

# SAFETY DATA SHEET

ACETIC ACID 56% F.G.  
Product ID: AC0116  
Revised: 05-17-2016  
Replaces: 05-17-2016

## 1. IDENTIFICATION

**Product Identifier:** ACETIC ACID 56% F.G.  
**Other Identifiers:** Ethanoic Acid; Vinegar Acid; Methanecarboxylic Acid  
**CAS Number:** MIXTURE  
**Recommended Use:** No data available.  
**Restrictions on Use:** No data available.

Hydrite Chemical Co.  
300 N. Patrick Blvd.  
Brookfield, WI 53008-0948  
(262) 792-1450

**EMERGENCY RESPONSE NUMBERS:**  
**24 Hour Emergency #:** (414) 277-1311  
**CHEMTREC Emergency #:** (800) 424-9300

## 2. HAZARD(S) IDENTIFICATION

**GHS Classification(s):** Skin Corrosion/Irritation Category 1B  
Serious Eye Damage/Eye Irritation Category 1  
Acute Toxicity - Dermal Category 4

**GHS Label Elements:**

**GHS Hazard Symbols:**



**Signal Word:** Danger

**Hazard Statements:** Harmful in contact with skin.  
Causes severe skin burns and eye damage.

**Precautionary Statements:**

**Prevention:** Do not breathe dust/fume/gas/mist/vapours/spray.  
Wash thoroughly after handling.  
Wear protective gloves/protective clothing/eye protection/face protection.

**Response:** IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Immediately call a POISON CENTER or doctor/physician.  
Specific treatment (see First Aid on SDS or on this label).  
Wash contaminated clothing before reuse.

**Storage:** Store in a secure manner.

**Disposal:** Dispose of in accordance with local, regional and international regulations.

**Hazards Not Otherwise Classified:** May react with certain metals to form explosive/flammable hydrogen gas.

**Percentage of Components with Unknown Acute Toxicity:**  
**Oral:** 56 %

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Inhalation Vapor: 56 %  
Inhalation Dust/Mist: 56 %

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substances/Mixtures:**

<u>Chemical or Common Name/Synonyms</u>	<u>CAS Number</u>	<u>% by Wt.</u>
Acetic Acid	64-19-7	56 %

Note: Any chemical identity and/or exact percentage not expressly stated is being withheld as a trade secret or is due to batch variation.

**4. FIRST-AID MEASURES****Description of Necessary Measures:**

**Eye Contact:** If in eyes: Immediately flush eyes with plenty of water for at least 15 minutes while holding eyelids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention. Remove contact lens if easy to do.

**Skin Contact:** If on skin: Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately. Do not reuse clothing and shoes until cleaned. Discard contaminated leather articles such as shoes and belt.

**Inhalation:** If inhaled: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth-to-mouth. GET MEDICAL ATTENTION IMMEDIATELY.

**Ingestion:** If swallowed: Call a physician immediately. DO NOT induce vomiting unless directed to do so by a physician. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs. If victim is fully conscious, give a cupful of water.

**Most Important Symptoms/Effects, Acute and Delayed:**

**Eye Contact:** CORROSIVE-Causes severe irritation and burns. Liquid or vapor may cause: irritation. burning sensation. tearing. redness. pain. change of vision. eye damage. permanent eye damage.

**Skin Contact:** CORROSIVE-Causes severe irritation and burns. Contact may cause: redness. discoloration. itching. swelling. blistering. burning. skin damage.

**Skin Absorption:** May be harmful if absorbed through skin.

**Inhalation:** CORROSIVE-Causes severe irritation and burns. Vapors or mists may irritate: nose. throat. respiratory tract. May cause: coughing. nasal discomfort and discharge. hoarseness. chest pain. difficulty breathing. wheezing. tightness of the chest. shortness of breath. headache. Symptoms of pulmonary edema may be delayed. Chronic exposure may cause: tooth decay. lung damage.

**Ingestion:** CORROSIVE-Causes severe irritation and burns. May cause burns to the: mouth. throat. esophagus. stomach. May cause: coughing. throat constriction. loss of appetite. gastrointestinal irritation. nausea. vomiting. diarrhea. drowsiness. dizziness. faintness. weakness. collapse. coma. Prolonged or repeated exposure may cause damage to the: digestive tract.

**Indication of Immediate Medical Attention and Special Treatment Needed:** Observe for latent pulmonary edema. Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing Media:** Water spray. Water fog. Dry chemical. Carbon dioxide. Alcohol foam. Foam. Do not use straight streams of water.

**Specific Hazards Arising from the Chemical:**

**Fire and Explosion Hazards:** Material will burn in fire, releasing toxic vapors. This product may react with certain metals to produce flammable Hydrogen Gas.

