



## MATERIAL SAFETY DATA SHEET

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CODE #6400

## SECTION I PRODUCT INFORMATION

PRODUCT IDENTIFIER : ACETIC ACID USP  
CHEMICAL NAME AND SYNONYMS : Acetic acid glacial, ethanoic acid, vinegar acid  
IDENTIFICATION NUMBER : UN 2789  
PRODUCT USE : Industrial use, solvent

SUPPLIER : Regent Chemical Products Ltd.  
ADDRESS : 600 Delmar Avenue  
Pointe-Claire, QC  
H9R 4A8

TELEPHONE : (514) 630-3309

EMERGENCY Philip Environmental: 1-800-567-7455 (24h/24)

## SECTION II HAZARDOUS INGREDIENTS

| INGREDIENT  | CONC.     | CAS NUMBER | LD50(rat-oral) | LC50(rat-ihl)       |
|-------------|-----------|------------|----------------|---------------------|
| Acetic acid | 99 - 100% | 64-19-7    | 3310 mg/kg     | 2810 ppm/4h (mouse) |

## SECTION III WHMIS CLASSIFICATION



CLASS B3



CLASS E

## SECTION IV PHYSICAL DATA

|                                       |                                            |                              |                   |
|---------------------------------------|--------------------------------------------|------------------------------|-------------------|
| PHYSICAL STATE                        | Liquid                                     | pH (WATER=7)                 | 2,4 (1M solution) |
| ODOUR AND APPEARANCE                  | Vinegar like odour, clear colorless liquid | SPECIFIC GRAVITY (WATER = 1) | 1,05 @ 20°C       |
| ODOUR THRESHOLD                       | 1,02 ppm                                   | VAPOUR DENSITY (AIR = 1)     | 2,07              |
| BOILING POINT                         | ≈ 118°C                                    | VAPOUR PRESSURE              | 11,4mmHg @ 20°C   |
| MELTING POINT                         | ≈ 16,6°C                                   | EVAPORATION RATE             | 11,0 (ether=1)    |
| COEFFICIENT OF WATER/OIL DISTRIBUTION | 0,49                                       |                              |                   |

## SECTION V FIRE OR EXPLOSION

CONDITION OF FLAMMABILITY: Combustible liquid and vapor.

**MEANS OF EXTINCTION:** Use water fog, foam, dry chemicals, or carbon dioxide. DO NOT fight fire when it reaches material. Withdraw from fire and let it burn. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. Vapors may cause flash fire. Vapors may accumulate in low or confined areas, travel considerable distance to source of ignition and flash back. Runoff to sewer may create fire or explosion hazard. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.

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|                       |                   |                               |       |
|-----------------------|-------------------|-------------------------------|-------|
| FLASH POINT           | 39°C (closed cup) | AUTO-IGNITION TEMPERATURE     | 427°C |
| UPPER FLAMMABLE LIMIT | 16 %              | MECHANICAL IMPACT SENSITIVITY | No    |
| LOWER FLAMMABLE LIMIT | 4 %               | STATIC DISCHARGE SENSITIVITY  | Yes   |

**HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide and carbon dioxide.

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**SECTION VI REACTIVITY DATA**

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**CHEMICAL INSTABILITY CONDITIONS:** Stable. This product is hygroscopic.**INCOMPATIBLE SUBSTANCES AND CONDITIONS OF REACTIVITY:** Incompatible with metals, oxidizers and reducing agent. Avoid freezing and sources of ignition.**HAZARDOUS DECOMPOSITION PRODUCTS:** Carbon monoxide and carbon dioxide. Reacts with metals to form hydrogen (flammable and/or explosive gas)

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**SECTION VII TOXICOLOGICAL PROPERTIES**

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**SKIN CONTACT/ABSORPTION:** Causes severe burns. Direct contact or exposure to high vapor concentrations can cause erythema, blisters, tissue destruction with slow healing, darken skin and teeth. Diluted solutions may cause dermatitis in some sensitive individuals. Readily absorbed through skin.**EYE CONTACT:** Lachrymatory. Causes severe burns and loss of vision. May cause permanent damage. High vapor concentrations may result in conjunctivitis, iritis, corneal erosion, hyperkeratosis and opacification. Direct contact with the eyes can cause irreversible damage including blindness.**INHALATION:** Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract. May cause central nervous system depression (e.g., headache, nausea, vomiting), coughing, dyspnea, thoracic pain, bronchopneumonia, chemical pneumonitis, pulmonary edema.**INGESTION:** Burns in mouth, pharynx and gastrointestinal tract. Nausea, diarrhea, abdominal pain, hematemesis, albuminuria, hemolysis, hemoglobinuria, anuria, uremia, kidney damage, shock, coma and possibly death. Ingestion of as little as 1.0 ml has resulted in perforation of the esophagus.**ACUTE/CHRONIC EXPOSURE EFFECTS:** Irritation of respiratory tract, chronic bronchitis, erosion of teeth.

