SAFETY DATA SHEET

Compiled in accordance with REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758

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 (GB-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.

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

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

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

Blackcurrant & Jasmine:	Contains 4-tert-butylcyclohexyl acetate, linalool, linalyl acetate and hydroxycitronellol. May produce an allergic reaction.
Bluebell Woods:	Contains linalool, benzyl salicylate, hexylcinnamaldehyde, limonene, and citronellol. May produce an allergic reaction.
Bouquet:	Contains nopyl acetate, hexylcinnamaldehyde, geraniol, cedryl methyl ether and linalyl acetate. 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 and citronellol. May produce an allergic reaction.
Cranberry and Orange:	Contains limonene, eugenol, coumarin and ethyl 2,3-epoxy-3-phenylbutyrate. May produce an allergic reaction.
Cucumber & Mint	Containsmhexylcinnamaldehyde, linalool, geraniol, tetramethyl acetyloctahydronaphthalenes, citronellol, menthone, geranyl acetate and hexyl salicylate. May produce an allergic reaction.
Cypress and Sea Sage:	Contains linalool, limonene, and benzyl salicylate. May produce an allergic reaction.
Fig & Cedar:	Contains Cinnamaldehyde, linalool, hexylcinnamaldehyde and citronellol. May produce an allergic reaction.
Fir Needle & Amber:	Contains limonene and 4-tert-butylcyclohexyl acetate. May produce an allergic reaction.
Frosted Peppermint:	Contains linalool and trans-menthone. 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.
Lavender:	Contains linalyl acetate, cineole, Tetrahydrolinalool, tetramethyl acetyloctahydronaphthalenes, linalool and limonene. 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 linalyl acetate. May produce an allergic reaction.
Mandarin & Lime:	Contains linalool, limonene, hexylcinnamaldehyde, linalyl acetate and dihydromyrcrene. May produce an allergic reaction.
Midnight Blooms:	Contains linalool and longifolene. May produce an allergic reaction.

Orchard Pear:	Contains linalool, hexylcinnamaldehyde, limonene and cyclamen aldehyde. May produce an allergic reaction.
Paradise Peach:	Contains citronellol, limonene, linalool, nerol and hexylcinnamaldehyde. May produce an allergic reaction.
Peony Blush:	Contains hexylcinnamaldehyde, citronellol, linalool, dipentene, geraniol and d-damascone. May produce an allergic reaction.
Pink Grapefruit:	Contains linalool, limonene and hexylcinnamaldehyde. May produce an allergic reaction.
Raspberry & Juniper Berry:	Contains linalool, tetramethyl acetyloctahydronaphthalenes, hexyl cinnamal, citronellol and tetrahydrolinalool. May cause an allergic reaction.
Rhubarb & Bergamot	Contains linalool, limonene, linalyl acetate, geraniol and citronellol. May produce an allergic reaction.
Rhubarb & Cassis	Contains 4-tert-butylcyclohexyl acetate, benzyl salicylate, linalyl acetate, hexyl salicylate, limonene and bis(cyclohexylmethyl)ether. May cause an allergic reaction.
Rose Noir	Contains d-damascone, hexylcinnamaldehyde, linalool, citronellol and tetramethyl acetyloctahydronaphthalenes. May produce an allergic reaction.
Secret Garden:	Contains linalool, geraniol, tetramethyl acetyloctahydronaphthalenes and eugenol. May produce an allergic reaction.
Sparkling Spruce:	Contains 4-tert-butylcyclohexyl acetate and pentamethylheptenone. May produce an allergic reaction.
Spiced Plum:	Contains linalool, hexylcinnamaldehyde and tetramethyl acetyloctahydronaphthalenes. May produce an allergic reaction.
Springtime Fresh:	Contains linalyl acetate, linalool, hexyl cinnamaldehyde, amyl cinnamaldehyde, citronellol, geraniol, cyclamen aldehyde, butylphenyl methylpropional and dimethylcyclohex-3-ene-1-carbaldehyde. May produce an allergic reaction.
Summer Berries:	Contains linalool. May produce an allergic reaction.
Summer Breeze:	Contains hexylcinnamaldehyde, geraniol, citronellol, linalool and butylbenzyl propionaldehyde. May produce an allergic reaction.
Sweet Pea:	Contains geraniol, linalool, ethyl linalool, citronellol, nerol, and benzyl salicylate. May produce an allergic reaction.
Twilight Garden:	Contains hexylcinnamaldehyde, butylbenzyl propionaldehyde, 4-tert-butylcyclohexyl acetate, linalool, cedrol methyl ether, butylphenyl methylpropional and hydroxyisohexyl 3-cyclohexene carboxaldehyde. May produce an allergic reaction.
Vanilla & Amber:	Contains linalool, linalyl acetate, hexyl cinnamal, coumarin, limonene, tetramethyl acetyloctahydronaphthalenes. May produce an allergic reaction.
Velvet Poppy:	Contains linalool, citronellol, geraniol, linalyl acetate and d-damascone. May produce an allergic reaction.
Very Berry:	Contains limonene and citronellol. May produce an allergic reaction.
Violet & Mimosa:	Contains linalool, benzyl salicylate, hexylcinnamaldehyde, limonene, citronellol and butylbenzyl propionaldehyde. May produce an allergic reaction.

