

# MATERIAL SAFETY DATA SHEET

This MSDS complies with OSHA'S Hazard Communication Standard 49 CFR 1910.1200 and OSHA Form 174

IDENTITY AND MANUFACTURER'S INFORMATION					
<b>NFPA Rating:</b> Health-3; Flammability-0; Reactivity-0; Special- - Manufacturer's Name: <b>RITE-KEM, INC.</b> Address: 703 Westmoreland Drive Tupelo, MS 38801  CAGE 0VVN0 GSA GS-07F-0283J			<b>HMIS Rating:</b> Health-3; Flammability-0; Reactivity-1; Personal Protection-E <b>DOT Hazard Classification:</b> Corrosive Material 8  <b>Identity</b> (trade name as used on label): <p style="text-align: center;"><b>DESCALER TWO</b></p>		
Date Prepared: 05/21/2004      Prepared By: ml			Revision - 3		
Information Calls: (662)840-6060			NOTICE: JUDGMENT BASED ON INDIRECT TEST DATA		
EMERGENCY RESPONSE NUMBER: 1(800)424-9300 CHEMTREC					
SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION					
COMPONENTS-CHEMICAL NAMES AND COMMON NAMES (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	CAS Number	SARA III LIST	OSHA PEL (ppm)	ACGIH TLV (ppm)	Carcinogen Ref. Source **
<b>HYDROGEN CHLORIDE</b>	7647-01-0	Yes	5	5	d
Percentages and non-hazardous ingredients are trade secrets					
SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS					
<b>Boiling Point:</b> 212°F			<b>Specific Gravity</b> (H <sub>2</sub> O=1): 1.05		
<b>Vapor Pressure:</b> PSIG @ 70°F (Aerosols): N/A			<b>Vapor Pressure</b> (Non-Aerosols)(mm Hg and Temperature): N/A		
<b>Vapor Density</b> (Air = 1): N/A			<b>Evaporation Rate</b> ( water= 1): 1		
<b>Solubility in Water:</b> Total			<b>Water Reactive:</b> None		
<b>Appearance and Odor:</b> Brown liquid with slight pungent odor.					
SECTION 3 - FIRE AND EXPLOSION HAZARD DATA					
<b>FLAMMABILITY</b> as per USA FLAME PROJECTION TEST (aerosols) N/A		<b>Auto Ignition Temperature</b> N/A		<b>Flammability Limits in Air by % in Volume:</b> % LEL: N/A      % UEL: N/A	
<b>FLASH POINT AND METHOD USED</b> (non-aerosols): None			<b>EXTINGUISHER MEDIA:</b> Non-combustible.		
<b>SPECIAL FIRE FIGHTING PROCEDURES:</b> None					
<b>Unusual Fire &amp; Explosion Hazards:</b> Avoid exposure to metals, oxidants which might produce flammable hydrogen gas.					
SECTION 4 - REACTIVITY HAZARD DATA					
<b>STABILITY</b> [ X ] STABLE [ ] UNSTABLE			<b>HAZARDOUS POLYMERIZATION</b> [ ] WILL [ X ] WILL NOT OCCUR		
<b>Incompatibility</b> (Mat. to avoid): Bases, metals, mercuric sulfate, carbides of calcium, cesium, rubidium.			<b>Conditions to Avoid:</b> Contact with strong bases can cause violent reaction generating large amounts of heat.		
<b>Hazardous Decomposition Products:</b> Hydrogen gas.					
SECTION 5 - HEALTH HAZARD DATA					
<b>PRIMARY ROUTES OF ENTRY:</b> [ X ] INHALATION [ ] INGESTION [ X ] SKIN ABSORPTION [ X ] EYE [ ] NOT HAZARDOUS					
ACUTE EFFECTS					
<b>Inhalation:</b> Irritant causing burning, choking, coughing, headache.					
<b>Eye Contact:</b> Irritation, severe burns & permanent damage including blindness.			<b>Skin Contact:</b> Burning, irritation, dermatitis.		
<b>Ingestion:</b> Unlikely route-causes severe burns to internal organs.					
<b>CHRONIC EFFECTS:</b> Skin, eye, mucous membrane irritation.					
<b>Medical Conditions Generally Aggravated by Exposure:</b> None.					
EMERGENCY FIRST AID PROCEDURES					
<b>Eye Contact:</b> Wash eyes for 15 minutes. Get medical attention.					
<b>Skin Contact:</b> Remove contaminated clothing, wash skin with water for 15 minutes.					
<b>Inhalation:</b> Move to fresh air. Get medical attention.					
<b>Ingestion:</b> DO NOT INDUCE VOMITING. Drink 3 to 4 glasses of water. Get immediate medical attention.					
SECTION 6 - CONTROL AND PROTECTIVE MEASURES					
<b>Respiratory Protection (specify type):</b> Approved self-contained breathing apparatus when use concentrations exceed 100 ppm HCl vapors.					
<b>Protective Gloves:</b> Neoprene.			<b>Eye Protection:</b> Chemical goggles or face shield.		
<b>Ventilation Requirements:</b> As necessary to maintain air concentration below 5 ppm at all times.					
<b>Other Protective Clothing &amp; Equipment:</b> Neoprene or PVC rain suit & boots in case of fire. Safety showers & eyewash stations should be available.					
<b>Hygienic Work Practices:</b> Wash hands after use. Do not eat, drink or smoke in immediate area.					
SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE					
<b>Steps To Be Taken If Material Is Spilled Or Released:</b> Contain fluid by diking. Neutralize with soda ash or baking soda.					
<b>Waste Disposal Methods:</b> Neutralize material may be washed down the sewer. Absorbed material to be boxed and disposed of in compliance with local, state and federal regulations.					
<b>Precautions To Be Taken In Handling &amp; Storage:</b> Store in closed labeled containers. Keep in cool, metal free area for not more than one year.					
<b>Other Precautions &amp;/or Special Hazards:</b> KEEP OUT OF REACH OF CHILDREN. Do not store near strong alkalies or other reactive materials.					

**SECTION 8 – TRANSPORTATION INFORMATION**

US Department of Transportation  
Shipping Name: CORROSIVE LIQUIDS,N.O.S., (Hydrochloric Acid)  
Hazard Class: 8  
Label: CORROSIVE LIQUIDS,N.O.S., (Hydrochloric Acid),8,UN1760,PGIII  
Exemption: ON CONTAINERS OF 1 GL OR LESS CONTENT: ORM-D

IMDG:  
Proper Shipping Name: CORROSIVE LIQUIDS,N.O.S., (Hydrochloric Acid)  
Hazard Classification: 8  
International Marine UN Number: 1760  
Packing Group: III  
Subsidiary Hazard:  
Subsidiary Packing Group:  
MFAG Table No. :  
EMS No. :  
Flash point (test method)  
IMDG Page Number:  
Label: CORROSIVE LIQUIDS,N.O.S., (Hydrochloric Acid),8,UN1760,PGIII

*We believe the statements, technical information and recommendations contained herein are reliable, but they are given without warranty or guarantee of any kind.*

\*\* Chemical Listed as Carcinogen or Potential Carcinogen. [a] NTP [b] IARC Monograph [c] OSHA [d] Not Listed [e] Animal Data Only