

# 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.
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.
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, dipentene 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.
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.

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.
Springtime Fresh:	Contains linalyl acetate, butylphenyl methylpropional, linalool, hexyl cinnamaldehyde, citronellol, geraniol, dimethylcyclohex-3-ene-1-carbaldehyde 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 9002534			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
Country Garden 9002531			Skin Irr 2, Sk Sens 1, Aq Chr 2	315, 317, 411
Cranberry & Orange 9002554			Sk Sens 1, Aq Chr 2	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
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 9002533			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
Pink Grapefruit 9002536			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
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
Springtime Fresh 9002793			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
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 9002530			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 persists 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.
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**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 <sup>3</sup> )	STEL (ppm)	STEL (mg/m <sup>3</sup> )	Note
Ethanol 9002380	64-17-5 200-578-6 01-2119457610-43- xxxx	1000	-	-	-	
Methanol (denaturant for Ethanol) 9002380	67-56-1 200-659-6 01-2119433307-44- xxxx	200	-	250	-	

### 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**

Addition of new perfume compound.

**16.2. Sources of information**

Ingredient safety data sheet(s), C&amp;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).