PRODUCT NAME: ZOFLORA DISINFECTANT (with Odour Neutraliser)

SAFETY DATA SHEET

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1. COMPANY AND PRODUCT IDENTIFICATION

THORNTON & ROSS LTD Linthwaite Laboratories, Huddersfield HD7 5QH Tel: 01484 842217 Fax 01484 847301		
PRODUCT NAME	ZOFLORA DISINFECTANT (all perfumes)	
CHEMICAL FAMILY	Alcoholic solution of a quaternary ammonium compound.	
INTENDED USE	Disinfectant	

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance Benzalkonium Chloride Ethanol Methanol	<u>CAS No.</u> 68989-00-4 64-17-5 67-56-1	<u>% (</u> w/w) < 5 65 – 70 < 3	<u>Symbols</u> C,N F F, T	<u>R Phrases</u> 21/22, 34,50 11 11, 23/24/25,
Mothanol	07 00 1		•,•	39/23/24/25
Perfume (Bouquet)	N/A	10 – 15	Xi, N	36/38, 43, 51/53
(Citrus)			Xn, N	38, 43, 65, 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
(Rose)			Xi, N	36/38, 43, 51/53
(Springtime)			Xi, N	43, 51/53
(Sweetpea)			Xi, N	38, 43, 51/53
(Wallflower)			Xi	43, 52/53

3. HAZARD IDENTIFICATION

All fragrances are classified as highly flammable and harmful in contact with skin and if swallowed.

In addition, the following fragrances are further classified:-

Bouquet – 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.

Citrus Fresh – Irritating to skin, may cause sensitisation by skin contact, harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.

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Cool and Fresh - harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.

Flowershop – Irritating to eyes and skin.

Hyacinth – Irritating to eyes.

Lavender - harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.

Rose – 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. Springtime - Harmful to aquatic organisms, may cause long term adverse effects in the aquatic environment.

Sweetpea – Irritating to skin, may cause sensitisation by skin contact.

4. FIRST AID MEASURES

PRODUCT IN EYE	Immediately flood with copious quantities of water for at least 10 minutes holding the eye open if necessary. Obtain medical attention.
PRODUCT INGESTED	Wash out mouth with water. Drink plenty of water. Do not induce vomiting. Obtain immediate medical attention.
SKIN CONTACT	Wash off with soap and warm water. If irritation persists seek medical advice.
INHALATION	Remove to fresh air, keep warm and at rest. Obtain medical attention.

5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA	Extinguish with water spray, foam, dry powder or carbon dioxide. Keep containers cool with water spray.
UNSUITABLE EXTINGUISHING MEDIA	Do not use water jets.
HAZARDOUS/COMBUSTION DECOMPOSITION PRODUCTS	Carbon dioxide/monoxide, alcohol fumes.
PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS	Fire fighters should wear self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

Extinguish sources of ignition. Wear suitable protective equipment. Absorb onto an inert material eg. sand or earth and transfer to suitable containers for subsequent disposal by a licensed waste contractor. Prevent entry into drains and watercourses.

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7. HANDLING AND STORAGE

HANDLING	Always handle in a well- ventilated area to prevent build up of vapour. Avoid static discharge and naked lights. Avoid contact with eyes and skin.
STORAGE	Most plastics, metals and glass. In well closed containers in a cool place, away from sources of ignition. Ventilation recommended.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS PERSONAL PROTECTION	Long term occupational exposure limit 1000ppm as ethanol. LTEL 200 ppm, STEL 250 ppm as methanol
Hand Protection	Rubber gloves.
Evo Protoction	C C
Eye Protection	Goggles/safety glasses.
Skin Protection	Overalls when handling in an industrial situation.
Respiratory Protection	Self contained breathing apparatus may be necessary in areas of high concentrations of vapour.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	A clear, yellow mobile liquid.
ODOUR	Spirituous and perfumed.
FLASH POINT	17°C
WT/ML AT 20°C	0.86 – 0.88
SOLUBILITY	Miscible with water, ether, chloroform, acetone, and glycerol.
BOILING POINT	78°C
AUTO-IGNITION TEMPERATURE	365°C
EXPLOSIVE LIMITS IN AIR	Lower limit 3.5% by volume Upper limit 19% by volume

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10. STABILITY AND REACTIVITY

STABILITY

Stable.

