**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, citronellol, and lilial, May produce an allergic reaction.

Bouquet: Contains nopyl acetate, hexylcinnamaldehyde, geraniol, cedryl methyl ether, linalyl acetate and linalool. May produce an allergic reaction.

Coastal Waves: Contains linalyl acetate, linalool, limonene, tetramethyl acetyloctahydronaphthalenes, citronellol and d-damascone. May produce an allergic reaction.

Coconut and Lime: Contains hexylcinnamaldehyde, linalool and d-damascone. May produce an allergic reaction.

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

Cranberry and Orange: Contains d-limonene, eugenol, tetrahydrolinalool, coumarin and cinnamaldehyde. May produce an allergic reaction.

Cucumber & Mint Contains hexylcinnamaldehyde, 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 linalool, hexylcinnamaldehyde, linalyl acetate, tetramethyl acetyloctahydronaphthalenes, citronellol and cinnamaldehyde. May produce an allergic reaction.

Fir Needle & Amber: Contains limonene and methyl cedryl ketone, eugenol and cinnamaldehyde. May produce an allergic reaction.

Frosted Peppermint: Contains linalool and trans-menthone. 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 Bloom: Contains linalool, hexylcinnamaldehyde, benzyl salicylate, citronellol, cyclamen aldehyde and limonene. May produce an allergic reaction.

Lavender: Contains linalyl acetate, cineole, dihydromyrcene, methyl cedryl ketone, 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 and linalyl acetate. May produce an allergic reaction.

Midnight Blooms: Contains linalool, longifolene and benzyl salicylate. May produce an allergic reaction.

Mountain Air: Contains dihydromyrcene, linalool, hexylcinnamaldehyde, cineole and limonene. May cause an allergic reaction.

Peony Blush: Contains hexylcinnamaldehyde, citronellol, linalool, d-lemonene, 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, hexylcinnamaldehyde, citronellol, tetrahydrolinalool and d-damascone. May cause 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 hexylcinnamaldehyde, linalool, 4-tert-butylcyclohexyl acetate, citronellol, tetramethyl acetyloctahydronaphthalenes and d-damascone. May produce an allergic reaction.

Springtime Fresh: Contains linalyl acetate, linalool, hexyl cinnamaldehyde, amyl cinnamaldehyde, citronellol, geraniol and cyclamen aldehyde. May produce an allergic reaction.

Summer Berries: Contains linalool. May produce an allergic reaction.

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

Sunshine Escapes: Contains hexylcinnamaldehyde, benzyl salicylate, d-limonene, linalool, 4-tert-butylcyclohexyl acetate, linalyl acetate, tetramethyl acetyloctahydronaphthalenes and citronellol. May produce an allergic reaction.

Sweet Orchard: Contains linalool, hexylcinnamaldehyde, geranyl acetate, limonene, geraniol and cyclamen aldehyde. May produce an allergic reaction.

Sweet Pea: Contains geraniol, linalool, dihydromyrcene, citronellol, nerol, and benzyl salicylate. May produce an allergic reaction.

Tropical Palms: Contains linalool and d-limonene. May cause an allergic reaction.

Vanilla & Amber: Contains linalool, linalyl acetate, hexylcinnamaldehyde, methyl cedryl ketone, limonene, coumarin. May produce an allergic reaction.

Velvet Poppy: Contains linalool, citronellol, geraniol, linalyl acetate and d-damascone. May produce an allergic reaction.

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

Winter Spice: Contains d-limonene and 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* | 55-65% | 64-17-5  200-578-6  01-2119457610-43-xxxx | Flam Liq 2 | 225 |
| Benzalkonium chloride  *9002397* | <2% | 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*  *no further production, still selling through finished stock* |  |  | Sk Sens 1, Eye Irr 2, Aq Chr 3 | 317 319 412 |
| Bluebell Woods  *5506664*  *international only fragrance, under review for new mod* |  |  | Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2 | 315, 319, 317, 411 |
| Bouquet  *6099674* |  |  | Eye Irr 2, Sk Sens 1, Aq Chr 2 | 319, 317, 411 |
| Coastal Waves  *5914814* |  |  | Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2 | 315, 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  *6142871* |  |  | Sk Sens 1, Aq Chr 2 | 317, 411 |
| Cucumber & Mint  *6030551*  *no further production, still selling through finished stock* |  |  | 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 |
| Fig & Cedar  *5980698*  *under review for discontinuation* |  |  | Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2 | 315, 319, 317, 411 |
| Fir Needle & Amber  *6044705*  *no further production, still selling through finished stock* |  |  | Sk Sens 1, Aq Chr 2 | 317, 411 |
| Frosted Peppermint  *5914833*  *no further production, still selling through finished stock* |  |  | Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 3 | 315, 319, 317, 412 |
| Honeysuckle & Jasmine  *5521878* |  |  | Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2 | 315, 317, 319, 411 |
| Hyacinth Bloom  *5943665* |  |  | Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2 | 315, 319, 317, 411 |
| Lavender  *6099678* |  |  | 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  *6153909* |  |  | Eye Irr 2, Sk Sens 1, Aq Chr 2 | 319, 317, 411 |
| Mountain Air  *6064577* |  |  | Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2 | 315, 319, 317, 411 |
| Peony Blush  6156457  *new mod code progressing* |  |  | 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 & Cassis  *6030612* |  |  | Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2 | 315, 319, 317, 411 |
| Rose Noir  *5913038*  *international only fragrance, under review for new mod* |  |  | 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, Aq Chr 2 | 315, 319, 317, 411 |
| Summer Berries  *5676253* |  |  | Sk Sens 1 | 317 |
| Summer Breeze  *5370749*  *new mod required for international* |  |  | Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 2 | 315, 318, 317, 411 |
| Sunshine Escape  6098406 |  |  | Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 3 | 315, 319, 317,412 |
| Sweet Orchard  *5912619* |  |  | Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2 | 315, 319, 317, 411 |
| Sweet Pea  6048755 |  |  | Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 2 | 315, 318, 317, 411 |
| Tropical Palms  *6129350* |  |  | Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 2 | 315, 318, 317, 411 |
| Vanilla & Amber  *6002582* |  |  | Sk Irr 2, Eye Irr 2, Sk Sens 1, Aq Chr 2 | 315, 319, 317, 411 |
| Velvet Poppy  *6031062*  *no further production, still selling through finished stock* |  |  | Sk Irr 2, Eye Dam 1, Sk Sens 1, Aq Chr 2 | 315, 318, 317, 411 |
| Winter Morning  *6143592* |  |  | Sk Sens 1, Aq Chr 3 | 317, 412 |
| Winter Spice  *6142872*  *new mod code progressing* |  |  | Sk Sens 1, Aq Chr 2 | 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/m3)** | **STEL (ppm)** | **STEL (mg/m3)** | **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**

Winter morning hazards and allergens edited for new mod, cranberry and orange allergens edited for new mod.

**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

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).