

Safety Data Sheet

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| 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY | |
|-----------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name | DT 450 |
| Description | A water treatment biocide for use by service staff. Product is a colourless, odourless liquid. |
| Company | Rentokil Initial Supplies, Webber Road, Knowsley Industrial Park, Liverpool, L33 7SR. For general enquiries telephone: +44 (0) 151 548 5050. For safety or regulatory enquiries telephone: + 44 (0) 1342 833022. |

| 2 HAZARD IDENTIFICATION | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------|
| Classification (Supply – Use) : In compliance with EC Directive 1999/45. | |
| O Oxidising | R8 Contact with combustible material may cause fire |
| C Corrosive | R34 Causes burns |
| N Dangerous for the Environment | R50 Very toxic to aquatic organisms |
| Adverse Physical, Chemical, Significant Human Health and Environmental Effects (See also box 11): | |
| Product is an oxidising agent. Contact with combustible material may cause fire. Danger of decomposition in contact with incompatible substances (metals, metal ions, alkalis and reducing agents) and when exposed to heat. | |
| Product causes burns. | |
| Very toxic to aquatic organisms, however, adverse effects on the environment are unlikely, provided that the product is used as intended. | |

| 3 COMPOSITION / INFORMATION ON INGREDIENTS (SEE ALSO BOX 16) | | |
|--------------------------------------------------------------|---------------------------------------------------------------|------------------------------------------------------|
| % w/w | Common*/Chemical Name, Elincs/Einecs & CAS No. of Ingredients | EC 1999/45 Classification |
| >25.0 ≤50.0 | Hydrogen peroxide EINECS : 231-765-0 CAS : 7722-84-1 | O : R8 C : R35 X _n : R20/22 : R5 |
| ≤0.1 | Silver EINECS : 231-131-3 CAS : 7440-22-4 | Not classified. |

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| 4 FIRST-AID MEASURES (SEE ALSO “ADVERSE EFFECTS” IN BOX 2) | |
|-------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Inhalation | Remove patient to fresh air, keep warm and at rest. Apply supportive measures if necessary and seek medical attention. |
| Eye Contact | Rinse affected eye with clean running water, or eyewash solution, for at least 15 minutes holding eyelids well apart. Rinse entire surface and do not allow run-off to contaminate unaffected eye. Seek medical attention. |
| Skin Contact | Remove and wash contaminated clothing immediately. Wash affected area thoroughly with soap and water. If the patient feels unwell seek medical advice. |
| Ingestion (Swallowing) | Do NOT induce vomiting. If unconscious place in the recovery position and apply supportive measures if necessary. If conscious give patient up to ½ litre or 1 pint of water to drink. Seek medical attention. |
| Emergency Equipment Suggested | Appropriate first-aid equipment should be provided. For the UK this should be in accordance with the Health & Safety (First-Aid) Regulations 1981. See also the Approved Code of Practice “First-aid at Work”. |
| Note To Doctor | Further information on all Rentokil Initial formulations is lodged with the National Poisons Information Service in the UK. |

| 5 FIRE FIGHTING MEASURES | |
|-----------------------------------------|-------------------------------------------------------------------------------------|
| Fire Extinguisher Type | Use water and foam. Do NOT use powder or carbon dioxide. |
| Special Fire-Fighting Procedures | Wear self-contained breathing apparatus and suitable personal protective equipment. |
| Special Exposure Hazards | Product may yield oxygen in the event of a fire. |

| 6 ACCIDENTAL RELEASE MEASURES | |
|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Personal Precautions (See also box 8) | Wear suitable personal protective equipment. |
| Environmental Precautions | This product is classified as dangerous for the environment. Keep away from drains, surface and ground water, and soil. |
| Clean-up Procedure (See also box 13) | Absorb spill with an inert material such as sand, earth or sawdust. Transfer to a suitable container for subsequent disposal. |

| 7 HANDLING AND STORAGE (SEE ALSO BOX 8) | |
|------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Handling Storage | No specific handling requirements. Store in original container in a cool, dry, ventilated place out of the reach of children and away from food, drink and animal feeding stuffs. |

