

SAFETY DATA SHEET

SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1. Product Identifier

Zoflora Concentrated Disinfectant (All Perfumes) – 9405771

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

Household disinfectant.

1.3. Details of supplier of the safety data sheet

Supplier name: Thornton & Ross Ltd
Supplier address: Linthwaite, Huddersfield, HD7 5QH
Telephone: +44 (0) 1484 842 217
Fax: +44 (0) 1484 847 301
Email: sds@thorntonross.com

1.4. Emergency telephone number

Telephone: +44 (0) 1484 848 164
Available: Out of working hours

SECTION 2: Hazards Identification

2.1. Classification of the substance or mixture

According to Regulation (EC) No. 1272/2008 (CLP) the mixture is 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 is also classified as Skin Sensitisation Category 1.

2.2. Label elements



Pictogram(s):

Signal Word: Danger

Hazard Classification: Flammable Liquid Category 2
Skin Irritant Category 2
Eye Irritant Category 2
Hazardous to Aquatic Environment Chronic Category 3

Additional for Sweetpea only: Skin Sensitisation Category 1

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

Additional for Sweetpea only: H317: May cause 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: IN IN EYES – rinse continuously with water for several minutes, remove contact lenses if present and easy to do so – 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.

EUH Statements: EUH208: Contains (see section 2.2.1). May produce an allergic reaction.

2.2.1 Supplemental Hazard Information Relating to Perfumes

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, cedrol methyl ether and geraniol. May produce an allergic reaction.
Citrus Fresh:	Contains limonene. May produce an allergic reaction.
Coconut and Lime	Contains hexylcinnamaldehyde, linalool and delta-damascone. 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.
Fig & Cedar:	Contains Cinnamaldehyde, linalool, hexylcinnamaldehyde and citronellol. May produce an allergic reaction.
Green Valley:	Contains Linalool, pentamethylheptenone and 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 and geraniol. May produce an allergic reaction.
Hyacinth:	Contains hexylcinnamaldehyde, eugenol, hydroxycitronellal, citronellol and 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, tetramethyl acetyloctahydronaphthalenes and hydroxyisohexyl 3-cyclohexene carboxaldehyde. May produce an allergic reaction.
Mandarin & Lime:	Contains linalool, limonene, hexylcinnamaldehyde and linalyl acetate. May produce an allergic reaction.
Midnight Blooms:	Contains linalool and longifolene. May produce an allergic reaction.
Paradise Peach:	Contains citronellol, limonene, linalool, nerol and hexylcinnamaldehyde. May produce an allergic reaction.

Peony Blush:	Contains d-damascone, hexylcinnamaldehyde, linalool, citronellol, limonene and butylphenyl methylpropional. May produce an allergic reaction.
Pink Grapefruit:	Contains linalool, limonene and hexylcinnamaldehyde. May produce an allergic reaction.
Rhubarb & Bergamot	Contains linalool, limonene, linalyl acetate and geraniol. May produce an allergic reaction.
Rose:	Contains geraniol, citronellol, benzyl salicylate, nerol and delta-damascone. May produce an allergic reaction.
Rose Noir	Contains d-damascone, hexylcinnamaldehyde, linalool, butylphenyl methylpropional, citronellol and tetramethyl acetyloctahydronaphthalenes. May produce an allergic reaction.
Secret Garden:	Contains linalool, geraniol and tetramethyl acetyloctahydronaphthalenes. May produce an allergic reaction.
Sparkling Spruce:	Contains 4-tert-butylcyclohexyl acetate and pentamethylheptenone. May produce an allergic reaction.
Springtime:	Contains benzyl salicylate, linalool, citronellol, hexylcinnamaldehyde, butylbenzyl propionaldehyde and amyl cinnamaldehyde. May produce an allergic reaction.
Summer Berries:	Contains linalool. May produce an allergic reaction.
Summer Bouquet:	Contains hexylcinnamaldehyde, geraniol, citronellol, linalool and butylbenzyl propionaldehyde. May produce an allergic reaction.
Summer Breeze:	Contains hexylcinnamaldehyde, geraniol, citronellol, linalool and butylbenzyl propionaldehyde. May produce an allergic reaction.
Sweetpea:	Contains linalool, benzylideneheptanal, hexylcinnamaldehyde, citronellol, heliotropine, cinnamyl alcohol, butylbenzyl propionaldehyde, cyclamen aldehyde, hydroxycitronellal, isoeugenol and hydroxymethylpentylcyclohexenecarboxaldehyde. May produce an allergic reaction.
Tropical Twist:	Contains hexylcinnamaldehyde, linalool and delta-damascone. May produce an allergic reaction.
Twilight Garden:	Contains hexylcinnamaldehyde, butylbenzyl propionaldehyde, 4-tert-butylcyclohexyl acetate, linalool, cedrol methyl ether 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 and 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

