

MATERIAL SAFETY DATA SHEET

SECTION I NAME

Product	ACETIC ACID, GLACIAL	Chemical Synonyms	Ethanoic Acid	Formula	CH ₃ COOH	Unit(s) Size	500 mL, 1 Lt., 2.5 Lt.	C.A.S. No.	64-19-7
HAZARD RATING									
LEAST SLIGHT MODERATE HIGH EXTREME									
0 1 2 3 4									

CHEMTREC 800-424-9300 Day 716-226-6177 Night 716-334-4222		Health 2
NPPA		Fire 2
HAZARD RATING		Reactivity 2
LEAST SLIGHT MODERATE HIGH EXTREME		0 1 2 3 4

SECTION II HAZARDOUS INGREDIENTS OF MIXTURES

Principal Hazardous Component(s)	Acetic Acid, Glacial	TLV Units	10 ppm.
DANGER! POISON CAUSES SEVERE SKIN AND EYE BURNS			
VAPOR EXTREMELY IRRITATING - COMBUSTIBLE.			

SECTION III PHYSICAL DATA

Melting Point (°F)	16.7°C	Specific Gravity (H ₂ O = 1)	1.050 @ 20°C/4°C.
Boiling Point (°F)	244°F (118°C)	Percent Volatile by Volume (%)	100
Vapor Pressure (mm Hg)	@ 68°F 11.7mm	Evaporation Rate (But. AC. = 1)	0.97
Vapor Density (Air = 1)	2.07		
Solubility in Water	Complete.		
Appearance and Odor.	Clear colorless liquid; strongly pungent vinegar-like odor.		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used)	104°F (39°C) (CC).	Flammable Limits in Air % by Volume	Lower 5.4 Upper 16.0
Extinguisher Media	Carbon dioxide (CO ₂); dry chemical (ABC); alcohol foam. Large spills, use water spray or alcohol foam.		

SPECIAL FIREFIGHTING PROCEDURES

Water in a straight hose stream will scatter and spread fire and should not be used. Use water spray to cool container. In fire conditions, wear a NIOSH-approved self-contained breathing apparatus.

Autoignition temperature: 1050°F.

UNUSUAL FIRE AND EXPLOSION HAZARDS

Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat or spark. Acid reacts with most metals to release hydrogen gas which can form explosive mixtures with air. Moderate fire hazard, when exposed to heat and flame; can react vigorously with oxidizing materials.

D.O.T. CORROSIVE MATERIAL.



FREY SCIENTIFIC

905 HICKORY LANE MANSFIELD OHIO 44905

Approved by U.S. Department of Labor "essentially similar" to form OSHA-20

MSDS No. Effective Date

SECTION V HEALTH HAZARD DATA

Threshold Limited Value

10 ppm or 25 mg/m³ (ACGIH, 1981). 000956

Effects of Overexposure

Vapor causes irritation of eyes, nose and throat. Liquid causes severe burns to eyes and skin. May be fatal if swallowed. Swallowing results in severe damage to mucous membranes and deep tissues.

Emergency and First Aid Procedures

Flush eyes or skin with water for 15 minutes. For eyes, get immediate medical attention. If breathing is affected by vapor inhalation, remove to fresh air. Call a physician. Administer oxygen. Speed is of primary importance. If swallowed, do not induce vomiting. Drink large quantities of water, follow with milk or magnesia, beaten eggs, or vegetable oil. Get prompt medical attention.

SECTION VI REACTIVITY DATA

Stability	Unstable Stable	Conditions to Avoid	Keep from freezing. Excessive temperature and heat.
Incompatibility (Materials to avoid)	X	Strong oxidants, hydroxides, oxides, xylenes, combustible materials. (Chromic acids, sodium peroxides.)	

Hazardous Decomposition Products

Dangerous; when heated to decomposition, emits toxic fumes.

Hazardous Polymerization

May Occur	Will Not Occur	Conditions to Avoid	X
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SECTION VII SPILL OR LEAK PROCEDURES

Steps to be taken in case material is released or spilled

Eliminate all source of ignition. Cover contaminated surfaces with soda ash or sodium bicarbonate. Mix and add water if necessary. Scoop up slurry and wash neutral (make litmus test) waste down drain with excess water, if local environmental regulations permit.

Waste Disposal Method

Neutralize with sodium bicarbonate and flush to sewer with copious amounts of water.

Discharge, treatment, or disposal may be subject to federal, state, or local laws.

SECTION VIII SPECIAL PROTECTION INFORMATION

Respiration Protection (Specify Type)	For laboratory use work in ventilation hood or wear a NIOSH-approved respirator.	Recommended.	Special Recommended.	Other No.
Ventilation	Local Exhaust Mechanical (General)	Recommended.	Recommended.	No.
Protective Gloves	Rubber.	Eye Protection	Chemical safety goggles, face shield.	
Other Protective Equipment	Goggles and shield, lab coat, apron, vented hood, proper gloves, fire extinguisher, eye wash station.			

SECTION IX SPECIAL PRECAUTIONS

Precautions to be Taken in Handling and Storing

Keep away from heat and open flame. Keep in tightly closed container, at a temperature above 17°C (63°F). If frozen, thaw by moving closed container to warm area. Loosen closure cautiously.

Other Precautions

Read label on container before using. Do not get liquid or vapor in eyes, on skin, on clothing. Avoid breathing vapor. Wash thoroughly after handling.

For laboratory use only. Not for drug, food or household use. Keep out of reach of children.

Rev. No. No. 1 Date 1/12/87 Approved [Signature] Chemical Safety Coordinator

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