

MATERIAL SAFETY DATA SHEET

MSDS 0239

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 Section 1 -- PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME	Liquid Descalit	HMIS CODES	Health 3
		Flammability	0
		Reactivity	1
PRODUCT CODES	80902, 80904	PPI	D
CHEMICAL FAMILY	Inorganic Acids		
USE	Scale Remover		
MANUFACTURER'S NAME	The RectorSeal Corporation	EMERGENCY TELEPHONE NO.	Chemtrec 24 Hours
	2601 Spenwick Drive		(800) 424-9300
	Houston, Texas 77055 USA		
VALIDATION DATE	May 3, 2006	TECHNICAL SERVICE TELEPHONE NO.	(800) 231-3345
REVISION DATE	May 3, 2006		

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 Section 2 -- COMPOSITION/INFORMATION ON INGREDIENTS

% by WT	CAS No.	INGREDIENT	UNITS
27.2	7647-01-0	Hydrochloric Acid	
		ACGIH TLV CL	5 ppm
		OSHA PEL CL	5 ppm
1.05	70776-86-2	Ketoamino	
		ACGIH TLV	N/D
		OSHA PEL	N/D

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 Section 3 -- HAZARDS IDENTIFICATION

SUMMARY OF ACUTE HAZARDS
 Corrosive. Causes severe skin and eye burns. Vapors may irritate eyes, nose, throat. Ingestion will cause chemical burns to digestive system and mucosal surface. May be fatal.

INHALATION
 Vapors irritating to eyes, nose and throat. May be fatal.

EYE CONTACT
 Corrosive. Causes severe eye burns. Can cause severe damage including blindness.

SKIN CONTACT
 Corrosive. Causes severe skin burns.

INGESTION
 Chemical burns to digestive system and mucosal surface. May be fatal.

SUMMARY OF CHRONIC HAZARDS

Bronchitis, pulmonary, chemical burns and chemical pneumonitis.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE

Individuals with pre-existing or chronic diseases of the eyes, skin, respiratory system, cardiovascular system, gastrointestinal system, liver, or kidneys may have increased susceptibility to excessive exposure.

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Section 4 -- FIRST AID MEASURES

If INHALED: If overcome by exposure, remove victim to fresh air immediately. Give oxygen or artificial respiration as needed. Obtain emergency medical attention. Prompt action is essential.

If on SKIN: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

If in EYES: Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Call a physician immediately.

If SWALLOWED: If swallowed, call a physician immediately. Only induce vomiting at the instruction of a physician. Never give anything by mouth to an unconscious person.

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Section 5 -- FIRE FIGHTING MEASURES

FLASH POINT	LEL	UEL
None	N/A	N/A

EXTINGUISHING MEDIA

Use agents appropriate for surrounding fires.

SPECIAL FIRE FIGHTING PROCEDURES: Wear self-contained breathing apparatus (SCBA) and other protective clothing. Hazardous decomposition products possible (see Section 10). Evacuate immediate area.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Toxic fumes of chlorine, and HCL may be produced in fire.

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Section 6 -- ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Evacuate area and keep upwind until gas has dispersed. Dike spill. Dilute with water fog (direct application of alkali may cause violent splattering). Neutralize with sodium bicarbonate. Persons not wearing protective equipment and clothing should be restricted from areas of spills or leaks until clean up has been completed.

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Section 7 -- HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Keep container closed and upright when not in use. Do not store near heat, sparks, or open flames. This product will attack glass, concrete and certain metals. Store only in plastic containers. DO NOT USE METAL CANS.

OTHER PRECAUTIONS: Refrain from splashing product when pouring. Avoid all contact with skin or clothing. Empty containers may contain residues and vapors. KEEP OUT OF REACH OF CHILDREN.

