MATERIAL SAFETY DATA SHEET

Reference: HSDETDIS Creation date: 4 April 2003 Page 1 of 10

1 IDENTIFICATION OF THE PRODUCT AND THE COMPANY

PRODUCT: DETTOL ANTI-BACTERIAL DISINFECTANT SPRAY

Company
Reckitt Benckiser UK Ltd
Delta 1200, Welton Road
Delta Business Park
Swindon, Wiltshire, SN5 7XZ
Tel 01793 732000

Fax 01793 - 511572

2 COMPOSITION I/NFORMATION ON INGREDIENTS

CHEMICAL CHARACTERISATION
Aerosol with alcohols and disinfectants

DANGEROUS INGREDIENTS:

Component Source	EINECS-Nr	Concentration	Classification	Data
Ethanol, Denatured	200-578-6	range 70-90%	F, R11	Annex 1 of 67/548/EEC MERCK ChemDat 2002
Carbon dioxide propellant	204-696-9	0-5%	n.c	

3 HAZARDS IDENTIFICATION

For Humans (additional information is given under item 11):

Extremely flammable. May form explosive vapour-air mixture. Degreases skin.

Expanding gas may cause frostbite.

For the Environment:

Raising overall contamination hydrocarbons.

For Materials:

Materials should be tested for resistance.

4 FIRST AID MEASURES

Inhalation:

After inhalation of product/fumes of fire leave contaminated area and provide for fresh air. In event of symptoms occurring, seek medical treatment.

Skin Contact:

Wash away with water.

In the event of symptoms occurring seek medical treatment.

Eye Contact:

Flush eyes out immediately with large amounts of water with eye lids lifted.

If irritation persists consult physician.

Ingestion:

Rinse mouth out and drink plenty of water.

Consult physician.

Note to Physician:

No specific antidotes known. Symptomatic treatment.

Special Equipment:

n.av.

5 FIRE FIGHTING MEASURES

Suitable Extinguishing Media: Water spray jet, foam dry chemicals, CO2.

Extinguishing Media to Avoid: None.

Fire and Explosion Hazards:

In case of fire, product may form: Organic crackproducts and carbon oxides, inorganic dust.

Additional Information: Cool container at risk with water spray jet.

Special Protective Equipment:

Wear positive pressure self-contained breathing apparatus.

Wear full protective clothing.

6 ACCIDENTAL RELEASE MEASURES

Personal Precautions:

See No. 8.3 Personal Protective Equipment, Provide sufficient ventilation. Keep away from sources of ignition.

Environmental Precautions and Methods for Cleaning up:

Do not allow larger quantities to enter drainage.

Inform responsible authorities after accidental conduction of larger quantities.

Soak up with absorbent material. Flush away residues with water.

Further Information: None.

7 STORAGE AND HANDLING

<u>Handling</u>

Precautions for Safe Handling:

Keep container tightly closed. Close container straight after use or if empty.

Take precautionary measures against static discharges.

Precautions in Case of Fire and Explosion:

Keep away from sources of ignition, do not smoke. Vapours may form an explosive mixture with air.

Storage

Storage Instructions:

Floor must be resistant against solvents

Store away from:

Store away from explosive substances and products, oxidizers.

Further Information on Storage conditions:

Provide sufficient ventilation. Protect from sun. Protect from warming up / overheating.

Storage Class: 2B (VCI – Concept)

8 EXPOSURE CONTROLS / PERSONAL PROTECTING MEASURES

See also section 7.

Information on System Design:

Provide for sufficient exhaustion. Provide personal protective equipment.

Exposure Limits:

Material:

Carbon Dioxide:

	8 Hour TWA	15 Minute STEL	<u>IDLH</u>
<u>Ti</u>	me Weighted Average	Short Term Exposure Limit	Immediately Dangerous
		Time Weighted Average	to Life and Health
OSHA PE	L 5,000 ppm (0.5%)	30,000 ppm (3%)	50,000 ppm (5%)
NIOSH RE	EL 5,000 ppm (0.5%)	30,000 ppm (3%)	50,000 ppm (5%)
A COULT	V = 000 (0 50/)	00 000 (00()	50 000 mm (50/)
ACGIH TL	. V 5,000 ppm (0.5%)	30,000 ppm (3%)	50,000 ppm (5%)

Personal Protective Equipment: General Protection and Hygiene:

Avoid contact with eyes and skin. Do not eat, drink or smoke during work. Take off contaminated, saturated clothing immediately. Do not inhale vapours.