SECTION 3: Composition/Information on Ingredients

3.2. Mixtures

Hazardous Ingredient(s)	%w/w	CAS no EC/List no REACH reg. no	Hazard Classification	H Statements
<i>Zoflora Base</i>				
Ethanol 9002380	65-75%	64-17-5 200-578-6 01-2119457610-43-xxxx	Flam Liq 2	225
Benzalkonium chloride 9002397	<3%	68424-85-1 270-325-2 01-2119983287-23-xxxx	Ac Tox 4, Sk Cor 1B, Eye Dam 1, Aq Ac 1, Aq Chr 1	302, 314, 318, 400, 410
Methanol (denaturant for Ethanol) 9002380	<3%	67-56-1 200-659-6 01-2119433307-44-xxxx	Flam Liq 2, Ac Tox 3, STOT SE 1	225, 301, 311, 331, 370
<i>Zoflora Perfume Compounds</i>				
Perfume compounds (see below)	1-15	N/A		
Apple Orchard 9002539			Eye Irr 2, Sk Sens 1, Aq Chr 2	319, 317, 411
Bluebell Woods 9002535			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Bouquet 9002918			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Citrus Fresh 9002532			Eye Irr 2, Sk Sens 1, Aq Chr 2	319, 317, 411
Coconut and Lime 9002774			Sk Sens 1, Aq Acu 1, Aq Chr 2	317, 400, 411
Country Garden 9002922			Skin Irr 2, Sk Sens 1, Aq Chr 2	315, 317, 411
Cranberry & Orange 9002554			Sk Sens 1, Aq Chr 2	317, 411
Fig & Cedar 9002894			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Green Valley 9002695			Eye Irr 2, Sk Sens 1, Aq Chr 3	319, 317, 412
Hello Spring 9002555			Eye Irr 2, Sk Sens 1, Aq Chr 2	319, 317, 411
Honeysuckle & Jasmine 9002441			Sk Irr 2, Eye Irr 2, Sk Sens 1	315, 317, 319

Hazardous Ingredient(s)	%w/w	CAS no EC/List no REACH reg. no	Hazard Classification	H Statements
Hyacinth 9002401			Eye Irr 2, Sk Sens 1, Asp Tox 1, Aq Chr 2	319, 317, 304, 411
Lavender 9002473			Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 2	315, 318, 317, 411
Lavender Escape 9002676			Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 2	315, 318, 317, 411
Lemon Zing 9002677			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Linen Fresh 9002915			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Mandarin & Lime 9002797			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Midnight Blooms 9002796			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Paradise Peach 9002775			Sk Irr 2, Sk Sens 1, Eye Dam 1, Aq Chr 2	315, 317, 318, 411
Peony Blush 9002891			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Pink Grapefruit 9002536			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Rhubarb & Bergamot 9002893			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Rose 9002469			Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 3	315, 318, 317, 412
Rose Noir 9002895			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Secret Garden 9002795			Sk Irr 2, Sk Sens 1, Eye Dam 1, Aq Chr 2	315, 317, 318, 411
Sparkling Spruce 9002858			Sk Sens 1, Aq Chr 2	317, 411
Springtime 9002537			Sk Irr 2, Eye Irr 2, Sk Sens 1, Repro Tox 2, Aq Chr 2	315, 319, 317, 361f, 411
Summer Berries 9002794			Sk Sens 1	317
Summer Bouquet 9002538			Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 2	315, 318, 317, 411

Hazardous Ingredient(s)	%w/w	CAS no EC/List no REACH reg. no	Hazard Classification	H Statements
Summer Breeze 9002538			Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 2	315, 318, 317, 411
Sweetpea 9002439			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 3	315, 319, 317, 412
Tropical Twist 9002774			Sk Sens 1, Aq Acu 1, Aq Chr 2	317, 400, 411
Twilight Garden 9002529			Sk Irr 2, Sk Sens 1, Repro Tox 2, Aq Chr 2	315, 317, 361f, 411
Very Berry 9002759			Sk Irr 2, Sk Sens 1, Aq Chr 2	315, 317, 411
Warm Cinnamon 9002540			Sk Irr 2, Eye Irr 2, Sk Sens 1	315, 319, 317
Winter Morning 9002549			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Winter Spice 9002913			Eye Irr 2, Sk Sens 1, Aq Chr 2	319, 317, 411