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Section 8 -- EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION (SPECIFY TYPE): In confined poorly ventilated areas, use NIOSH/MSHA approved air purifying or supplied air purifying or supplied air respirators.
VENTILATION - LOCAL EXHAUST: Acceptable
SPECIAL: N/A
MECHANICAL (GENERAL): Acceptable
OTHER: N/A
PROTECTIVE GLOVES: Wear acid resistant gloves (neoprene, PVC, butyl rubber).
EYE PROTECTION: Full-face shield and chemical splash goggles (ANSI Z-87.1 or equivalent).
OTHER PROTECTIVE CLOTHING OR EQUIPMENT: Acid resistant vinyl or polyethylene coated coveralls.
WORK/HYGIENIC PRACTICES: Where use can result in skin contact, wash exposed areas thoroughly before eating, drinking, smoking, or leaving work area. Launder contaminated clothing before reuse.

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Section 9 -- PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT: 214 F (101 C) @ 760mm Hg
SPECIFIC GRAVITY (H2O = 1): 1.11
VAPOR PRESSURE (mm Hg): N/A
MELTING POINT: N/A
VAPOR DENSITY (AIR = 1): N/A
EVAPORATION RATE (ETHYL ACETATE = 1): N/A
APPEARANCE/ODOR: Amber Liquid / Irritating Odor
SOLUBILITY IN WATER: Soluble
VOLATILE ORGANIC COMPOUNDS(VOC)Content
(Theoretical Percentage By Weight): 0% or (0 g/L)

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Section 10 -- STABILITY AND REACTIVITY

STABILITY: Stable
CONDITIONS TO AVOID: Incompatibles
INCOMPATIBILITY (MATERIALS TO AVOID): A strong acid; violent reaction with bases; forms explosive hydrogen gas with base metals; oxidizers form toxic chlorine gas; reaction with sulfuric acid forms corrosive hydrochloric acid gas. Corrosive fume on contact with air. Highly corrosive to most metals with evolution of hydrogen gas, which may form explosive mixtures with air. Reacts with hydroxides, amines, alkalis, copper, brass, zinc.
HAZARDOUS DECOMPOSITION PRODUCTS: Toxic fumes of chlorine, and HCL.
HAZARDOUS POLYMERIZATION: Will not occur.

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Section 11 -- TOXICOLOGY INFORMATION

CHRONIC HEALTH HAZARDS
No ingredient in this product is an IARC, NTP or OSHA listed carcinogen.

TOXICOLOGY DATA
Ingredient Name

Hydrochloric Acid

Oral-Rabbit, adult LD50:900 mg/kg
Inhalation-Rat LC50:3124 ppm/1H

Ketoamino

Oral-Rat LD50:N/D
Inhalation-Rat LC50:N/D

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Section 12 -- Ecological Information

ECOLOGICAL DATA

Ingredient Name

Hydrochloric Acid

Food Chain Concentration Potential	None
WATERFOWL TOXICITY	N/A
BOD	None
AQUATIC TOXICITY	282 ppm/96 hr/mosquito

Ketoamino

Food Chain Concentration Potential	N/D
WATERFOWL TOXICITY	N/D
BOD	N/D
AQUATIC TOXICITY	N/D

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Section 13 -- DISPOSAL CONSIDERATIONS

Waste Classification: Corrosive(D002)

Disposal Method: Neutralization

RCRA classified hazardous waste. Dispose of absorbed materials and liquid waste in accordance with all local, state and federal regulations.

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Section 14 -- TRANSPORTATION INFORMATION

DOT: Hydrochloric acid, solution, class 8, UN1789, PG II, ERG#157

OCEAN (IMDG): Hydrochloric acid, solution, class 8, UN1789, PG II, IMDG#8183,
EmS#8-03, MFAG#700

AIR (IATA): Hydrochloric acid, solution, class 8, UN1789, PG II, ERG#157

WHMIS (CANADA): Class E

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Section 15 -- REGULATORY INFORMATION

REGULATORY DATA

Ingredient Name

Hydrochloric Acid

SARA 313	Yes
TSCA Inventory	Yes
CERCLA RQ	5,000 lb.
RCRA Code	N/A

Ketoamino

SARA 313	No
TSCA Inventory	Yes

CERCLA RQ N/A
RCRA Code N/A

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Section 16 -- OTHER INFORMATION

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