

# EASTMAN

## MATERIAL SAFETY DATA SHEET

Revision Date: 11/18/2008  
MSDSUSA/ANSI/EN/150000001043/Version 9.1

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

<b>Product Name</b>	Eastman(TM) Glacial Acetic Acid
<b>Product Identification Number(s)</b>	00021-00, P0002106, P0002100, P0002141, P0002143, P0002144, P0002145, P0002146, P0002147, P0002148, P0002142, P0002140, P0002127, E00021LS, E0002101, P000214E, E0002102, P000210P, E0002103, E0002104, E0002105, P0002154, P0002153, P0002155, P0002156
<b>Manufacturer/Supplier</b>	Eastman Chemical Company 200 South Wilcox Drive Kingsport, TN 37660-5280 US +142322922000
<b>MSDS Prepared by</b>	Eastman Product Safety and Health
<b>Chemical Name</b>	acetic acid
<b>Synonym(s)</b>	00021-00 900763
<b>Molecular Formula</b>	C2H4O2
<b>Molecular Weight</b>	60.05
<b>Product Use</b>	solvent
<b>OSHA Status</b>	hazardous

For emergency health, safety, and environmental information, call 1-423-229-4511 or 1-423-229-2000.

For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300 or call 423-229-2000.

### 2. COMPOSITION INFORMATION ON INGREDIENTS

(Typical composition is given, and it may vary. A certificate of analysis can be provided, if available.)

<u>Weight %</u>	<u>Component</u>	<u>CAS Registry No.</u>
100%	acetic acid	64-19-7

### 3. HAZARDS IDENTIFICATION

**DANGER!**  
CAUSES SEVERE SKIN AND EYE BURNS  
MIST OR VAPOR IRRITATING TO EYES AND RESPIRATORY TRACT  
HARMFUL IF SWALLOWED  
COMBUSTIBLE LIQUID AND VAPOR

**HMIS® Hazard Ratings:** Health - 3, Flammability -2, Chemical Reactivity - 0

*HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.*

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### 4. FIRST-AID MEASURES

- Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
- Eyes:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately. In case of irritation from airborne exposure, move to fresh air. Get medical attention if symptoms persist.
- Skin:** Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
- Ingestion:** Call a physician or poison control center immediately. Do NOT induce vomiting. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head lower than the hips to help prevent aspiration.

### 5. FIRE FIGHTING MEASURES

- Extinguishing Media:** water spray, dry chemical, carbon dioxide, alcohol foam
- Special Fire-Fighting Procedures:** Wear self-contained breathing apparatus and protective clothing. Use water spray to keep fire-exposed containers cool.
- Hazardous Combustion Products:** carbon dioxide, carbon monoxide
- Unusual Fire and Explosion Hazards:** Combustible.

### 6. ACCIDENTAL RELEASE MEASURES

- Wear a self-contained breathing apparatus and appropriate personal protective equipment. (See EXPOSURE CONTROL/PERSONAL PROTECTION.) Eliminate all ignition sources. Neutralize spill area and washings with soda ash or lime. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.
- For Large Spills:** Flush spill area with water spray. Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

### 7. HANDLING AND STORAGE

- Personal Precautionary Measures:** Do not get in eyes, on skin, on clothing. Do not taste or swallow. Avoid breathing mist or vapor. Use only with adequate ventilation. Wash thoroughly after handling.
- Prevention of Fire and Explosion:** Keep away from heat and flame. Keep from contact with oxidizing materials.
- Storage:** Keep container closed.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

*Country specific exposure limits have not been established or are not applicable unless listed below.*

#### ACETIC ACID

US: ACGIH Threshold Limit Values  
Time Weighted Average (TWA): 10 ppm,

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US. ACGIH Threshold Limit Values  
Short Term Exposure Limit (STEL): 15 ppm,  
US. NIOSH: Pocket Guide to Chemical Hazards  
Recommended exposure limit (REL): 10 ppm, 25 mg/m<sup>3</sup>  
US. NIOSH: Pocket Guide to Chemical Hazards  
Short Term Exposure Limit (STEL): 15 ppm, 37 mg/m<sup>3</sup>  
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)  
PEL: 10 ppm, 25 mg/m<sup>3</sup>

**Ventilation:** Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Respiratory Protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.