Respiratory Protection: If ventilation is insufficient, wear respiratory protection

(Short term: Filter A)

Hand Protection: Impermeable gloves

Eye Protection: Goggles

Skin Protection: Light protective clothing

Further Information: Refer to special restrictions in wearing protective equipment.

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form: Aerosol 9.1.2 Colour: colourless 9.1.3 Odour: aromatic

Preparation No: 164597 – Dettol Disinfecting Spray "Mountain Air"

164479 – Dettol Disinfecting Spray "Spring Waterfall" 164480 – Dettol Disinfecting Spray "Meadow Fresh"

Use of the substance / preparation:

To disinfect surfaces

Safety Relevant Data

pH-value, undiluted:

n.av., pH-value, 1% aqueous solution :n.av.

Boiling point / Boiling – range (°C):

80 (active agent), Melting point / Melting range (°C):

<0

Flash Point (°C,c.c):

Flammability (EEC A10/A13): The sprayed product is Extremely Flammable

Ignition temperature (°C): n. av. Autoflammability (EEC A16): None. Oxidising properties: No Explosion hazard: No

Explosion limits (Vol.%) lower: 1,5, upper: 8,5

Vapour pressure: n.av.

Density (g/ml): 0.835 (liquid)

Solubility (in Water): Partially miscible Soluble in: most organic solvents.

Partition coefficient,n-Octanol/Water: n.av. Viscosity: waterlike Solvent separation test: n.ap.

Solvent content (m%): Not relevant

Further Data

Thermal decomposition (°C): n.av. Vapour density (Air=1): >2 Evaporation rate: n.av.

Internal pressure: at 20°C:5.85 bar g at 50°C:8.36 bar g

10 STABILITY AND REACTIVITY

Conditions to Avoid:

Sparks, flames, static charge

Materials to Avoid:

Contact with oxidizers may lead to strong reactions.

Hazardous Decomposition Products:

No dangerous decomposition products when properly handled.

Further Information:

Protect from sunlight and do not expose to temperatures exceeding 50 Celsius. Extremes of temperature can occur in motor cars and near ovens and fireplaces. Do not place in contact with hot surfaces or near naked flames. Do not pierce or burn even after use. Do not spray on a naked flame, onto or near fire, or any incandescent material such as an electric fire. Keep away from sources of ignition- No Smoking.

11 TOXICOLOGICAL INFORMATION

See also section 2 and 3

Toxicological Tests:

Acute Health Effects:

Inhalation, LC50 rat, (mg/l/4h):n.av. Ingestion, LD50 rat, (mg/kg): n.av. Skin - contact, LD50 rat,(mg/kg):n.av.

Skiii - Contact, LD30 Tat, (mg/kg).m.av.

Irritation (to skin / eye): Mildly irritating – not to be labelled.

Sensitisation:

Subacute / Chronic Toxicity:

Carcinogenicity: None.
Mutagenicity: None.
Teratogenicity None.

Narcotic Effects: Inhalation of solvent-vapours in high concentration causes

narcotic effects.

Practical Experience

Observation relevant for classification:

None.

Further Observations:

Inhalation causes headache / nausea.

General Remarks:

Classification of the preparation has been done by calculation in accordance with EEC directives.

12 ECOLOGICAL INFORMATION

See also sections 6,7,13 and 15

Ecotoxic Effects, Aquatic Toxicity:

n.av.

Behaviour in Sewage Works:

Mobility and Accumulation Potential: n.av.

Elimination (Persistence and Degradability):

The product is biodegradable.

Other Ecological information

COD-Value, mg/g: n.av.
BOD5-Value, mg/g: n.av.
AOX-Remarks: n.ap.
Significant Components: None.
Other adverse effects; None.

