

SAFETY DATA SHEET

Zoflora Concentrated Disinfectant

Revision date: 30.11.17

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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

1.4. Emergency telephone number:

Out of normal working hours: +44 (0)1484 848164

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 linalool, 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, linalool and limonene. May produce an allergic reaction.

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

Festive Fireside: Contains 4-tert-butylcyclohexyl acetate, limonene, eugenol, tetramethyl acetyloctahydronaphthalenes, cinnamaldehyde. May produce an allergic reaction.

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

Hello Spring: Contains hexylcinnamaldehyde, citronellol, butylbenzyl propionaldehyde and delta-damascone. May produce an allergic reaction.

Honeysuckle and Jasmine: Contains (hexylcinnamaldehyde, citronellol, benzyl salicylate, limonene, linalool, 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, linalool, limonene, pinene and hydroxyisohexyl 3-cyclohexene carboxaldehyde. May produce an allergic reaction.

Lavender Escape: Contains citronellol, geraniol, limonene, nerol, cineole and linalool. May produce an allergic reaction.

Lemon Zing: Contains linalool, citral and geraniol. May produce an allergic reaction.

Linen Fresh: Contains linalool, benzyl salicylate, and tetramethyl acetyloctahydronaphthalenes and hydroxyisohexyl 3-cyclohexene carboxaldehyde. May produce an allergic reaction.

Merry Berry: Contains limonene, and citronellol. May produce an allergic reaction.

Pink Grapefruit: Contains linalool, 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 benzyl salicylate, linalool, citronellol, hexyl-cinnamaldehyde, butylbenzyl propionaldehyde and amyl cinnamaldehyde. May produce an allergic reaction.

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

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

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

Twilight Garden: Contains hexylcinnamaldehyde, butylbenzyl propionaldehyde, 4-tert-butylcyclohexyl acetate, linalool and hydroxyisohexyl 3-cyclohexene carboxaldehyde. May produce an allergic reaction.

Very Berry: Contains limonene, and citronellol. May produce an allergic reaction.

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

Winter Morning: Contains cinnamaldehyde, linalool, alpha-methylcinnamaldehyde, eugenol, cineole and isolongifolanone. May produce an allergic reaction.

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

2.3. Other hazards

None known.



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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 Fresh			Eye Irr 2, Sk Sens 1, Aq Chr 2	319, 317, 411
Country garden			Skin Irr 2, Sk Sens 1, Aq Chr 2	315, 317, 411
Cranberry & Orange			Sk Sens 1, Aq ch 2	317, 411
Festive Fireside			Eye Irr 2, Sk Sens 1, Aq Chr 3	319, 317, 412
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
Lavender Escape			Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 2	315, 318, 317, 411
Lemon Zing			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Linen Fresh			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Merry Berry			Sk Irr 2, Sk Sens 1, Aq Chr 2	315, 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
Very Berry			Sk Irr 2, Sk Sens 1, Aq Chr 2	315, 317, 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



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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.

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.



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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.

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



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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

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.



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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.

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



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16. Other information

16.1. Reason for change

Addition of new fragrance.

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