| 8 EXPOSURE CONTROLS/PERSONAL PROTECTION | |
|--------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Exposure Standard - Directive EC/98/24 (1st IOELV Directive) | Workplace Exposure Limit (WEL) for hydrogen peroxide is 1.4 mg/m ³ long-term exposure (8 hour Time Weighted Average) and 2.8 mg/m ³ short-term exposure (15 minute reference period). Workplace Exposure Limit (WEL) for silver, metallic is 0.1 mg/m ³ long-term exposure (8 hour Time Weighted Average). |
| Engineering Controls | Where exposure may occur, engineering controls, rather than the provision of Personal Protective Equipment (PPE) should be employed. On completion of a risk assessment, the following PPE may be required: |
| Eye Protection | Suitable eye protection such as goggles. |
| Hand Protection | Suitable hand protection such as gloves. |
| Skin Protection | Suitable skin protection such as coveralls. |
| Breathing Protection | Do not breathe vapour, otherwise wear suitable respiratory protection. |
| Environmental Exposure Controls | Use only in accordance with instructions given. An ecological hazard assessment indicates no specific restrictions on environmental release. |

| 9 PHYSICAL AND CHEMICAL PROPERTIES | | | |
|-------------------------------------------|---------------------------------|-------------------------------------|----------------------|
| Appearance and Odour | Clear, odourless liquid. | | |
| pH | 1.7 (at 20°C) | Solubility in Water | Miscible. |
| Density | 1.2 g/cm ³ (at 20°C) | Solubility in Other Solvents | Not determined. |
| Flash Point | Not applicable. | Explosive Properties | None. |
| Flammability | Non-flammable. | Combustibility | Non-combustible. |
| Boiling Point/Range | 114°C | Oxidising Properties | Oxidising. |
| Vapour Density | Not determined. | Evaporation Rate | Not determined. |
| Vapour Pressure | Not determined. | Partition Coefficient | Not applicable. |
| Viscosity | Not applicable. | Other Data | Melting point: -52°C |

10 STABILITY AND REACTIVITY

| | |
|-------------------------------------|---------------------------------------------------------------|
| Conditions to avoid | Avoid extremes of temperature, e.g. below 0°C and above 40°C. |
| Materials to avoid | None. |
| Hazardous Breakdown Products | Decomposition may yield oxygen. |

11 TOXICOLOGICAL INFORMATION (SEE ALSO BOX 2)



| | | |
|--------------------------------|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Acute Toxicity | Oral | LD ₅₀ (rat): 2896 mg/kg Swallowing may lead to burning necrosis of the mucous membranes of the mouth, oesophagus and stomach. Rapid liberation of oxygen may cause gastric distension and bleeding and may lead to severe damage to the inside organs, especially if ingestion is gross. |
| Corrosivity/ Irritation | Inhalation | No data available. |
| | Dermal | LD ₅₀ (rat): >2000 mg/kg |
| | Skin | Causes burns. At prolonged exposure time, irritation (white colouration) of the mucosae and the skin can occur (blistering). |
| Sensitisation | Eyes | May cause severe conjunctivitis, cornea injury or irreversible damage to the eyes. Symptoms may occur with delay. |
| | Respiratory tract | Inhalation of aerosols may lead to severe irritation of the respiratory tract and may cause inflammation and pulmonary oedema. |
| Repeat-Dose Toxicity | Skin | Contains no known skin sensitisers. |
| | Respiratory | Contains no known respiratory sensitisers. |
| Mutagenicity | | Product does not contain any components known to have any effects relating to repeated-dose toxicity. |
| Carcinogenicity | | Product does not contain any components known to have a mutagenic effect. |
| Reproductive Toxicity | Fertility | Product does not contain any components known to have a carcinogenic effect. |
| Other Information | Development | Product does not contain any components known to have effects on fertility. |
| | | Product does not contain any components known to be toxic to the reproductive system. |
| | | None known. |

12 ECOLOGICAL INFORMATION

| | |
|--------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| General Information | This product is classified as very toxic to aquatic organisms. However, when used in accordance with instructions given, controlled release of this product is not expected to cause environmental contamination. |
| Ecotoxicity Data | LC ₅₀ (<i>Brachydanio rerio</i>) (96 h): 4.9 mg/L EC ₅₀ (<i>Daphnia magna</i>) (24 h): 2.8 mg/L IC ₅₀ (<i>Selenastrum capricornutum</i>) (72 h): 0.12 mg/L |
| Mobility | No data available. |
| Persistence and Degradability | The product is biodegradable by adsorption of the stabiliser to active silt and by decomposition of the hydrogen peroxide in water and oxygen. |
| Bioaccumulative Potential | No data available. |
| Other Adverse Effects | None known. |