13 DISPOSAL CONSIDERATION

Residues

Recommendation; D 10 / R 2 Waste – Code – No.: 16 05 05

In addition comply with the regional authorities.

Safe Handling: See item 7 and 15.

Contaminated Packaging

Recommendation; Wash with suitable cleaner. Otherwise as described under Residues.

Safe Handling: As described under Residues.

14 TRANSPORT INFORMATION

<u>Transportation by Road</u> or Railway according to ADR/GGVS and RID/GGVE

Remarks:

Class: 2 Classification Code: 5 F Packing Group:

Hazard-No : 23 UN-No : 1950

Instruction Concerning Shipper's Declaration and Packaging:

Volume or Mass	Name and Description	Risklabel	Packing Code or Instructions
300 ml, max. 30 kg per box	UN 1950 Aerosols	n.ap.	/4G
300 ml	UN 1950 Aerosols	2.1	P204

Classification for <u>Transportation by Inland-Navigation</u> according to ADNO/GGVBinSch

Remarks: Classification has not been done.

Class: Division: Category:

Description of Goods:

Remarks:

Classification for <u>Transportation by Vessels</u> according to IMDG/GGVSee

Remarks:

Class: 2 UN-No: 1950 Packing Group: n.ap.

EmS-No: 2-13

Marine pollutant : No

Instruction of Declaration and Labelling;

Proper Shipping Name: Aerosols

Risk Label: Flammable gas

Remarks None

Classification for <u>Transportation by Aeroplane</u> according to IATA-DGR/ICAO-TI

Remarks;

Class; 2.1 UN-No: 1950 Packing Group: n.ap.

Instruction for Declaration and Labelling:

Proper Shipping Name: Aerosols, flammable

Risk Label: Flammable gas

Packing instructions, Passenger: 203 Cargo: 203

Remarks: None

15 REGULATORY INFORMATION

Classification according to EEC-Regulations:

Classification required by EEC: Yes

I Symbol(s)

Hazard Identification: Extremely flammable Hazard Symbol(s):

Components(s): Ethanol

R-Phrases:

R 12: Extremely flammable.

S-Phrases:

Keep out of reach of children (S2)

In case of contact with the eyes rinse immediately with plenty of water and seek medical advice (S26)

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

Additional Markings:

Use only as directed

Pressurised container: Protect from sunlight and do not expose to temperatures exceeding 50°C (extremes of temperature can occur in motor cars, near ovens and near fireplaces) Do not pierce or burn even after use.

Do not spray on a naked flame, onto or near a fire, or any incandescent material such as an electric fire.

Do not place in contact with hot surfaces or near naked flames

Keep away from sources of ignition – No smoking.

For UK:

Solvent abuse can kill instantly.

The above mentioned labelling is valid for distribution to private consumer.

Labelling (formats, exemptions, additional markings) has to be done according to respective regulations.

National Regulations

VOC-Contents: n.av.

Notice: Additional national legislation may apply.

The following directives are relevant to the above classification:

Council Directive 1999/45/EC of May 1999 on the approximation of the laws, regulations and administrative provisions of the Member States relating to the classification, packaging and labelling of dangerous preparations.

16 OTHER INFORMATION

This document complements the technical usage instructions but does not replace them. The information contained herein is based on our best current technical knowledge of the product concerned, and is given in good faith. The attention of recipients is drawn to (amongst other things) the elements of risk consequent to use of the product for a purpose other than that for which it was intended.

In no way does this document remove the need of the recipient of the product to fully understand and apply statutory requirements. It is the recipient's sole responsibility to take due precautions relative to the use made of the product.

All information contained herein is included only to assist the recipient in fulfilling his or her statutory duty connected with the use of hazardous materials.

This list of information must not be considered as exhaustive, and does not exonerate the recipient from taking other precautions described in documents other than those mentioned, concerning the storage and the use of the product, for which he or she remains the sole person responsible.

Comment for non-printing information:

Non-printing information:

Product Category: SURFACE CARE

Formula reference(s): 159986, 164479, 164480, 164597

Factory: Contracted Manufacture.