



# SAFETY DATA SHEET

## Zoflora Concentrated Disinfectant

Revision date: 24.11.16

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

#### 1.1. Product identifier

Zoflora Concentrated Disinfectant (all perfumes)

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

Household disinfectant

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

Thornton & Ross Ltd, Linthwaite, Huddersfield, HD7 5QH  
Tel: 01484 842217 Fax: 01484 847301 Email: [sds@thorntonross.com](mailto:sds@thorntonross.com)

#### 1.4. Emergency telephone number:

Out of normal working hours: +44 870 8510207

### 2. Hazards identification

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

According to Regulation EC 1272/2008 classified as Flammable Liquid Category 2, Skin Irritant Category 2, Eye Irritant Category 2, and Hazardous to Aquatic Environment, Chronic Hazard Category 3. Additionally, Sweetpea fragrance only also classified as Skin Sensitisation Category 1

#### 2.2. Label elements

GHS Pictogram



Signal Word  
**Danger**

Hazard Class

**Flammable Liquid Category 2**  
**Skin Irritant Category 2**  
**Eye Irritant Category 2**  
**Hazardous To Aquatic Environment – Chronic Hazard Category 3**

**Additional for Sweetpea only:**  
**Skin Sensitisation Category 1**

#### Hazard statements

**H225: Highly flammable liquid and vapour**  
**H319: Causes serious eye irritation**  
**H315: Causes skin irritation**  
**H412: Harmful to aquatic life with long lasting effects**

**Additional for Sweetpea only:**

**H317: May cause an allergic reaction**

#### Precautionary statements

P101: If medical advice is needed, have product container or label at hand  
P102: Keep out of reach of children  
P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking  
P280: Wear protective gloves/eye protection  
P305+351+338: IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing  
P337+313: Get medical advice/attention  
P501: Dispose of contents by pouring down drain with plenty of water. Empty containers can be disposed of by recycling where possible. Contact your local council for details.



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#### Supplemental Hazard Information

Apple Orchard: Contains limonene, benzyl salicylate and hexylcinnamaldehyde. May produce an allergic reaction.

Bluebell Woods: Contains benzyl salicylate, hexylcinnamaldehyde, limonene, citronellol and butylbenzyl propionaldehyde. May produce an allergic reaction.

Bouquet: Contains nopyl acetate, hexylcinnamaldehyde and geraniol. May produce an allergic reaction.

Citrus Fresh: Contains limonene. May produce an allergic reaction.

Country Garden: Contains benzyl salicylate, tetramethyl acetyloctahydronaphthalenes, citronellol and limonene. May produce an allergic reaction.

Cranberry and Orange: Contains limonene, cinnamaldehyde and eugenol. May produce an allergic reaction.

Green Valley: Contains pentamethylheptenone and hydrocinnamaldehyde. May produce an allergic reaction.

Hello Spring: Contains alpha-hexylcinnamaldehyde, citronellol, 2-(4-tert-butylbenzyl)propionaldehyde and delta-damascone. May produce an allergic reaction.

Honeysuckle and Jasmine: Contains (alpha-hexylcinnamaldehyde, citronellol, benzyl salicylate, limonene, 2-(4-tert-butylbenzyl)propionaldehyde, geraniol). May produce an allergic reaction.

Hyacinth: Contains hexylcinnamaldehyde, eugenol, hydroxycironellal, citronellol, phenylacetaldehyde. May produce an allergic reaction.

Lavender: Contains cineole, tetramethyl acetyloctahydronaphthalenes, limonene and pinene. May produce an allergic reaction.

Linen Fresh: Contains benzyl salicylate and tetramethyl acetyloctahydronaphthalenes. May produce an allergic reaction.

Pink Grapefruit: Contains limonene and hexylcinnamaldehyde. May produce an allergic reaction.

Rose: Contains geraniol, citronellol, benzyl salicylate, nerol and delta-damascone. May produce an allergic reaction.

Springtime: Contains citronellol, benzyl salicylate, butylphenyl methylpropional, hexyl cinnamaldehyde, amyl cinnamaldehyde. May produce an allergic reaction.

Summer Bouquet: Contains hexylcinnamaldehyde, geraniol, citronellol, butylbenzyl propionaldehyde. May produce an allergic reaction.

Summer Breeze: Contains hexylcinnamaldehyde, geraniol, citronellol, butylbenzyl propionaldehyde. May produce an allergic reaction.

Sweetpea: Contains benzylideneheptanal, hexylcinnamaldehyde, citronellol, heliotropine, cinnamyl alcohol, butylbenzyl propionaldehyde, cyclamen aldehyde, hydroxycitronallal, isoeugenol.

