

MATERIAL SAFETY DATA SHEET

1 · Product and Company Identification

Product name : Acetic Acid Glacial
Synonyms : Acetic Acid;Glacial
Recommended use and restrictions on use : make reagent above: Vam monomer,acetic anhydride,Hcl,insecticide....
Supplier detail :
Emergency phone number :

2 · Hazards Identification

Hazard classification : Acute toxicity : Skin Contact;Corrosive to metal;Flammable liquids;Hazardous to the aquatic environment;Skin sensitization
Warning information :
GHS label : 
Signal word : Danger
Hazard statement : Flammable liquid and vapour;Harmful if inhaled;Harmful if swallowed;Harmful in Contact with skin;Harmful to aquatic life;May be corrosive to metals
Precautionary statement : Put the good place ventilating of container. If keep in touch with eyes, consult medical treatment after washing with a large amount of water at once. The clothes are polluted, take off immediately. In case of unexpected feeling uncomfortable, consult medical treatment immediately
Other hazards :

3 · Composition / Information on Ingredients

Substances
Product name : Acetic Acid Glacial
Synonyms : Ethanoic acid · Ethylic acid · Methanecarboxylic acid
CAS Number : 64-19-7
ingredients : 100

4 · First-Aid Measures

First-aid measures for different exposure routes :
Inhalation : If feel not comfortable, remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
Skin Contact : Immediately flush skin with water or small amount of ethanol for at least 15 minutes and get medical aid immediately.
Eye Contact : Immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid if irritation develops or persists .
Ingestion :
Do NOT induce vomiting. Give victim a glass of water. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person.
Most important symptoms and hazardous effects : Serious harmful to eyes and skin.
Protection of First-aiders : Wear C- Class personal protective equipment
Notes to Physician : If swallow DO NOT gastrolavage

5 · Fire-Fighting Measures

Extinguishing Media :
Water spray, dry chemical, carbon dioxide (CO ₂), alcohol foam
Fire and Explosion Hazards :
Wear self-contained breathing apparatus and protective clothing. Use water spray to keep fire-exposed containers cool.
Special Firefighting Procedures :
No information
Special Equipment for the Protection of Firefighters : No information

6 · Accidental Release Measures

Personal Precautions :
Eliminate all ignition sources. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.
Environmental Precautions :
No information
Methods for Cleaning Up :
For large spills: Flush spill area with water spray. Prevent runoff from entering drains, sewers, or streams.

7 · Safe Handling and Storage Measures

Handling :
Personal Precautionary Measures: Do not breathe vapor at concentrations greater than the exposure limits. Do not get in eyes, on skin, on clothing. 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. Use with adequate ventilation.
Storage :
Keep away from toxic substances. Keep container closed. Keep away from incompatible substances

8 · Exposure Controls / Personal Protection

<p>Engineering Measure : IF VENTILATION DOES NOT MAINTAIN INHALATION EXPOSURES BELOW PEL (TLV), USE NIOSH/MSHA APPROVED RESPIRATOR AS PER CURRENT 29 CFR 1910.134, INSTRUCTIONS/WARNINGS AND NIOSH-RESPIRATOR SELECTION. Work Hygienic Practices: WASH THOROUGHLY AFTER HANDLING AND BEFORE EATING OR DRINKING. LAUNDER CONTAMINATED CLOTHING BEFORE REUSE. Suppl. Safety & Health Data: CORROSIVE MATERIAL - AVOID CONTACT.</p>			
Control Parameters			
8 hours time weighted average exposure limits TWA	Short-term exposure limits STEL	Maximum exposure limits CEILING	biological standards
10	15		
Personal protective equipment : Eyeglasses, gloves, helmet, mask, safety shower, eye wash fountain. <ul style="list-style-type: none"> • Respiratory protection : • Hand protection : Chemical resistant gloves. (Butyl rubber , Polyvinyl alcohol) • Eye protection : • Skin and body protection : Wear appropriate protective gloves and clothing to prevent and minimize contact with skin. 			
Specific hygiene measures : Wash hand before eating and drinking.			

