

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	ST 220
Description	A corrosion inhibitor for use by Rentokil Initial Service Staff. A clear odourless liquid with an amine 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.	
C Corrosive	R34 Causes burns.
Adverse Physical, Chemical, Significant Human Health and Environmental Effects (See also box 11):	
Vapour may form a potentially explosive mixture with air and an exothermic reaction may occur with strong acids.	
Will cause burns to skin and eyes on contact. Skin may absorb the product and if in sufficient quantities may cause drowsiness or loss of consciousness. Product may have a caustic action on mucous membranes. If the vapour is inhaled it may be irritating to the respiratory system and at high concentrations may lead to lung and liver damage and affect the central nervous system. If ingested may cause burns to the mouth, throat and digestive tract and cause 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	Cyclohexylamine EINECS : 203-629-0 CAS : 108-91-8	: R10 X _n : R21/22 C : R34
>10.0 ≤25.0	2-amino-2-methyl-1-propanol EINECS : 204-709-8 CAS : 124-68-5	X _i : R36/38 : R52,53

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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	This product is not combustible. However, use carbon dioxide, foam, water, or dry powder extinguishers.
Special Fire-Fighting Procedures	Wear self-contained breathing apparatus to protect against any toxic fumes liberated.
Special Exposure Hazards	Vapour may form a potentially explosive mixture with air. In the event of a fire, oxides of carbon and nitrogen may be liberated.

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	Do not open or mix directly with BT102 or BT103.
Storage	Do not open in confined or poorly ventilated areas. 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. Keep away from heat, and protect from frost. Keep containers properly sealed when not in use.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION	
Exposure Standard - Directive EC/98/24 (1st IOELV Directive)	Workplace Exposure Limit (WEL) for cyclohexylamine is 41 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. Not required unless natural ventilation is inadequate, then wear suitable respiratory protection.
Environmental Exposure Controls	Use only in accordance with instructions given.

9 PHYSICAL AND CHEMICAL PROPERTIES			
Appearance and Odour	A clear odourless liquid with an amine odour.		
pH	12.0 – 12.5	Solubility in Water	Miscible.
Specific Gravity	0.9 at 20°C	Solubility in Other Solvents	Not determined.
Flash Point	56°C	Explosive Properties	Vapour may form potentially explosive mixture with air. Explosive limits for cyclohexylamine: 1.5%- 9.4%
Flammability	Non-flammable.	Combustibility	Non-combustible.
Boiling Point/Range	Starts at ca. 100°C	Oxidising Properties	Not determined.
Vapour Density	Not determined.	Evaporation Rate	Not determined.
Vapour Pressure	Not determined.	Partition Coefficient	Not applicable.
Viscosity	Not determined.	Other Data	None known.

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 acids, copper, brass and aluminium.
Hazardous Breakdown Products	In the event of a fire fumes of oxides of carbon and nitrogen may be liberated.

11 TOXICOLOGICAL INFORMATION (SEE ALSO BOX 2)

Acute Toxicity	Oral	For cyclohexylamine: LD ₅₀ (rat) : 11 mg/kg. If product is ingested, may cause burns to mouth, throat, digestive tract and cause nausea and vomiting.
	Inhalation	Inhalation of product vapours at high concentrations may lead to lung and liver damage and affect the central nervous system.
	Dermal	For cyclohexylamine: LD ₅₀ (rat) : 277 mg/kg. May be absorbed through the skin and if in sufficient quantities may cause drowsiness or loss of consciousness.
Corrosivity/Irritation	Skin	Product will cause burns to skin on contact.
	Eyes	Product will cause burns to eyes on contact.
	Respiratory tract	Inhalation of product vapours may be irritating to the respiratory system.
Sensitisation	Skin	Contains no known skin sensitisers.
	Respiratory	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 known to have a carcinogenic effect.
Reproductive Toxicity	Fertility	Product does not contain any components known to have effects on fertility.
	Development	Product does not contain any components known to be toxic to the reproductive system.
Other Information		None known.

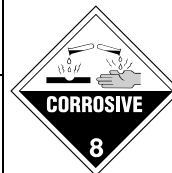
12 ECOLOGICAL INFORMATION

General Information	The 2-amino-2-methyl-1-propanol in this product is classified as harmful to aquatic organisms and may cause long-term adverse effects in the aquatic environment. However, when used in accordance with instructions given, controlled release of this product is not expected to cause environmental contamination.
Ecotoxicity Data	For cyclohexylamine : LC ₅₀ (rainbow trout) (96h) : 55.1 mg/L For 2-amino-2-methyl-1-propanol: LC ₅₀ (fish) (96h) : 190 mg/kg EC ₅₀ (daphnia) (48h) : 193 mg/L IC ₅₀ (algae) (72h) : 520 mg/L
Mobility	Not determined.
Persistence and Degradability	Not determined.
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 Concentrations (%):</u> Cyclohexylamine >10.0 ≤25.0
Note for Disposal	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.	UN1760	Tremcard Reference No.	CEFIC TEC (R)- 80GC91II+III
Transport Category	2	UK Hazchem EAC	2X
ADR 2005 (International Road)	Class 8	ADR HIN	80
Proper Shipping Name	CORROSIVE LIQUID N.O.S (contains cyclohexylamine).		
Limited Quantity Exemptions	Maximum quantity per inner receptacle is 3 litres. Maximum quantity per outer package is 30kg. Combination packs only.		
Special Requirements	Not required. Packing Group II		
IMDG 2004 (Sea)	Class 8	IMDG EMS	F-A, S-B
Proper Shipping Name	CORROSIVE LIQUID N.O.S (contains cyclohexylamine).		
Limited Quantity Exemptions	Maximum quantity per inner receptacle is 1 litre. Maximum quantity per outer package is 30kg. 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>S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.</p> <p>S28 After contact with skin, wash immediately with plenty of water.</p> <p>S35 This material and its container must be disposed of in a safe way.</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>
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 plastic 12.5 litre container with a screw top.
Revisions	Changes have been made to the content of boxes 1, 2, 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)	<p>R10 : Flammable</p> <p>R21/22 : Harmful in contact with skin and if swallowed.</p> <p>R34 : Causes burns.</p> <p>R36/38 : Irritating to eyes and skin.</p> <p>R52,53 : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</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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