**Eye Protection:** Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed.

**Skin Protection:** Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.

**Recommended Decontamination Facilities:** eye bath, safety shower, washing facilities

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical Form:** liquid

**Color:** colorless

**Odor:** vinegar, pungent

**Odor Threshold:** 0.48 ppm

**Specific Gravity:** 1.05 (20 °C)

**Vapor Pressure:** 20 °C; 15.2 mbar

**Vapor Density:** 2.1

**Melting Point:** 17 °C

**Boiling Point:** 118 °C

**Evaporation Rate:** 0.97 (n-butyl acetate = 1 )

**Viscosity:** 1.2 mPa.s (20 °C),

**Solubility in Water:** complete

pH: 2.4

**Octanol/Water Partition Coefficient:** P: 0.49; log P: -0.31

**Flash Point:** 39 °C (Tag closed cup)

**Autoignition Temperature:** 516 °C (ASTM D2155)

**Thermal Decomposition Temperature:** (DTA) No exotherm to 500 °C

### 10. STABILITY AND REACTIVITY

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**Stability:** Stable; however, material can decompose at elevated temperatures.  
**Incompatibility:** Material reacts violently with strong oxidizing agents  
**Hazardous Polymerization:** Will not occur.

### 11. TOXICOLOGICAL INFORMATION

*Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.*

Oral LD-50:(rat)	3,310 - 3,530 mg/kg
Oral LD-50:(mouse)	4,960 mg/kg
Inhalation LC-50: (mouse)	1 h: 5620 ppm
Dermal LD-50: ( rabbit)	1,060 mg/kg
Skin Irritation (rabbit)	severe
Eye Irritation (rabbit)	severe

### 12. ECOLOGICAL INFORMATION

*Acute toxicity data, if available, are listed below. Additional toxicity data may be available on request.*

This material is a strongly acidic aqueous solution, and this property may cause adverse environmental effects.

**Oxygen Demand Data:**

BOD-5: 340 - 880 mg/g  
BOD-20: 900 mg/g

COD (Chemical Oxygen Demand):: 1,030 mg/g

**Acute Aquatic Effects Data:**

96 h LC-50 (fathead minnow): > 100 mg/l  
48 h LC-50 (golden orfe): 410 mg/l  
48 h LC-50 (mosquito fish): 251 mg/l  
96 h LC-50 (daphnid): > 100 mg/l

### 13. DISPOSAL CONSIDERATIONS

Discharge, treatment, or disposal may be subject to national, state, or local laws. Incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied.

### 14. TRANSPORT INFORMATION

*Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.*

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**DOT (USA)**

Reportable Quantity: 2,270 kg (acetic acid)

*Possible Shipping Description(s):*

UN 2789 Acetic acid, glacial 8 (3) II

**Sea - IMDG (International Maritime Dangerous Goods)**

*Possible Shipping Description(s):*

UN 2789 ACETIC ACID, GLACIAL 8 (3) II

**Air - ICAO (International Civil Aviation Organization)**

*Possible Shipping Description(s):*

UN 2789 Acetic acid, glacial 8 (3) II

**15. REGULATORY INFORMATION**

**SARA 311-312 Hazard Classification(s):**  
immediate (acute) health hazard  
fire hazard

**SARA 313: none, unless listed below**

**Carcinogenicity Classification (components present at 0.1% or more): none, unless listed below**

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MSDSUSA/ANSI/EN/150000001043/Version 9.1

**TSCA (US Toxic Substances Control Act):** This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

**DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act):** This product is listed on the DSL. Any impurities present in this product are exempt from listing.

**EINECS (European Inventory of Existing Commercial Substances):** This product is listed on EINECS or otherwise complies with EINECS requirements. **EINECS Number:** 200-580-7

**ACCS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme):** This product is listed on ACCS or otherwise complies with NICNAS.

**MITI (Japanese Handbook of Existing and New Chemical Substances):** This product is listed in the Handbook or has been approved in Japan by new substance notification.

**ECL (Korean Toxic Substances Control Act):** This product is listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act.

**Inventory of Existing Chemical Substances in China:** All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

### **16. OTHER INFORMATION**

Visit our website at [www.EASTMAN.com](http://www.EASTMAN.com) or email [emmsds@eastman.com](mailto:emmsds@eastman.com)

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