

The Version Date and Number for this MSDS is : 08/17/2006 - #007

PRODUCT NAME: DILUTE ACETIC ACID 50-80%

MSDS NUMBER: EZ064727

DATE ISSUED: 8/30/2004

SUPERSEDES: 6/25/2003

ISSUED BY: 009292

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name Dilute Acetic Acid, 50-80%

Distributed by:

Univar USA Inc.
17425 NE Union Hill Road
Redmond, WA 98052
425-889-3400

Chemical Name not applicable
Molecular Formula not applicable
Molecular Weight not applicable
Product Use solvent
OSHA Status hazardous

For emergency transportation information, call CHEMTREC at 800-424-9300

2. COMPOSITION INFORMATION ON INGREDIENTS

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

Weight %	Component	CAS Registry No.
50-80%	acetic acid	64-19-7
20-50%	water	7732-18-5

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.

4. FIRST-AID MEASURES

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. 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.

Sensitivity to Static Discharge: Material is unlikely to accumulate a static charge which could act as an ignition source.

6. ACCIDENTAL RELEASE MEASURES

Use personal protective equipment. Eliminate all ignition sources. Neutralize with soda ash lime. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste.

For Large Spills: Use water spray to disperse vapors and flush spill area.

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.

Avoid breathing mist or vapor. Do not taste or swallow. 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,
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/m³
US. NIOSH: Pocket Guide to Chemical Hazards
Short Term Exposure Limit (STEL): 15 ppm, 37 mg/m³
US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
PEL: 10 ppm, 25 mg/m³
US. California Code of Regulations, Title 8, Section 5155. Airborne
Contaminants Time Weighted Average (TWA) Permissible Exposure Limit (PEL): 10
ppm, 25 mg/m³
US. California Code of Regulations, Title 8, Section 5155. Airborne
Contaminants Ceiling Limit Value: 40 ppm,
US. California Code of Regulations, Title 8, Section 5155. Airborne
Contaminants Short Term Exposure Limit (STEL): 15 ppm, 37 mg/m³

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). 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: pungent, vinegar
Odor Threshold for (acetic acid): 0.48 ppm
Specific Gravity: > 1
Vapor Pressure for (acetic acid): 20 deg C; 15.2 mbar
Vapor Density for (acetic acid): 2.1
Boiling Point: 102 - 118 deg C
Solubility in Water: complete

Flash Point: 71 - 91 deg C

Thermal Decomposition Temperature: Thermal stability not tested. Low stability hazard expected at normal operating temperatures.

10. STABILITY AND REACTIVITY

Stability: Stable.

Incompatibility: Material reacts 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.

Data for major component

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.

Data for a major component:

Oxygen Demand Data:

BOD-5: 340 - 880 mg/g

COD: 1,000 mg/g

Acute Aquatic Effects Data:

96 h LC-50 (fathead minnow): > 100 mg/l

48 h LC-50 (mosquito fish): 251 mg/l

48 h LC-50 (golden orfe): 410 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.

Reportable Quantity: 2,837 kg (acetic acid)

Possible Shipping Description(s):

Acetic acid solution

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Sea - IMDG (International Maritime Dangerous Goods)

Possible Shipping Description(s):

ACETIC ACID SOLUTION

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Air - ICAO (International Civil Aviation Organization)

Possible Shipping Description(s):

Acetic acid solution

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15. REGULATORY INFORMATION

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS (Canada) Status: controlled

WHMIS (Canada) Hazard Classification: B/3, E

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

TSCA (US Toxic Substances Control Act): All components of this product are 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): All components of this product are listed on the DSL. Any impurities present in this product are exempt from listing.

EINECS (European Inventory of Existing Commercial Chemical Substances): All components of this product are listed on EINECS.

AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): All components of this product are listed on AICS or otherwise comply with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances): All components of this product are listed in the Handbook or have been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): All components of this product are listed on the Korean inventory or otherwise comply with the Korean Toxic

ORDER NO:GB461927

MATERIAL SAFETY DATA SHEET
CUST:NS FARRINGTON

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Substances Control Act.

Philippines Inventory (PICCS) : All components of this product are listed on the Philippine inventory or otherwise comply with PICCS.

16. OTHER INFORMATION

Univar USA Inc Material Safety Data Sheet

For Additional Information contact MSDS Coordinator during business hours, Pacific time: (425) 889-3400

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