

Safety Data Sheet

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REVISION (see box 16)

Issue : 07 21 : 06 : 2006

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY	
Product Name	DESCALER
Description	A heavy-duty descaler for used by Rentokil Initial Service Staff. An orange-red liquid with a pungent odour.
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 833 022.

2 HAZARD IDENTIFICATION	
Classification (Supply – Use) : In compliance with EC Directive 1999/45.	
X_i Irritant	R36/37/38 Irritating to eyes, respiratory system and skin.
Adverse Physical, Chemical, Significant Human Health and Environmental Effects (See also box 11):	
Contact with some metals such as aluminium, chromium and zinc may lead to oxidisation, forming the corresponding metal chloride. Chlorine, hydrogen and hydrogen chloride gases may be evolved in the event of a fire.	
Irritating to eyes, respiratory system and skin. Ingestion may result in sore throat, difficulty on swallowing, nausea and vomiting.	
No other significant adverse effects expected under normal conditions of handling and use.	

3 COMPOSITION / INFORMATION ON INGREDIENTS (SEE ALSO BOX 16)		
% w/w	Common*/Chemical Name, Elincs/Einecs & CAS No. of Ingredients	EC 1999/45 Classification
>10.0 ≤25.0	Hydrochloric acid EINECS : 231-595-7 CAS: 7647-01-0	X _i : R37 C : R34
≤1.0	Prop-2-yn-1-ol EINECS : 203-471-2 CAS: 107-19-7	: R10 T : R23/24/25 C : R34
≤1.0	Butan-1-ol EINECS : 200-751-6 CAS: 71-36-3	N : R51,53 : R10 X _n : R22 X _i : R37/38 X _i : R41 : R67
≤0.0023	Formaldehyde EINECS : 200-001-8 CAS: 50-00-0	T : R23/24/25 C : R34 X _n : R40 X _i : R43

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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 carbon dioxide, foam, water-fog, or dry powder extinguishers.
Special Fire-Fighting Procedures	Wear self-contained breathing apparatus and suitable personal protective equipment.
Special Exposure Hazards	Chlorine, hydrogen and hydrogen chloride gases may be evolved in the event of a fire.

6 ACCIDENTAL RELEASE MEASURES	
Personal Precautions (See also box 8)	Wear suitable personal protective equipment.
Environmental Precautions	Keep undiluted product 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	No specific handling requirements.
Storage	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 chloride gas and mist is 2 mg/m ³ long-term exposure (8 hour Time Weighted Average) and 8 mg/m ³ short-term exposure (15 minute reference period). Workplace Exposure Limit (WEL) for prop-2-yn-1-ol is 2.3 mg/m ³ long-term exposure (8 hour Time Weighted Average) and 7 mg/m ³ short-term exposure (15 minute reference period). Can be absorbed through the skin. Workplace Exposure Limit (WEL) for butan-1-ol is 154 mg/m ³ short-term exposure (15 minute reference period). Can be absorbed through the skin. Workplace Exposure Limit (WEL) for formaldehyde is 2.5 mg/m ³ long-term exposure (8 hour Time Weighted Average) and 2.5 mg/m ³ short-term exposure (15 minute reference period).
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.

9 PHYSICAL AND CHEMICAL PROPERTIES			
Appearance and Odour	An orange-red liquid with a pungent odour.		
pH	0.2 at 20°C	Solubility in Water	Miscible.
Specific Gravity	1.1 at 20°C	Solubility in Other Solvents	Not determined.
Flash Point	>61°C	Explosive Properties	None.
Flammability	Non-flammable.	Combustibility	Non-combustible.
Boiling Point/Range	Starts at ca. 100°C	Oxidising Properties	May oxidise some metals such as aluminium, chromium and zinc, forming the corresponding metal chloride.
Vapour Density	Not determined.	Evaporation Rate	Not determined.
Vapour Pressure	Not determined.	Partition Coefficient	Not applicable.
Viscosity	Not determined.	Other Data	None known.