|                       |               |                                  |                 |
|-----------------------|---------------|----------------------------------|-----------------|
| EXPOSURE LIMIT (VEMP) | 10 ppm        | SHORT TERM EXPOSURE LIMIT (VECD) | 15 ppm          |
| CARCINOGENICITY       | Not available | SENSITIZATION TO PRODUCT         | Possible (skin) |
| TERATOGENICITY        | Not available | MUTAGENICITY                     | Not available   |
| SYNERGISTIC PRODUCTS  | Not available | REPRODUCTIVE TOXICITY            | Not available   |
| IRRITANCY OF PRODUCT  | Yes           |                                  |                 |

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**SECTION VIII PREVENTIVE MEASURES**

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**PROTECTIVE GLOVES:** Wear impervious gloves (nitrile, PVC or neoprene).**EYE PROTECTION:** Wear chemical safety goggles and faceshield.**RESPIRATORY PROTECTION:** Wear a NIOSH/MSHA approved respirator if exposure above the TLV is possible.**OTHER PROTECTIVE EQUIPMENT:** Wear rubber apron. In case of leak, spill or emergency situations with possibility of contact with the material, add full impervious clothing including rubber boots. Provide an eyewash station and an emergency shower near the working area.**ENGINEERING CONTROLS:** Use local exhaust ventilation to maintain levels to below the TLV.

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**PROCEDURES TO BE FOLLOWED IN CASE OF SPILL OR LEAK:** Eliminate all ignition sources. Flush spill area with water spray. Prevent runoff from entering drains, sewers, and streams. Since emptied containers retain product residues, follow label warnings even after container is emptied. Small spills: Take up with sand or other noncombustible absorbent material and place into containers for later disposal. Large spills: Dike far ahead of liquid spill for later disposal.

**WASTE DISPOSAL:** Dispose of neutralized waste or other wastes of this material consistent with the requirements of federal, provincial or local regulations.

**HANDLING AND STORAGE PROCEDURES:** Store in closed containers in a cool, dry, isolated and well ventilated area. Outdoors or detached storage is preferred. Keep above its freezing point (16.7°C) to avoid rupture of carboys and glass containers due to expansion upon solidification. Keep away from incompatible and from heat, sparks and flame. Use non sparking tools.

**SPECIAL SHIPPING INFORMATION:**

Shipping Name: ACETIC ACID, GLACIAL  
Class/Division : UN 2789, Class 8 (3), Packing group II  
Special instruction: Requires heated service - temperature 17°C

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**SECTION IX FIRST AID MEASURES**

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**SKIN:** Immediately flush with plenty of water for 20 minutes, while removing contaminated clothing. Wash clothing before reuse. Get medical attention.

**EYES:** Immediately flush with plenty of water for at least 20 minutes keeping eyelids opened. Get medical attention.

**INHALATION:** If person experiences nausea, headache or dizziness, person should stop work immediately and move to fresh air until these symptoms disappear. If breathing is difficult, administer oxygen, keep the person warm and at rest. Call a physician. In the event that an individual inhales enough vapor to lose consciousness, person should be moved to fresh air at once and a physician should be called immediately. If breathing has stopped, artificial respiration should be given immediately. In all case, ensure adequate ventilation and provide respiratory protection before the person returns to work.

**INGESTION:** Do not induce vomiting. Give a glass of water or milk if victim is conscious. Never give anything by mouth to an unconscious person. Get immediate medical attention.

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**SECTION X PREPARATION INFORMATION**

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PREPARED BY : Regent Chemical Products Ltd.  
TELEPHONE : (514) 630-3309  
DATE : February 17<sup>th</sup>, 2005

**IMPORTANT:** The information presented herein is believed to be accurate and is offered only as a guide. Users should make their own tests to determine the suitability of these products for their own particular purposes. Users assume all risk of use, storage and handling of the product. No warranty, express or implied, is made including, but not limited to, implied warranties of merchantability and fitness for a particular purpose. Nothing contained herein shall be construed as a license to operate under, or recommendation to infringe any patents.