Twilight Garden: Contains hexylcinnamaldehyde, butylphenyl methylpropional, 4-tert-butylcyclohexyl acetate. May produce an allergic reaction.

Warm Cinnamon: Contains eugenol, cinnamaldehyde, coumarin. May produce an allergic reaction.

Winter Morning: Contains cinnamal, alpha-methylcinnamaldehyde, eugenol, cineole. May produce an allergic reaction.

Winter Spice: Contains limonene, eugenol. May produce an allergic reaction.

#### 2.3. Other hazards

None known.

### 3. Composition/information on ingredients

#### 3.2. Mixtures

<i>Substance</i>	<i>CAS- No</i>	<i>%</i>	<i>Hazard class</i>	<i>H statements</i>
Benzalkonium chloride	68424-85-1	<5	Met Corr 1, Ac Tox 4, Sk Cor 1, Aq Ac 1, Aq Ch 1	290, 312, 302, 314, 400, 410
Ethanol	64-17-5	65 - 75	Flam Liq 2	225
Methanol	67-56-1	<3	Flam Liq 2, Ac Tox 3, STOT SE 1	225, 331, 311, 301, 370
<u>Perfume:</u>	<u>N/A</u>	<u>5 - 15</u>		
Apple Orchard			Eye Irr 2, Sk Sens 1, Aq Chr 2	319, 317, 411
Bluebell woods			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Bouquet			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Citrus			Eye Irr 2, Sk Sens 1, Aq Chr 2	319, 317, 411



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Country garden	Skin Irr 2, Sk Sens 1, Aq Chr 2	315, 317, 411
Cranberry & Orange	Sk Sens 1, Aq ch 2	317, 411
Green valley	Eye Irr 2, Sk Sens 1, Aq Chr 3	319, 317, 412
Hello Spring	Eye Irr 2, Sk Sens 1, Aq Chr 2	319, 317, 411
Honeysuckle & Jasmine	Sk Irr 2, Eye Irr 2, Sk Sens 1	315, 317, 319
Hyacinth	Eye Irr 2, Sk Sens 1, Asp Tox 1, Aq Chr 2	319, 317, 304, 411
Lavender	Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 2	315, 318, 317, 411
Linen Fresh	Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Pink Grapefruit	Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Rose	Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 3	315, 318, 317, 412
Springtime	Sk Irr 2, Eye Irr 2, Sk Sens 1, Repro Tox 2, Aq Chr 2	315, 319, 317, 361f, 411
Summer bouquet	Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 2	315, 318, 317, 411
Summer breeze	Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 2	315, 318, 317, 411
Sweetpea	Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 3	315, 319, 317, 412
Twilight Garden	Sk Sens 1, Repro Tox 2, Aq Chr 2	317, 361f, 411
Warm Cinnamon	Sk Irr 2, Eye Irr 2, Sk Sens 1	315, 319, 317
Winter Morning	Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Winter Spice	Eye Irr 2, Sk Sens 1, Aq Chr 2	319, 317, 411

#### 4. First aid measures

##### 4.1. Description of first aid measures

*Eyes* –Rinse with plenty of water for at least 10 minutes, keeping the eye lids open if necessary. Get medical attention.

*Ingestion* – Wash out mouth with water and then drink plenty of water. Do not induce vomiting. Get medical attention.

*Skin* – Wash skin thoroughly with water. If irritation persists seek medical advice.

*Inhalation* –Remove from exposure and get fresh air. Get medical attention.

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

May irritate the skin and eyes. Ingestion or inhalation of large quantities may cause intoxication.

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

If not sure about any symptoms contact a doctor or emergency service.

#### 5. Fire fighting measures

##### 5.1. Extinguishing media

*Suitable extinguishing media* – water spray, foam, dry chemical or carbon dioxide.



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*Unsuitable extinguishing media* – Do not use water jet.

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

May produce carbon dioxide, carbon monoxide and alcohol fumes.

**5.3. Advice for fire-fighters**

Wear self contained breathing apparatus and protective clothing.

### 6. Accidental release measures

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

Extinguish sources of ignition. Wear appropriate protective clothing, Avoid contact with eyes and skin.

**6.2. Environmental precautions**

Prevent material entering drains and watercourses. Advise local authorities if spillage has entered watercourses and sewer.

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

Absorb onto inert material and transfer to suitable containers for disposal by a licensed waste contractor.

**6.4. Reference to other sections**

See section 8 for protective equipment requirements.

### 7. Handling and storage

**7.1. Precautions for safe handling**

Avoid contact with eyes and skin. Handle in well ventilated area to prevent build up of vapour. Avoid static discharge and sources of ignition.