9 · Physical and Chemical Properties

Appearance(physical state, color, etc.) : Clear Liquid @ above 16°C	Odor : Pungent, vinegar
Odor threshold : 0.037-0.15ppm(detected)	Melting point : 16°C
pH : 2.4(1M/1L water)	Boiling point/boiling Range : 117.9 °C
Flammability : -	Flash point & method : 39 °C
Decompositon temperature : -	used : closed cup
Autoignition temperature : 516°C(crystal)	Explosion limits : No information available
Vapor pressure : 15.7 mmHg@25°C	Vapor density : 2.07(Air=1)
Density : 1.05(water=1)	Solubility : easy dissolve in water
Partition coefficient n-octanol/water : -0.17	Evaporation rate : 0.97(ether=1)

10 · Stability and Reactivity

Stability : Stable under normal conditions.

Possible Hazardous Reactions Occurring under Specific Conditions : Hazardous Polymerization: Will not occur
Conditions to Avoid :
Materials to Avoid : Incompatibility: Material can react with metals, bases, strong oxidizing agents, amines.
Hazardous Decomposition Products : Carbon dioxide, carbon monoxide

11 · Toxicological Information

Routes of exposure(inhalation, ingestion, skin and eye contact) :
Symptoms : acidity,burn, pulmonary edema,dermatitis,ablepsia
Acute toxicity : General: Acute overexposure to extremely high airborne concentrations of respiratory irritants has been associated with development of an asthma-like reactive airways syndrome (RADS) in susceptible individuals. Extremely high airborne concentrations are not generated during normal conditions of use but may occur following a spill. The potential to generate extremely high airborne concentrations in a spill situation depends upon physical factors such as the concentration of the solution, the volume of the spill, the surface area of the spill, the size of the room where the spill occurred, and the ventilation rate in the room. Inhalation: Vapor extremely irritating. Eyes: Causes severe burns. Vapor extremely irritating. Skin: Causes severe burns. Ingestion: May be fatal or harmful if swallowed. May cause burns of the gastrointestinal tract if swallowed.
Chronic Toxicity or delayed Toxicity : Acute Toxicity Data: Oral LD-50 (rat): 3310-3530 mg/kg Oral LD-50 (mouse): 4960 mg/kg. Inhalation LC-50 (mouse): 5620 ppm/1 hour(s) Dermal LD-50: 1060 mg/kg. Skin irritation: severe. Eye irritation: severe

12 · Ecological Information

Ecotoxicity : LC50 (fish) : 75-88 mg/96H EC50 (Aquatic Invertebrates) : 32mg/l/48H BCF : < 1
Persistence and degradability : No information
Bioaccumulative potential : No bioaccumulative
Mobility in soil : Permeate to soil ,easy veporize to air
other adverse effect : -

13 · Disposal Considerations

Recommended Methods for Safe and Environmentally Preferred Disposal : Discharge, treatment, or disposal is subject to national, state, or local laws. Contract with a licensed chemical disposal agency. Since emptied containers retain product residue, follow label warnings even after container is emptied.

14 · Transport Information

UN number : 2789
UN proper shipping name : ACETIC ACID GLACIAL or ACETIC ACID SOLUTION more than 80% acid by mass
Transport hazard class : corrosive and flammable material
Packing group : II
Marine pollution : NO
Specific precautionary transport measures and conditions : -

15 · Regulatory Information

Applicable Regulations : Carcinogenicity Classification (components present at 0.1% or more): - International Agency for Research on Cancer (IARC): None - American Conference of Governmental Industrial Hygienists (ACGIH): None - National Toxicology Program (NTP): None - Occupational Safety and Health Administration (OSHA): None
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16 · Other Information

Literature references : 1.CHEMINFO Data base , CCINFO CD-R , 2005-1 2.RTECS Data base , TOMES PLUS CD-R , Vol.63 , 2005 3.ChemWatch Data base , 2004-4
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Date the GHS was prepared : 2014/8/11 02:58:19 PM Revised Version : 2014/8/11 02:58:19 PM