

## MATERIAL SAFETY DATA SHEET

Supersedes: 05/21/01

Issue Date: 09/27/01

Issue Date: N/A

SECTION I - CHEMICAL PRODUCT		
Identity: <b>130180</b>		
Brands: DCT Delimer		
Hazard Rating: 1	Health: 1	4=EXTREME
	Flammability: 1	3=HIGH
	Reactivity: 0	2= MODERATE
		1=SLIGHT
Emergency Telephone Number: (800) 424-9300 (24-HR – CHEMTREC)		

SECTION II - COMPOSITION AND INGREDIENTS					
Ingredients/Chemical Name: Citric acid, anhydrous					
Hazardous Ingredients as defined by OSHA, 29 CFR 1910.1200.					
Chemical Name	Common Name	CAS No.	Recommended Limits	Composition Range	LD50/LC50
Citric Acid, Anhydrous	Citric acid	77-92-9		100	

SECTION III - HAZARDS IDENTIFICATION	
<b>Health Hazards (Acute and Chronic):</b>	
Ingestion:	May cause moderate to severe gastrointestinal irritation if swallowed.
Eye Contact:	Can cause moderate to severe eye irritation.
Inhalation:	May cause irritation if inhaled during prolonged, repeated exposures.
Skin:	Can cause moderate to severe skin irritation.

SECTION IV - FIRST AID INFORMATION	
<b>Emergency and First Aid Procedures:</b>	
Ingestion:	Drink large quantities of water or milk. Do not induce vomiting. Seek prompt medical attention.
Eye Contact:	Hold eyelids open and flush thoroughly with plenty of water for at least 15 minutes. Seek prompt medical attention.
Skin:	Wash skin thoroughly with soap and water. If irritation persists, or burns exist, seek prompt medical attention. If spilled on clothing, change clothes.
Inhalation:	For accidental, high level inhalation, remove to fresh air. Get medical attention if irritation persists.
<b>Other</b>	None

SECTION V - FIRE FIGHTING INFORMATION	
<b>Flash Point (Method Used):</b> >200 f (PMCC)	<b>Explosive Limits:</b> LEL: N/K UEL: N/K
<b>Extinguishing Media:</b> Use CO <sub>2</sub> , water, or dry chemical.	
<b>Special Fire Fighting Procedures:</b> None Known	
<b>Unusual Fire Hazards:</b> None Known	

SECTION VI - ACCIDENTAL RELEASE MEASURES
<b>Personal Precautions:</b> None Known
<b>Environmental Precautions:</b> DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS.
<b>Steps To Be Taken in Case Large Quantities of Material are Released or Spilled:</b> Put on safety glasses, or goggles, and rubber gloves. Contain spill. Prevent large spills from reaching waterways or sewers untreated. Sorbents may be used. Read "Waste Disposal Method" below for further information.

SECTION VII - HANDLING AND STORAGE
<b>Precautions To Be Taken in Handling and Storing:</b> Avoid eye and skin contact. Store in dry, cool, well-ventilated area away from incompatibles. Avoid extreme temperatures. Keep container sealed when not in use. Wash thoroughly after handling material.
<b>Other Precautions:</b> For Institutional Use Only. Keep out of reach of children.

SECTION VIII - EXPOSURE CONTROLS, PERSONAL PROTECTION
<b>Respiratory Protection (Specify Type):</b> None required with normal use
<b>Ventilation</b> General
<b>Eye Protection:</b> None required with normal use. If dusting is likely, safety glasses may be needed.
<b>Protective Gloves:</b> None required with normal use. Protective gloves (neoprene preferred) may be needed if prolonged, direct contact is anticipated.
<b>Other Protective Equipment:</b> Suitable eyewash facilities

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES	
<b>Boiling Point °F:</b> N/K	<b>Specific Gravity (H<sub>2</sub>O=1):</b> 1.665
<b>Vapor Pressure (mm Hg):</b> N/K	<b>Percent Volatile by Volume (%):</b> N/K
<b>Vapor Density (Air=1):</b> N/K	<b>Evaporation Rate (nBuOAc=1):</b> N/K
<b>Appearance and Odor:</b> White crystals, odorless	<b>Freezing Point:</b> N/K
<b>Coefficient of Water/Oil Distribution:</b> N/K	<b>pH (F.S.):</b> 2.1 (1.0% solution)
	<b>Solubility in Water:</b> Complete

SECTION X - STABILITY AND REACTIVITY
<p><b>Possible Hazardous Reactions/Conditions:</b> Potentially explosive reaction with metal nitrates.</p> <p><b>Conditions to Avoid:</b> None Known</p> <p><b>Materials to Avoid:</b> metal nitrates</p> <p><b>Hazardous Decomposition Products:</b> acrid smoke/irritating fumes</p> <p><b>Other Recommendations:</b> None</p> <p><b>Stability:</b> Stable</p> <p><b>Hazardous Polymerization:</b> Will not occur</p>

SECTION XI - TOXICOLOGICAL INFORMATION
<p>An irritating organic acid, some allergic properties</p> <p>LD50 (oral-Rat): 6730 mg/kg; Eye (Rabbit): 750 microns/24 HR (Severe); Skin (Rabbit): 500 mg/24 HR (Moderate)</p>

SECTION XII - ECOLOGICAL INFORMATION
<p>N/K</p>

SECTION XIII - DISPOSAL CONSIDERATIONS
<p><b>Waste Disposal Method:</b> Small quantities: Flush with plenty of water to dilute and/or neutralize with soda ash prior to discharge to POTW. Follow applicable local ordinances for disposal. Large quantities (i.e. 50 gallons or more): RCRA-corrosive (D002). Neutralization is preferred. Do not allow to enter sewers or waterways untreated. DISPOSAL IS TO BE PERFORMED IN COMPLIANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS.</p>

SECTION XIV - TRANSPORT INFORMATION
<p><b>DOT Classification:</b> Not DOT-Regulated</p>

SECTION XV - ADDITIONAL REGULATORY INFORMATION
<p>All components are listed on the US TSCA Inventory.</p> <p>All ingredients are listed on the Canadian DSL Inventory. The Canadian WHMIS classification is: Class E (Corrosive Material).</p>

**SECTION XVI - OTHER INFORMATION**

\*N/A. - Not Applicable

\*N/K. - Not Known

\*F.S. – Full Strength

The submission of this MSDS may be required by law, but this is not an assertion that the substance is hazardous when used in accordance with proper safety practices and normal handling procedures. Data supplied is for use only in connection with occupational safety and health.

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