hours
2-tert-Butylcyclohexyl acetate	Acute LC <sub>50</sub> 1.7 mg/l	Fish	96 hours
2H-Chromen-2-one	Acute EC <sub>50</sub> 1.45 mg/l	Algae	72 hours
2H-Chromen-2-one	Acute LC <sub>50</sub> 2.94 mg/l	Fish	96 hours
2H-Chromen-2-one	Acute LC <sub>50</sub> 13500 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
4-Allyl-2-methoxyphenol	Acute EC <sub>50</sub> 23 mg/l	Aquatic plants	72 hours
4-Allyl-2-methoxyphenol	Acute EC <sub>50</sub> 1.05 mg/l	Daphnia	48 hours
4-Allyl-2-methoxyphenol	Acute LC <sub>50</sub> 24000 µg/l Fresh water	Fish - Pimephales promelas - Juvenile	96 hours

### 12.2 Persistence and degradability

Substance	Test	Result	Dose	Inoculum
Benzyl acetate	OECD 301B Ready Biodegradability - CO2 Evolution	92% - Readily - 28 days	-	-

	Test			
2-Propenyl cyclohexylpropionate	OECD 301D Ready Biodegradability - Closed bottle test	86% - Readily - 28 days	-	-
(2-methoxymethylethoxy)propanol	OECD 301E Ready Biodegradability - Modified OECD Screening Test	>70% - Readily - 28 days	-	-
2H-Chromen-2-one	OECD 301F Ready Biodegradability - Manometric Respirometry Test	90% - Readily - 28 days	-	-
4-Allyl-2-methoxyphenol	OECD 301F Ready Biodegradability - Manometric Respirometry Test	97% - Readily - 28 days	-	-

### 12.3 Bioaccumulative potential

Substance	LogP <sub>ow</sub>	BCF	Potential
Benzyl acetate	1.49	8	low
2-Propenyl cyclohexylpropionate	4.28	861	high
(2-methoxymethylethoxy)propanol	-0.35	-	low
2H-Chromen-2-one	1.39	-	low
4-Allyl-2-methoxyphenol	2.27	-	low
Ethanol	-0.35	-	low

### 12.4 Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>):  
Mobility:

Not available.  
Not available.

### 12.5 Results of PBT and vPvB assessment

PBT:  
vPvB:

Not applicable.  
Not applicable.

### 12.6 Other adverse effects:

Contains greenhouse gases not covered by 842/2006/EC. Contains greenhouse gases. When discharged in large quantities may contribute to the greenhouse effect.

#### Component information

Butane Global warming potential: 4  
Isobutane Global warming potential: 3  
Propane Global warming potential: 3

## 13. SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product:

Methods of disposal:

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of the 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 05 04	Gases in pressure containers (including halons) containing dangerous substances

Packaging:



Methods of disposal:

The generation of waste should be avoided or minimised where possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions:

Do not discharge into areas where its accumulation could be dangerous.

## 14. SECTION 14: Transport information

### 14.1 ADR/RID

UN Number: 1950  
Class: 2  
Shipping Name: Aerosols, flammable  
Packing Group: N/A  
Tunnel Code: D

### 14.2 IMDG

Marine Pollutant: No  
UN Number: 1950  
Class: 2  
Shipping Name: Aerosols  
Packing Group: N/A  
Storage Category: A

### 14.3 IATA

UN Number: 1950  
Class: 2.1  
Shipping Name: Aerosols, flammable



Label:  
Packing Group: N/A  
S.P.: A145, A167, A802  
ERG: 10L

### 14.4 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 a spillage.

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

## 15. Regulatory information

### 15.1 Safety, health and environmental regulations/legislation

#### EU Regulation (EC) No. 1907/2006 (REACH) Annex XIV – List of substances subject to authorisation

Annex XIV: None of the components are listed.  
Substances of very high concern: None of the components are listed.

