



SAFETY DATA SHEET

Zoflora Concentrated Disinfectant

Revision date: 15.08.11

SDS/896/4

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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 7772 316898

2. Hazards identification – Apple Orchard

2.1. Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC classified as Highly flammable, Harmful in contact with skin and if swallowed,

2.2. Label elements

Pictogram



Hazard Class

Flammable, Harmful

Risk phrases

R11 Highly flammable

R21/22 Harmful in contact with skin and if swallowed

R52/53 Harmful to aquatic organisms may cause long-term adverse effects in the aquatic environment.

Safety phrases

S2 Keep out of reach of children

S16 Keep away from sources of ignition – No smoking

S36/37 Wear suitable protective clothing and gloves

S46 If swallowed seek medical advice immediately and show this container or label

2.3. Other hazards

Contains limonene. May produce an allergic reaction.

2. Hazards identification - Bouquet

2.1. Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC classified as Highly flammable, Harmful in contact with skin and if swallowed, Irritating to eyes and skin, Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

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2.2. Label elements

Pictogram



Hazard Class

Flammable, Harmful, Irritant

Risk phrases

R11 Highly flammable
R21/22 Harmful in contact with skin and if swallowed
R36/38 Irritating to eyes and skin
R52/53 Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

Safety phrases

S2 Keep out of reach of children
S16 Keep away from sources of ignition – No smoking
S24/25 Avoid contact with skin and eyes
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S36/37 Wear suitable protective clothing and gloves
S46 If swallowed seek medical advice immediately and show this container or label

2.3. Other hazards

Contains limonene. May produce an allergic reaction.

2. Hazards identification – Cherry Blossom

2.1. Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC classified as Highly flammable, Harmful in contact with skin and if swallowed, Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

2.2. Label elements

Pictogram



Hazard Class

Flammable, Harmful

Risk phrases

R11 Highly flammable
R21/22 Harmful in contact with skin and if swallowed
R52/53 Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

Safety phrases

S2 Keep out of reach of children
S16 Keep away from sources of ignition – No smoking
S36/37 Wear suitable protective clothing and gloves
S46 If swallowed seek medical advice immediately and show this container or label

2.3. Other hazards

Contains hexyl cinnamaldehyde. May produce an allergic reaction.

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2. Hazards identification – Citrus Fresh

2.1. Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC classified as Highly flammable, Harmful in contact with skin and if swallowed, Irritating to skin, May cause sensitisation by skin contact, Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

2.2. Label elements

Pictogram



Hazard Class

Flammable, Harmful, Irritant

Risk phrases

R11 Highly flammable
R21/22 Harmful in contact with skin and if swallowed
R38 Irritating to skin
R43 May cause sensitisation by skin contact
R52/53 Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

Safety phrases

S2 Keep out of reach of children
S16 Keep away from sources of ignition – No smoking
S36/37 Wear suitable protective clothing and gloves
S46 If swallowed seek medical advice immediately and show this container or label

2.3. Other hazards

N/A

2. Hazards identification – Cool and Fresh

2.1. Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC classified as Highly flammable, Harmful in contact with skin and if swallowed, Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

2.2. Label elements

Pictogram



Hazard Class

Flammable, Harmful

Risk phrases

R11 Highly flammable
R21/22 Harmful in contact with skin and if swallowed
R52/53 Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

Safety phrases

S2 Keep out of reach of children
S16 Keep away from sources of ignition – No smoking
S36/37 Wear suitable protective clothing and gloves
S46 If swallowed seek medical advice immediately and show this container or label

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2.3. Other hazards

Contains limonene. May produce an allergic reaction.

2. Hazards identification – Flowershop

2.1. Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC classified as Highly flammable, Harmful in contact with skin and if swallowed, Irritating to eyes and skin

2.2. Label elements

Pictogram



Hazard Class

Flammable, Harmful, Irritant

Risk phrases

R11 Highly flammable

R21/22 Harmful in contact with skin and if swallowed

R36/38 Irritating to eyes and skin

Safety phrases

S2 Keep out of reach of children

S16 Keep away from sources of ignition – No smoking

S24/25 Avoid contact with skin and eyes

S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S36/37 Wear suitable protective clothing and gloves

S46 If swallowed seek medical advice immediately and show this container or label

2.3. Other hazards

Contains dimethyl-3-cyclohexene-1-carboxaldehyde. May produce an allergic reaction.

2. Hazards identification – Hyacinth

2.1. Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC classified as Highly flammable, Harmful in contact with skin and if swallowed, Irritating to eyes.