13 DISPOSAL CONSIDERATIONS

| | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------|-----------------------------|-------------------|-------------|
| Disposal of Waste / Containers | Under normal circumstances, waste / empty containers will be disposed of by Rentokil Initial. | | | | |
| Classification (Council Directive 91/689/EC, Commission Decision 2000/532/EC (amended) Commission Decision 2001/118/EC) | Hazard Code: H2 – Oxidising; H5 – Harmful; H8 – Corrosive; H14 – Ecotoxic | | | | |
| Note for Disposal | <table border="0"><tr><td><u>Components making the waste hazardous</u></td><td><u>Concentrations (%)</u>:</td></tr><tr><td>Hydrogen peroxide</td><td>>25.0 ≤50.0</td></tr></table> | <u>Components making the waste hazardous</u> | <u>Concentrations (%)</u> : | Hydrogen peroxide | >25.0 ≤50.0 |
| <u>Components making the waste hazardous</u> | <u>Concentrations (%)</u> : | | | | |
| Hydrogen peroxide | >25.0 ≤50.0 | | | | |
| | For further advice about disposal, in the UK, contact the local office of the Environment Agency (England and Wales) or Scottish Environment Protection Agency. Local rate from anywhere in the UK: +44 (0) 870 850 6506. | | | | |

| 14 TRANSPORT INFORMATION (INTERNATIONAL UNLESS OTHERWISE INDICATED) | | | | |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|-------------------------------------------------------------------------------------|
| UN No. | UN2014 | Tremcard Reference No. | CEFIC TEC (R)- 51S2014 | RIS Code |
| Transport Category | 2 | UK Hazchem EAC | 2P | TBC |
| ADR 2005 (International Road) | Class 5.1 | ADR HIN | 58 | Labels |
| Proper Shipping Name | HYDROGEN PEROXIDE, AQUEOUS SOLUTION | | |  |
| Limited Quantity Exemptions | Maximum quantity per inner receptacle is 500 ml. Maximum quantity per outer package is 30 litres. Combination packs only. | | | |
| Special Requirements | Not required. | Packing Group II | |  |
| IMDG 2004 (Sea) | Class 5.1 | IMDG EMS | F-H, S-Q | |
| Proper Shipping Name | HYDROGEN PEROXIDE, AQUEOUS SOLUTION | | | |
| Limited Quantity Exemptions | Maximum quantity per inner receptacle is 1 litre. Maximum quantity per outer package is 30 litres. Combination packs only. | | | |
| Special Requirements | Not required. | Packing Group II | | |
| Note for Transport | Local, State or National requirements may apply to the carriage of this product. | | | |

| 15 REGULATORY INFORMATION (HEALTH AND SAFETY INFORMATION (SEE ALSO BOX 2)) | |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safety Phrases | <p>S17: Keep away from combustible material.</p> <p>S23: Do not breathe spray.</p> <p>S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</p> <p>S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.</p> <p>S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).</p> <p>S60: This material and its container must be disposed of as hazardous waste.</p> |
| Additional Label Phrases | Not required. |
| Legislation | <p>Labelling is in accordance with UK regulations implementing the EC Directive 1999/45.</p> <p>Additional labelling requirements may be necessary in accordance with other National legislation. Outside the UK, the registration of this product may be necessary before use and any additional local requirements must be observed at all times.</p> <p>The information given on this Safety Data Sheet (SDS) does not constitute an assessment in accordance with Control of Substances Hazardous to Health (COSHH) Regulations 2002, in the UK. Other National measures or guidance should be followed where appropriate.</p> |

| 16 Other Information and indication of revisions | |
|-------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Packaging Information | A 10 litre, HDPE container with a screw top. |
| Revisions | Not applicable. |
| Risk phrase text (From box 3 - These refer to the ingredients only. See box 2 for the product risk phrases) | <p>R5 : Heating may cause an explosion.</p> <p>R8 : Contact with combustible material may cause fire.</p> <p>R20/22 : Harmful by inhalation and if swallowed.</p> <p>R35 : Causes severe burns.</p> |

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Before using any product, ensure that you read and understand its label.

The information contained in this safety data sheet is, to the best of our knowledge and belief, accurate and reliable at the time of publication. The information relates only to the specific material designated in this safety data sheet and may not be valid for such material if it is used in combination with any other material(s) or any other use than that specified herein. Rentokil Initial UK Ltd is not liable for the use of this product for any other purpose than that described in this safety data sheet. This does not affect your statutory rights. It is the user's responsibility to satisfy him/herself as to the suitability in completeness of such information for his/her own particular use.

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