

MATERIAL SAFETY DATA SHEET

This MSDS complies with OSHA'S Hazard Communication Standard 29 CFR 1910.1200 and OSHA Form 174

IDENTITY AND MANUFACTURER'S INFORMATION

NFPA Rating: Health-3; Flammability-0; Reactivity-2; Special-0 Manufacturer's Name: BRODY CHEMICAL Address: 4825 S. 6200 W. SLC, UT. 84118		HMIS Rating: Health-3; Flammability-0; Reactivity-2; Personal Protection-E DOT Hazard Classification: CORROSIVE MATERIAL Identity (trade name as used on label): <h3 style="text-align: center;">DESCALER</h3>	
Date Prepared: 05/08/01 Prepared By: CJ Information Calls: (801) 963-2436 EMERGENCY RESPONSE NUMBER: 1-800-424-9300		MSDS Number: 4007 Revision: 13 NOTICE: JUDGEMENT BASED ON INDIRECT TEST DATA	

SECTION 1 - MATERIAL IDENTIFICATION AND INFORMATION

COMPONENTS-CHEMICAL NAMES AND COMMON NAMES (Hazardous Components 1% or greater; Carcinogens 0.1% or greater)	CAS Number	Approx. % wt.	OSHA PEL (ppm)	ACGIH TLV (ppm)	Carcinogen Ref. Source **
HYDROGEN CHLORIDE	7647-01-0	75-80	5	5	d

SECTION 2 - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: 212°F	Specific Gravity (H2O=1): 1.05
Vapor Pressure: PSIG @ 70°F (Aerosols): N/A	Vapor Pressure (Non-Aerosols)(mm Hg and Temperature): N/A
Vapor Density (Air = 1): N/A	Evaporation Rate (Butyl Acetate = 1): 1
Solubility in Water: Total	Water Reactive: None
Appearance and Odor: Purple liquid, acidic odor.	IPH: 2.0

SECTION 3 - FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY as per USA FLAME PROJECTION TEST (aerosols) N/A	Auto Ignition Temperature N/A	Flammability Limits in Air by % in Volume: % LEL: N/A % UEL: N/A
FLASH POINT AND METHOD USED (non-aerosols): Non-Combustible.	EXTINGUISHER MEDIA: Non-Combustible	
SPECIAL FIRE FIGHTING PROCEDURES: None		
Unusual Fire & Explosion Hazards:		

SECTION 4 - REACTIVITY HAZARD DATA

STABILITY <input checked="" type="checkbox"/> STABLE <input type="checkbox"/> UNSTABLE	HAZARDOUS POLYMERIZATION <input type="checkbox"/> WILL <input checked="" type="checkbox"/> WILL NOT OCCUR
Incompatibility (Mat. to avoid): Bases, metals, mercuric sulfate, carbides of calcium, cesium, rubidium.	Conditions to Avoid: Contact with strong bases can cause violent reaction generating large amounts of heat.
Hazardous Decomposition Products: Hydrogen gas.	

SECTION 5 - HEALTH HAZARD DATA

PRIMARY ROUTES OF ENTRY: <input checked="" type="checkbox"/> INHALATION <input type="checkbox"/> INGESTION <input checked="" type="checkbox"/> SKIN ABSORPTION <input type="checkbox"/> EYE <input type="checkbox"/> NOT HAZARDOUS	
ACUTE EFFECTS:	
Inhalation: Irritant causing burning, choking, coughing, headache.	
Eye Contact: Irritation: sever burns and permanent damage including blindness	Skin Contact: Burning, irritation and dermatitis
Ingestion: Unlikely route – causes severe burns to internal organs	
CHRONIC EFFECTS: Skin, eye, mucous membrane irritation.	
Medical Conditions Generally Aggravated by Exposure:	

EMERGENCY FIRST AID PROCEDURES

Eye Contact: Wash eyes for 15 minutes – seek medical attention
Skin Contact: Remove contaminated clothing, wash skin with water for 15 minutes
Inhalation: Move to fresh air – get medical attention
Ingestion: Give large quantities of water. Do not induce vomiting – seek medical attention

SECTION 6 - CONTROL AND PROTECTIVE MEASURES

Respiratory Protection (specify type): Approved self-contained breathing apparatus when use concentrations exceed 100 ppm HCL vapors.
Protective Gloves: Neoprene Eye Protection: Chemical goggles or face shield
Ventilation Requirements: As necessary to maintain air concentration below 5 ppm at all times.
Other Protective Clothing & Equipment: Neoprene or PVC rain suit and boots in case of fire.
Hygienic Work Practices: Wash hands after use.

SECTION 7 - PRECAUTIONS FOR SAFE HANDLING AND USE

Steps To Be Taken If Material is Spilled Or Released: Contain fluid by diking. Neutralize with soda ash or baking soda.
Waste Disposal Methods: Neutralized materials may be washed down the sewer. Absorbed material to be boxed and disposed in compliance with local, state, federal statutes.
Precautions To Be Taken In Handling & Storage: Store in closed labeled containers. Keep away from children. Keep in cool metal free area for not more than one year.
Other Precautions &/or Special Hazards: Do not store near strong alkalis or other reactive materials.

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