2.2. Label elements

Pictogram



Hazard Class

Flammable, Harmful, Irritant

Risk phrases

R11 Highly flammable

R21/22 Harmful in contact with skin and if swallowed

R36 Irritating to eyes

Safety phrases

S2 Keep out of reach of children

S16 Keep away from sources of ignition – No smoking

S25 Avoid contact with eyes

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S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S36/37 Wear suitable protective clothing and gloves

S46 If swallowed seek medical advice immediately and show this container or label

2.3. Other hazards

Contains hexylcinnamic aldehyde. May produce an allergic reaction.

3. Hazards identification – Lavender

2.1. Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC classified as Highly flammable, Harmful in contact with skin and if swallowed, Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

3.2. Label elements

Pictogram



Hazard Class

Flammable, Harmful

Risk phrases

R11 Highly flammable

R21/22 Harmful in contact with skin and if swallowed

R52/53 Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

Safety phrases

S2 Keep out of reach of children

S16 Keep away from sources of ignition – No smoking

S36/37 Wear suitable protective clothing and gloves

S46 If swallowed seek medical advice immediately and show this container or label

3.3. Other hazards

Contains limonene. May produce an allergic reaction.

2. Hazards identification – Lilac

2.1. Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC classified as Highly flammable, Harmful in contact with skin and if swallowed

2.2. Label elements

Pictogram



Hazard Class

Flammable, Harmful



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Risk phrases

R11 Highly flammable

R21/22 Harmful in contact with skin and if swallowed

Safety phrases

S2 Keep out of reach of children

S16 Keep away from sources of ignition – No smoking

S36/37 Wear suitable protective clothing and gloves

S46 If swallowed seek medical advice immediately and show this container or label

2.3. Other hazards

Contains hydroxycitronellal. May produce an allergic reaction.

2. Hazards identification – Lily Fresh

2.1. Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC classified as Highly flammable, Harmful in contact with skin and if swallowed.

2.2. Label elements

Pictogram



Hazard Class

Flammable, Harmful

Risk phrases

R11 Highly flammable

R21/22 Harmful in contact with skin and if swallowed

Safety phrases

S2 Keep out of reach of children

S16 Keep away from sources of ignition – No smoking

S36/37 Wear suitable protective clothing and gloves

S46 If swallowed seek medical advice immediately and show this container or label

2.3. Other hazards

Contains hexylcinnamic aldehyde. May produce an allergic reaction.

2. Hazards identification – Linen Fresh

2.1. Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC classified as Highly flammable, Harmful in contact with skin and if swallowed, Irritating to skin, Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

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2.2. Label elements

Pictogram



Hazard Class

Flammable, Harmful

Risk phrases

R11 Highly flammable
R21/22 Harmful in contact with skin and if swallowed
R38 Irritating to skin
R52/53 Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

Safety phrases

S2 Keep out of reach of children
S16 Keep away from sources of ignition – No smoking
S36/37 Wear suitable protective clothing and gloves
S46 If swallowed seek medical advice immediately and show this container or label

2.3. Other hazards

Contains benzyl salicylate. May produce an allergic reaction.

2. Hazards identification - Rose

2.1. Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC classified as Highly flammable, Harmful in contact with skin and if swallowed, Irritating to eyes and skin, May cause sensitisation by skin contact, Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

2.2. Label elements

Pictogram



Hazard Class

Flammable, Harmful, Irritant

Risk phrases

R11 Highly flammable
R21/22 Harmful in contact with skin and if swallowed
R36/38 Irritating to eyes and skin
R43 May cause sensitisation by skin contact
R52/53 Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

Safety phrases

S2 Keep out of reach of children
S16 Keep away from sources of ignition – No smoking
S24/25 Avoid contact with skin and eyes
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
S36/37 Wear suitable protective clothing and gloves
S46 If swallowed seek medical advice immediately and show this container or label

2.3. Other hazards

N/A

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2. Hazards identification – Springtime

2.1. Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC classified as Highly flammable, Harmful in contact with skin and if swallowed, Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

2.2. Label elements

Pictogram



Hazard Class

Flammable, Harmful

Risk phrases

R11 Highly flammable

R21/22 Harmful in contact with skin and if swallowed

R52/53 Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

Safety phrases

S2 Keep out of reach of children

S16 Keep away from sources of ignition – No smoking

S36/37 Wear suitable protective clothing and gloves

S46 If swallowed seek medical advice immediately and show this container or label

2.3. Other hazards

Contains benzyl salicylate. May produce an allergic reaction.

2. Hazards identification – Sweetpea

2.1. Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC classified as Highly flammable, Harmful in contact with skin and if swallowed, Irritating to skin, May cause sensitisation by skin contact.