White Blossoms: Contains linalool, hexylcinnamaldehyde, benzyl salicylate, citronellol, cyclamen aldehyde and limonene. 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. 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
Zoflora Base				
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
Zoflora Perfume Compounds				
Perfume compounds (see below)	1-15	N/A		
Blackcurrant & Jasmine *6030881*			Sk Sens 1, Eye Irr 2, Aq Chr 3	317 319 412
Bluebell Woods *6064000*			Eye Irr 2, Sk Sens 1, Aq Chr 2	319, 317, 411
Bouquet *6099674*			Eye Irr 2, Sk Sens 1, Aq Chr 2	319, 317, 411
Coconut and Lime *5613562*			Sk Sens 1, Aq Acu 1, Aq Chr 2	317, 400, 411
Country Garden *6064542*			Sk Sens 1, Aq Chr 2	317, 411
Cranberry & Orange *5221953*			Sk Sens 1, Aq Chr 2	317, 411
Cucumber & Mint *6030551*			Sk Irr 2, Sk Sens 1, Eye Dam 1, Aq Chr 2	315, 317, 318, 411
Cypress & Sea sage *6030611*			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411

Hazardous Ingredient(s)	%w/w	CAS no EC/List no REACH reg. no	Hazard Classification	H Statements
Fig & Cedar *5980698*			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Fir Needle & Amber *6044705*			Sk Sens 1, Aq Chr 2	317, 411
Frosted Peppermint *5914833*			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Green Valley *5559542*			Eye Irr 2, Sk Sens 1, Aq Chr 3	319, 317, 412
Hello Spring *5569920*			Eye Irr 2, Sk Sens 1, Aq Chr 2	319, 317, 411
Honeysuckle & Jasmine *5521878*			Sk Irr 2, Eye Irr 2, Sk Sens 1	315, 317, 319
Lavender *6099678*			Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 2	315, 318, 317, 411
Lavender Escape *5582245*			Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 2	315, 318, 317, 411
Lemon Zing *5599692*			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Linen Fresh *6012184*			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 3	315, 319, 317, 412
Mandarin & Lime *5907978*			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Midnight Blooms *6091999*			Eye Irr 2, Sk Sens 1, Aq Chr 2	319, 317, 411
Orchard Pear *5912619*			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Paradise Peach *5608060*			Sk Irr 2, Sk Sens 1, Eye Dam 1, Aq Chr 2	315, 317, 318, 411
Peony Blush 6064311			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Pink Grapefruit *5944766*			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Raspberry & Juniper Berry 6030550			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Rhubarb & Bergamot *5942576*			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411

Hazardous Ingredient(s)	%w/w	CAS no EC/List no REACH reg. no	Hazard Classification	H Statements
Rhubarb & Cassis *6030612*			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Rose Noir *5913038*			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Secret Garden *5677233*			Sk Irr 2, Sk Sens 1, Eye Dam 1, Aq Chr 2	315, 317, 318, 411
Sparkling Spruce *5908491*			Sk Sens 1, Aq Chr 2	317, 411
Spiced Plum *5912620*			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Springtime Fresh *6031046*			Sk Irr 2, Eye Irr 2, Sk Sens 1, Repro Tox 2, Aq Chr 2	315, 319, 317, 361f, 411
Summer Berries *5676253*			Sk Sens 1	317
Summer Breeze *5370749*			Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 2	315, 318, 317, 411
Sweet Pea 6048755			Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 2	315, 318, 319, 411
Twilight Garden *5517821*			Sk Irr 2, Sk Sens 1, Repro Tox 2, Aq Chr 2	315, 317, 361f, 411
Vanilla & Amber *5517821*			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Velvet Poppy *6031062*			Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 2	315, 318, 317, 411
Very Berry *5613628*			Sk Irr 2, Sk Sens 1, Aq Chr 2	315, 317, 411
Violet & Mimosa *5938899*			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
White Blossoms *5943665*			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Winter Morning *5528502*			Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2	315, 319, 317, 411
Winter Spice *6012451*			Sk Sens 1	317

***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) *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, sulfuric 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
Updates to fragrances; Bluebell woods, Bouquet, Country Garden, Linen fresh, Lavender, Midnight blooms, Peony blush, Vanilla & amber and Winter spice. Removal of fragrances; Summer bouquet, Tropical twist and Warm cinnamon. Change to include all the fragrance codes to identify which mod it is. General layout corrections.

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 (GB-CLP) using the information provided for constituents (ingredients).