INCOMPATIBLE MATERIALS Will react violently with concentrated nitric and sulphuric acids.

11. TOXICOLOGICAL INFORMATION

ACUTE EFFECTS OF EXPOSURE	
On Eyes	Will cause severe stinging sensation and may cause inflammation.
On Skin	May cause irritation. Will cause smarting on cuts and abrasions. May cause sensitisation.
Ingestion	Will cause intoxication and coma in severe cases. Accidental ingestion of a significant quantity is however considered an unlikely occurrence due to the bitter nature of the product.
Inhalation	Vapour may cause irritation of the mucous membranes. Intoxication leading to unconsciousness.
LD50	Not known.

12. ECOLOGICAL INFORMATION

Some fragrances are classified as harmful to the aquatic environment, may cause long term adverse effects in the aquatic environment.

13. DISPOSAL CONSIDERATIONS

Liaise with the local Waste Regulation Authority to arrange disposal.

14. TRANSPORT INFORMATION

U N No AND CLASSIFICATION UN No 1170 class 3 PG II.

DATE 16.03.07

SDS/896/1

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15a. REGULATORY INFORMATION

(BOUQUET and ROSE PERFUMES)

HEALTH AND SAFETY INFORMATION	 Classification: Highly 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 the 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
ASSESSMENT	The information contained in this safety data sheet does not constitute the users own assessment of workplace risk.

15b. REGULATORY INFORMATION

(CITRUS FRESH PERFUME)

HEALTH AND SAFETY INFORMATION	 Classification: Highly 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 the 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
ASSESSMENT	The information contained in this safety data sheet does not constitute the users own assessment of workplace risk.

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15c. REGULATORY INFORMATION

(COOL & FRESH, LAVENDER and SPRINGTIME PERFUME)

HEALTH AND SAFETY INFORMATION	 Classification: Highly 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 the 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
ASSESSMENT	The information contained in this safety data sheet does not constitute the users own assessment of workplace risk.

15d. REGULATORY INFORMATION

(FLOWERSHOP PERFUME)

HEALTH AND SAFETY INFORMATION	Classification: Highly 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 the reach of children S16 Keep away from sources of ignition - No smoking S25 Avoid contact with 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
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15e. REGULATORY INFORMATION

(HYACINTH PERFUME)

HEALTH AND SAFETY INFORMATION	Classification: Highly 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 the reach of children S16 Keep away from sources of ignition - No smoking S25 Avoid contact with 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
ASSESSMENT	The information contained in this safety data sheet does not constitute the users own assessment of workplace risk.

15f. REGULATORY INFORMATION

(LILAC, LILY FRESH and WALLFLOWER PERFUMES)

HEALTH AND SAFETY INFORMATION	Classification: Highly Flammable, Harmful Risk phrases: R11 Highly Flammable R21/22 Harmful in contact with skin and if swallowed Safety phrases: S2 Keep out of the 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
ASSESSMENT	The information contained in this safety data sheet does not constitute the users own assessment of workplace risk.

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15g. REGULATORY INFORMATION

(SWEETPEA PERFUME)

HEALTH AND SAFETY INFORMATION	Classification: Highly 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 the 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
ASSESSMENT	The information contained in this safety data sheet does not constitute the users own assessment of workplace risk.

16. OTHER INFORMATION

SOURCES OF DATA	Manufacturing Documents Suppliers Safety Data Sheets (ingredients)
Risk phrases of ingredients given in section 2	 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. R52/53 Harmful to aquatic environment. R52/53 Harmful to aquatic environment.