#### Annex XVII – Restrictions on manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Not applicable

#### Registration status

Australian inventory (AICS): All components are listed.  
China inventory (IECSC): All components are listed.  
Japan inventory: All components are listed.  
Philippines inventory (PICCS): All components are listed.  
United States inventory (TSCA 8b): All components are listed.  
Europe inventory (EINECS/ELINCS/NLP): All components are listed.  
Canada inventory (DSL): All components are listed.

### 15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this mixture.

## 16. Other information

**Abbreviations and acronyms:**

ADR	–	Accord européen sur le transport des marchandises dangereuses par Route (European agreement concerning the International Carriage of Dangerous Goods by Road)
ATE	–	Acute Toxicity Estimate
CAS	–	Chemical Abstracts Service
CLP	–	Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL	–	Derived Minimal Effect Level
DNEL	–	Derived No Effect Level
IATA	–	International Air Transport Association
IMDG	–	International Maritime Code for Dangerous Goods
N/A	–	Not applicable
NAOEL	–	No Observable Adverse Effect Level
PBT	–	Persistent, Bioaccumulative and Toxic
PNEC	–	Predicted No Effect Concentration
PPE	–	Personal Protective Equipment
REACH	–	Registration, Authorisation and Restriction of Chemicals Regulation [Regulation (EC) No. 1907/2006]
RID	–	Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
vPvB	–	Very Persistent and Very Bioaccumulative

**Classification Procedure:**

Classification according to Regulation (EC) No. 1272/2008	Classification procedure
H222: Extremely flammable aerosol	On basis of test data

**Full text of hazard statements (EC 1272/2008) referred to in section 3:**

H220:	Extremely flammable gas.
H226:	Flammable liquid and vapour.
H272:	May intensify fire; oxidizer.
H301:	Toxic if swallowed.
H302:	Harmful if swallowed.
H304:	May be fatal if swallowed and enters airways.
H312:	Harmful in contact with skin.
H315:	Causes skin irritation.
H317:	May cause an allergic skin reaction.
H319:	Causes serious eye irritation.
H332:	Harmful if inhaled.
H335:	May cause respiratory irritation.
H373:	May cause damage to organs through prolonged or repeated exposure.
H400:	Very toxic to aquatic life.
H410:	Very toxic to aquatic life with long lasting effects.
H411:	Toxic to aquatic life with long lasting effects.
H412:	Harmful to aquatic life with long lasting effects.

**Full text of classifications (EC 1272/2008) referred to in section 3:**

Acute Tox. 3: H301	Acute toxicity, oral, category 3.
Acute Tox. 4: H302	Acute toxicity, oral, category 4.
Acute Tox. 4: H312	Acute toxicity, dermal, category 4.
Acute Tox. 4: H332	Acute toxicity, inhalation, category 4.
Aquatic Acute 1: H400	Hazardous to the aquatic environment, acute, category 1.
Aquatic Chronic 1: H410	Hazardous to the aquatic environment, chronic, category 1.
Aquatic Chronic 2: H411	Hazardous to the aquatic environment, chronic, category 2.
Aquatic Chronic 3: H412	Hazardous to the aquatic environment, chronic, category 3.
Eye Irrit. 2: H319	Eye irritation, category 2.
Flam. Gas 1: H220	Flammable gas, category 1.
Flam. Liq. 3: H226	Flammable liquid and vapour, category 3.
Ox. Sol. 3: H272	Oxidising solid, category 3.
Skin Irrit. 2: H315:	Skin irritation, category 2.
Skin Sens. 1: H317	Skin sensitizer, category 1.
Skin Sens. 1B: H317	Skin sensitizer, category 1B.
STOT RE 2:	Specific target organ toxicity, repeated exposure, category 2.
STOT SE 3 RTI: H335	Specific target organ toxicity, single exposure, category 3, respiratory tract irritation.

**Issue number:** 1

**Changes from previous issue:** New

The information given in this safety data sheet is based on the present state of knowledge and experiences but no guarantee can be given that the information is complete. It is in the customer's own interest to make sure that the information is sufficient for the purpose which the product shall be used. It is the responsibility of the user to fulfil any requirements according to current legislation.

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**End of Safety Data Sheet**