*Full text of H-Phrases can be found in Section 16.3

SECTION 4: First Aid Measures

4.1. Description of first aid measures

- If inhaled: Remove from exposure and get fresh air. Get medical attention.
- If on skin: Wash skin thoroughly with water. If irritation persist seek medical advice.
- If in eyes: Rinse with plenty of water for at least 10 minutes, keeping the eyelids open if necessary. Get medical attention.
- If swallowed: Wash out mouth with water and then drink plenty of water. Do not induce vomiting. Get medical attention.
- Other first aid advice: Not applicable.

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

- If inhaled: Inhaling large quantities may cause intoxication.
- If on skin: May irritate skin.
- If in eyes: May irritate eyes.
- If swallowed: Swallowing large quantities may cause intoxication.

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

- Medical treatment: If not sure about any symptoms contact a doctor or emergency services.

SECTION 5: Firefighting 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 firefighters

Wear self-contained breathing apparatus and protective clothing.

SECTION 6: Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Non-emergency personnel: Wear appropriate protective clothing (see Section 8). Avoid contact with eyes and skin.

Emergency personnel: Extinguish sources of ignition. Wear appropriate protective clothing (see Section 8). Avoid contact with eyes and skin.

6.2. Environmental precautions

Prevent non-dilute 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.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Handling: Avoid contact with eyes and skin. Handle in well-ventilated area to prevent buildup of vapour. Avoid static discharge and sources of ignition.

Hygiene: Do not eat, drink or smoke while using this product. Wash hands thoroughly after use.

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.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Substance	CAS no EC/List no REACH reg. no	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m ³)	STEL (ppm)	STEL (mg/m ³)	Note
Ethanol 9002380	64-17-5 200-578-6 01-2119457610-43- xxxx	1000	-	-	-	
Methanol (denaturant for Ethanol)	67-56-1 200-659-6	200	-	250	-	

9002380	01-2119433307-44-XXXX					
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8.2. Exposure controls

Engineering controls:	Provide adequate ventilation
Eye protection:	Chemical goggles or safety glasses
Face protection:	Not applicable
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
Thermal hazards:	None known
Environmental controls:	See Section 6.2

SECTION 9: Physical and Chemical Properties

9.1. Information on basic chemical and physical properties

Appearance:	Clear yellow mobile liquid
Odour:	Perfumed
Odour threshold:	Not determined
PH:	Not determined
Melting/freezing point:	-114°C (Ethanol)
Initial boiling point:	78°C (Ethanol)
Boiling range:	Not determined
Flash point:	17°C
Evaporation rate:	3.4 (Ethanol)
Flammability:	Highly flammable
Decomposition temperature:	Not available
Viscosity:	1.52 (Ethanol)
Upper explosive limit:	19% (Ethanol)
Lower explosive limit:	3.3% (Ethanol)
Vapour pressure:	5.81 (Ethanol)
Vapour density (Air=1):	1.59 (Ethanol)
Relative density:	0.85-0.87 at 20°C
Solubility:	Dispersible in water

Partition coefficient:	0.32 (Ethanol)
Auto ignition temperature:	365°C
Oxidizing properties:	Not determined
Explosive properties:	Not determined

9.2. Other information

Not available.

SECTION 10: Stability and Reactivity

10.1. Reactivity

Stable

10.2. Chemical stability

Stable

10.3. Possibility of hazardous reactions

Possible reaction 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

SECTION 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

11.2. Other information

N/A

SECTION 12: Ecological Information**12.1. Toxicity**

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

SECTION 13: Disposal Considerations**13.1. Waste treatment methods**

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

SECTION 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

Additional Information:

Product can be transported as Limited Quantity if less than 1 litre receptacle and packed in cardboard boxes up to a 30kg gross mass or shrink-wrapped trays up to a gross mass of 20kg.

SECTION 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

SECTION 16: Other Information

16.1. Reason for change

Update to perfume compounds for Bouquet (CRN 17488), Country Garden (CRN 17487), Linen Fresh (CRN 17489) & Winter Spice (CRN 17491)

16.2. Sources of information

Ingredient safety data sheet(s), C&L Inventory and REACH Dossiers.

16.3. Full text of H phrases from section 3

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
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

16.4. Method of evaluation

Hazards for mixture calculated in accordance with Regulation (EC) No. 1272/2008 (CLP) using the information provided for constituents (ingredients).