Label elements

Pictogram



Hazard Class

Flammable, Harmful, Irritant

Risk phrases

R11 Highly flammable

R21/22 Harmful in contact with skin and if swallowed

R38 Irritating to skin

R43 May cause sensitisation by skin contact

Safety phrases

S2 Keep out of reach of children

S16 Keep away from sources of ignition – No smoking

S36/37 Wear suitable protective clothing and gloves

S46 If swallowed seek medical advice immediately and show this container or label

2.2. Other hazards

N/A

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2. Hazards identification – Warm Cinnamon

2.1. Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC classified as Highly flammable, Harmful in contact with skin and if swallowed,

2.2. Label elements

Pictogram



Hazard Class

Flammable, Harmful

Risk phrases

R11 Highly flammable

R21/22 Harmful in contact with skin and if swallowed

Safety phrases

S2 Keep out of reach of children

S16 Keep away from sources of ignition – No smoking

S36/37 Wear suitable protective clothing and gloves

S46 If swallowed seek medical advice immediately and show this container or label

2.3. Other hazards

Contains eugenol. May produce an allergic reaction.

3. Hazards identification – Winter Spice

3.1. Classification of the substance or mixture

According to Directive 67/548/EEC or 1999/45/EC classified as Highly flammable, Harmful in contact with skin and if swallowed,

3.2. Label elements

Pictogram



Hazard Class

Flammable, Harmful

Risk phrases

R11 Highly flammable

R21/22 Harmful in contact with skin and if swallowed

R52/53 Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment

Safety phrases

S2 Keep out of reach of children

S16 Keep away from sources of ignition – No smoking

S36/37 Wear suitable protective clothing and gloves

S46 If swallowed seek medical advice immediately and show this container or label

3.3. Other hazards

Contains eugenol. May produce an allergic reaction.



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3. Composition/information on ingredients

3.1. Substances

Substance	CAS- No	%	Symbols	R phrases	H statements
Benzalkonium chloride	68989-00-4	<5	C, N	21/22, 34, 50	312, 302, 314, 400
Ethanol	64-17-5	65 - 70	F	11	225
Methanol	67-56-1	<3	F, T	11, 23/24/25, 39/23/24/25	225, 331, 311, 301, 370
Perfume – Apple Orchard	N/A	5 - 15	Xi	43, 51/53	
Bouquet			Xi, N	36/38, 43, 51/52	
Citrus			Xn, N	38, 43, 65, 51/53	
Cherry Blossom			Xi, N	43, 51/53	
Cool&Fresh			Xi, N	43, 51/53	
Flowershop			Xi	36/38, 43, 52/53	
Hyacinth			Xn	36, 43, 52/53, 65	
Lavender			Xi, N	43, 51/53	
Lilac			Xi	43, 52/53	
Lily Fresh			Xi	43, 52/53	
Linen Fresh			Xi, N	38, 43, 51/53	
Rose			Xi, N	38, 41, 43, 51/53	
Springtime			Xi, N	43, 51/53	
Sweetpea			Xi, N	38, 43, 51/53	
Warm Cinnamon			Xi	43, 52/53	
WinterSpice			Xi	43, 51/53	

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.



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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.

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)

N/A

8. Exposure controls/personal protection

8.1. Control parameters

Short term exposure limit as methanol – 250ppm

Long term exposure limits 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 – n/a.

Respiratory protection – if ventilation is insufficient, wear respiratory protection.



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9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance – clear yellow mobile liquid

Odour – perfumed

pH – not available

Melting Point/freezing point – -114°C (ethanol)

Boiling point – 78°C (ethanol)

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 available

Explosive properties – not available

9.2. Other information

Not available

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

Irritation – May irritate eyes and skin

Corrosivity – data not available

Sensitization – some perfumes may cause sensitisation by skin contact

Repeated dose toxicity – data not available

Carcinogenicity – data not available



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Mutagenicity – data not available

Reproductive toxicity – 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.

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



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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

16. Other information

16.1. Reason for change

Addition of new perfumes.

16.2. Source of information

Ingredient safety data sheets

16.3 Risk phrases and hazard statements from section 3

R11 Highly flammable

R21/22 Harmful in contact with skin and if swallowed

R23/24/25 Toxic by inhalation, in contact with skin and if swallowed

R34 Cause burns

R36 Irritating to eyes

R38 Irritating to skin

R39/23/24/25 Toxic: danger of very serious irreversible effects through inhalation, in contact with skin and if swallowed

R43 May cause sensitisation by skin contact

R50 Very toxic to aquatic organisms.

R51/53 Toxic to aquatic organisms, may cause long term effects in the aquatic environment.

R52/53 Harmful to aquatic organisms, may cause long term effects in the aquatic environment.

R65 Harmful: may cause lung damage if swallowed.

H225 Highly flammable liquid and vapour

H301 Toxic if swallowed

H302 Harmful if swallowed

H311 Toxic in contact with skin

H312 Harmful in contact with skin

H314 Causes severe skin burns and eye damage

H331 Toxic if inhaled

H370 Causes damage to organs

H400 Very toxic to aquatic life