**Hazardous Combustion Products:** Carbon dioxide. Carbon monoxide.

**Special Protective Equipment and Precautions for Fire-Fighters:** Evacuate area of unprotected personnel. Wear protective clothing including NIOSH-approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition products. Use water spray to cool fire-exposed containers and disperse vapors. Do not use direct water stream. May spread fire. Move containers from fire area if possible without hazard. Run-off from fire control may cause pollution.

## 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions, Protective Equipment, Emergency Procedures:** CORROSIVE MATERIAL. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment recommendations found in Section 8. Never exceed any occupational exposure limit.

**Methods and Materials for Containment and Clean Up:** Do not touch or walk through spilled material. Contain spill, place into drums for proper disposal. Soak up residue with inert absorbent material. Place in non-leaking containers for immediate disposal. Flush remaining area with water to remove trace residue and dispose of properly. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs. Prevent entry into basements, low areas, or confined areas.

## 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** Avoid contact with eyes, skin, and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mists, or dust. Do not eat, drink, or smoke in work area. Wash thoroughly after handling. Empty containers retain product residue (vapor, dust, or liquid) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity, or other source of ignition. They may explode and cause injury or death.

**Conditions for Safe Storage, Including any Incompatibilities:** CORROSIVE MATERIAL. Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from heat. Keep away from incompatible materials. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Do not freeze. May be used in food. Do not store or ship together with toxic substances.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### OSHA Exposure Guidelines:

Component	Limits
Acetic Acid	10 ppm TWA; 25 mg/m <sup>3</sup> TWA

### ACGIH Exposure Guidelines:

Component	Limits
Acetic Acid	10 ppm TWA; 15 ppm STEL

**Engineering Controls:** Local exhaust or other engineering controls are needed to minimize exposures. Avoid creating dust or mist. Maintain adequate ventilation. Do not use in closed or confined spaces. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly.

### Individual Protection Measures:

**Eye/Face Protection:** Wear chemical safety goggles and a full face shield while handling this product. Wear a full-face respirator, if needed. Do not wear contact lenses.

**Skin Protection:** Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Chemical-resistant.

**Respiratory Protection:** Respiratory protection must be worn if ventilation does not eliminate symptoms or keep levels below recommended exposure limits. If exposure limits are exceeded, wear: NIOSH-Approved organic respirator. NIOSH-Approved self-contained breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

**Other Protective Equipment:** Eye-wash station. Safety shower. Rubber apron. Chemical safety shoes. Rubber boots. Protective clothing.

**General Hygiene Conditions:** Wash with soap and water before meal times and at the end of each work shift.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State:** Liquid.

**Color:** Clear. Colorless.

**Odor:** Acetic odor.

**Odor Threshold:** N.D.

**pH:** < 1 (as is)

**Freezing Point (deg. F):** N.D.

**Melting Point (deg. F):** N.D.

**Initial Boiling Point or Boiling Range:** N.D.

**Flash Point:** > 200 °F

**Flash Point Method:** N.A.

**Evaporation Rate (nBuAc = 1):** N.D.

**Flammability (solid, gas):** N.D.

**Lower Explosion Limit:** ~ 4% (v)

**Upper Explosion Limit:** ~ 19.9% (v)

**Vapor Pressure (mm Hg):** N.D.

**Vapor Density (air=1):** N.D.

**Specific Gravity or Relative Density:** 1.065 @ 25C

**Solubility in Water:** Complete

**Partition Coefficient (n-octanol/water):** N.D.

**Autoignition Temperature:** No Data

**Decomposition Temperature:** N.D.

**Viscosity:** N.D.

**% Volatile (wt%):** N.D.

**VOC (wt%):** ~ 56

**VOC (lbs/gal):** ~ 4.96

**Fire Point:** N.D.

## 10. STABILITY AND REACTIVITY

**Reactivity:** No data available.

**Chemical Stability:** Stable under normal conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization will not occur under normal conditions.

**Conditions to Avoid:** Avoid oxidizing conditions.

**Incompatible Materials:** Alkalies. Oxidizing agents. Amines. Strong acids. Bases. Reducing agents. Metals. Alcohols.

**Hazardous Decomposition Products:** Carbon dioxide. Carbon monoxide.

## 11. TOXICOLOGICAL INFORMATION

**Routes of Exposure:** Absorption. Eyes. Ingestion. Inhalation. Skin.

**Symptoms/Effects: Acute, Delayed and Chronic:**

**Eye Contact:** CORROSIVE-Causes severe irritation and burns. Liquid or vapor may cause: irritation. burning sensation. tearing. redness. pain. change of vision. eye damage. permanent eye damage.

**Skin Contact:** CORROSIVE-Causes severe irritation and burns. Contact may cause: redness. discoloration. itching. swelling. blistering. burning. skin damage.