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

Store in well closed containers in a cool place, away from sources of ignition.

**7.3. Specific end use(s)**

Household disinfectant

### 8. Exposure controls/personal protection

**8.1. Control parameters**

Short term exposure limit as methanol – 250ppm  
Long term exposure limit as methanol – 200ppm, as ethanol – 1000ppm.

**8.2. Exposure controls**

*Engineering Controls* – provide adequate ventilation.

*Eye/face Protection* – chemical goggles or safety glasses

*Hand protection* – Rubber gloves.

*Skin protection* – overalls must be worn when handling large quantities.

*Other protection* – none required.



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*Respiratory protection* – if ventilation is insufficient, wear respiratory protection.

#### 9. Physical and chemical properties

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

*Appearance* – clear yellow mobile liquid

*Odour* – perfumed

*pH* – not determined

*Melting Point/freezing point* – -114°C (ethanol)

*Initial boiling point and boiling range* – 78°C

(ethanol)/not determined

*Flash point* – 17°C

*Evaporation rate* – 3.4 (ethanol)

*Flammability* – highly flammable

*Decomposition temperature* – not available

*Viscosity* – 1.52 (ethanol)

*Explosive limit % (Upper)* – 19% (ethanol)

*Explosive limit % (lower)* – 3.3% (ethanol)

*Vapour pressure* – 5.81 (ethanol)

*Vapour density (air=1)* – 1.59 (ethanol)

*Relative density* – 0.85 - 0.87 @20 °C

*Solubility* – dispersible in water

*Partition coefficient* – 0.32 (ethanol)

*Auto ignition temperature* – 365°C (ethanol)

*Oxidising properties* – not determined

*Explosive properties* – not determined

##### 9.2. Other information

Not available

#### 10. Stability and reactivity

##### 10.1. Reactivity

Stable

##### 10.2. Chemical stability

Stable

##### 10.3. Possibility of hazardous reactions

Possible reactions with nitric acid, sulphuric acid and oxidising agents.

##### 10.4. Conditions to avoid

Avoid high temperature, static discharge and ignition sources.

##### 10.5. Incompatible materials

Acids, oxidising agents.

##### 10.6. Hazardous decomposition products

None known

#### 11. Toxicological information

##### 11.1. Information on toxicological effects

*Acute toxicity* – LD50 (oral rat) 6200 – 17800mg/kg – ethanol

LD50 (oral rat) 795mg/kg – benzalkonium chloride

*Skin corrosion/irritation* – May irritate skin

*Serious eye damage/irritation* – May irritate eyes

*Respiratory or skin sensitisation* – Some perfumes may cause sensitisation by skin contact



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*Germ cell mutagenicity* – data not available

*Carcinogenicity* – data not available

*Reproductive toxicity* – data not available

*STOT-single exposure* – data not available

*STOT-repeated exposure* – data not available

*Aspiration hazard* – data not available

#### 12. Ecological information

##### 12.1. Toxicity

LC50 – 1 - 10 mg/l 96h (fish), EC50 - <1mg/l 48h (daphnia) for benzalkonium chloride

##### 12.2. Persistence and degradability

Data not available.

##### 12.3. Bioaccumulative potential

Data not available.

##### 12.4. Mobility in soil

Data not available.

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

Data not available

##### 12.6. Other adverse effects

N/A

#### 13. Disposal considerations

##### 13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. This material and its container must be disposed as hazardous waste.

#### 14. Transport information

##### 14.1. UN number

1170

##### 14.2. UN proper shipping name

Ethanol Solution (Ethyl Alcohol Solution)

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

3

##### 14.4. Packing group

II

##### 14.5. Environmental hazards

Not a marine pollutant.



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**14.6. Special precautions for user**

N/A

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

N/A

**15. Regulatory information**

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

Not regulated by specific legislation.

**15.2. Chemical Safety Assessment**

Not available

**16. Other information**

**16.1. Reason for change**

Update to perfume sensitiser list.

**16.2. Source of information**

Ingredient safety data sheets

**16.3 Risk phrases and hazard statements from section 3**

H290 May be corrosive to metals  
H225 Highly flammable liquid and vapour  
H301 Toxic if swallowed  
H302 Harmful if swallowed  
H304 May be fatal if swallowed and enters airways  
H311 Toxic in contact with skin  
H312 Harmful in contact with skin  
H314 Causes severe skin burns and eye damage  
H315 Causes skin irritation  
H317 May cause an allergic skin reaction  
H318 Causes serious eye damage  
H319 Causes serious eye irritation  
H331 Toxic if inhaled  
H361f Suspected of damaging fertility  
H370 Causes 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