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10 STABILITY AND REACTIVITY

Conditions to avoid	Avoid extremes of temperature, e.g. below 0°C and above 40°C.
Materials to avoid	Avoid contact with materials such as aluminium and zinc, chromium plated surfaces, stainless steel, concrete, cement, enamel and fibreglass.
Hazardous Breakdown Products	Chlorine, hydrogen and hydrogen chloride gases may be evolved in the event of a fire.

11 TOXICOLOGICAL INFORMATION (SEE ALSO BOX 2)

Acute Toxicity	Oral Inhalation	Ingestion may result in sore throat, difficulty on swallowing, nausea and vomiting. Severe over exposure to vapours may result in coughing, wheezing, shortness of breath, chest pain and cause lung damage.
Corrosivity/ Irritation	Dermal Skin Eyes Respiratory tract	Not determined. Irritating to eyes. Irritating to skin. Irritating to respiratory system.
Sensitisation	Skin Respiratory	Contains less than 0.0023% skin sensitisers in the form of formaldehyde. Contains no known respiratory sensitisers.
Repeat-Dose Toxicity		Product does not contain any components known to have any effects relating to repeated-dose toxicity.
Mutagenicity		Product does not contain any components known to have a mutagenic effect.
Carcinogenicity		Product does not contain any components at concentrations greater than 0.0023% known to have a carcinogenic effect.
Reproductive Toxicity	Fertility 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.
Other Information		None known.

12 ECOLOGICAL INFORMATION

General Information	The prop-2-yn-1-ol in this product is classified as toxic to aquatic organisms and may cause long-term adverse effects in the aquatic environment. The amine ethoxylate in 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	Lowering of pH below 5 will induce fatalities in aquatic life.
Mobility	Not determined.
Persistence and Degradability	The surfactant contained in the preparation complies with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.
Bioaccumulative Potential	Not determined.
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))	<u>Hazard Code:</u> H8 – Corrosive. <u>Components making the waste hazardous</u> Hydrochloric acid
Note for Disposal	<u>Concentrations (%):</u> >10.0 ≤25.0 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.	Not classified.	Tremcard Reference No.	Not required.	RIS Code
Transport Category	Not required.	UK Hazchem EAC	Not required.	PSD54
ADR 2005 (International Road)	Class Not required.	ADR HIN	Not required.	Labels Not required.
Proper Shipping Name	Not required.			
Limited Quantity Exemptions	Not required.			
Special Requirements	Not required.	Packing Group	Not required.	
IMDG 2004 (Sea)	Class Not required.	IMDG EMS	Not required.	Labels Not required.
Proper Shipping Name	Not required.			
Limited Quantity Exemptions	Not required.			
Special Requirements	Not required.	Packing Group	Not required.	
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	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. S35 This material and its container must be disposed of in a safe way. S46 If swallowed, seek medical advice immediately and show this container or label.
Additional Label Phrases	Not required.
Legislation	Labelling is in accordance with UK regulations implementing the EC Directive 1999/45. 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. 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.

16 Other Information and indication of revisions	
Packaging Information	5 litre plastic bottle which is then decanted into a 500ml squeegee bottle before use.
Revisions	Changes have been made to the content of boxes 1, 2, 3, 4, 6, 7, 8, 9, 11, 12, 13, 14, 15 & 16 (as indicated by the thick lines on the left-hand side of the boxes) compared with issue 06.
Risk phrase text (From box 3 - These refer to the ingredients only. See box 2 for the product risk phrases)	R10 : Flammable. R22 : Harmful if swallowed. R23/24/25 : Toxic by inhalation, in contact with skin and if swallowed. R34 : Causes burns R37 : Irritating to respiratory system. R37/38 : Irritating to respiratory system and skin. R40 : Limited evidence of a carcinogenic effect. R41 : Risk of serious damage to eyes. R43 : May cause sensitisation by skin contact. R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R67 : Vapours may cause drowsiness and dizziness.

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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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