**Skin Absorption:** May be harmful if absorbed through skin.

**Inhalation:** CORROSIVE-Causes severe irritation and burns. Vapors or mists may irritate: nose, throat, respiratory tract. May cause: coughing, nasal discomfort and discharge, hoarseness, chest pain, difficulty breathing, wheezing, tightness of the chest, shortness of breath, headache. Symptoms of pulmonary edema may be delayed. Chronic exposure may cause: tooth decay, lung damage.

**Ingestion:** CORROSIVE-Causes severe irritation and burns. May cause burns to the: mouth, throat, esophagus, stomach. May cause: coughing, throat constriction, loss of appetite, gastrointestinal irritation, nausea, vomiting, diarrhea, drowsiness, dizziness, faintness, weakness, collapse, coma. Prolonged or repeated exposure may cause damage to the: digestive tract.

**Numerical Measures of Toxicity:**

<u>Component</u>	<u>Oral LD50</u>	<u>Dermal LD50</u>	<u>Inhalation LC50</u>
Acetic Acid	No Data	Rabbit: 1060 mg/kg	No Data

**Acute Toxicity Estimate (ATE):**

**Dermal:** 1964 mg/kg

**Cancer Information:**

This product does not contain 0.1% or more of the known or potential carcinogens listed in NTP, IARC, or OSHA.

**Medical Conditions Aggravated by Exposure to Product:** Eye disorders. Skin disorders. Respiratory system disorders. Mucous membranes diseases.

**Other:** None known.

Acetic Acid: Humans unacclimatized to acetic acid vapors experience extreme eye and nasal irritation at concentrations above 25 ppm. Air concentrations of 50 ppm are considered intolerable, causing intense lachrymation (eye weeping), nose and throat irritation. Repeated exposures to high concentrations in man can cause eye conjunctival lesions, blackening of the hands, hyperkeratosis (thickening) of the skin, teeth erosion, congestion and edema of the pharynx, bronchial constriction, and respiratory tract irritation.

## **12. ECOLOGICAL INFORMATION**

**Ecotoxicological Information:** This material is expected to be slightly toxic to aquatic species because of acidity.

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

**Chemical Fate Information:** This material is a strongly acidic aqueous solution, and this property may cause adverse environmental effects.

Readily biodegradable.

This product may move with surface or groundwater flow because its water solubility is 100%.

This product is not expected to bioaccumulate through food chains in the environment.

Oxygen Demand Data:

BOD-5: 340 - 880 mg/g

BOD-20: 900 mg/g

COD: 1,030 mg/g

## **13. DISPOSAL CONSIDERATIONS**

**Hazardous Waste Number:** D002

**Disposal Method:** Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. Since emptied containers retain product residue, follow label warnings even after container is

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emptied. DO NOT pressurize, cut, weld, solder, drill, grind or expose empty containers to heat, flame, sparks or other sources of ignition.

**14. TRANSPORT INFORMATION****DOT (Department of Transportation):**

**Identification Number:** UN2790  
**Proper Shipping Name:** ACETIC ACID SOLUTION  
**Hazard Class:** 8  
**Packing Group:** II  
**Label Required:** CORROSIVE  
**Reportable Quantity (RQ):** 5000# (Acetic Acid)

**15. REGULATORY INFORMATION**

**TSCA Inventory Status:** All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

**SARA Title III Section 311/312 Category Hazards:**

<u>Immediate (Acute)</u>	<u>Delayed (Chronic)</u>	<u>Fire Hazard</u>	<u>Pressure Release</u>	<u>Reactive</u>			
Yes	Yes	No	No	No			
<b>Regulated Components:</b>	<b>CAS</b>	<b>CERCLA</b>	<b>SARA</b>	<b>SARA</b>	<b>U.S.</b>	<b>WI</b>	<b>Prop</b>
<b><u>Component</u></b>	<b><u>Number</u></b>	<b><u>RQ</u></b>	<b><u>EHS</u></b>	<b><u>313</u></b>	<b><u>HAP</u></b>	<b><u>HAP</u></b>	<b><u>65</u></b>
Acetic Acid	64-19-7	Yes	No	No	No	Yes	No

**\*Prop 65 - May Contain the Following Trace Components:**

No data available.

**16. OTHER INFORMATION****Hazard Rating System**

**Health:** 3\*

**Flammability:** 1

**Reactivity:** 0

\* = Chronic Health Hazard

**NFPA Rating System**

**Health:** 3

**Flammability:** 1

**Reactivity:** 0

**Special Hazard:** None

**SDS Abbreviations**

**N.A. = Not Applicable**

**N.D. = Not Determined**

**HAP = Hazardous Air Pollutant**

**VOC = Volatile Organic Compound**

**C = Ceiling Limit**

**N.E./Not Estab. = Not Established**

**SDS Prepared by:** CSH

**Reason for Revision:** New format. Changes made throughout the SDS.

**Revised:** 05-17-2016

**Replaces:** 05-17-2016

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**Product ID: AC0116**

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The data in this Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which HYDRITE CHEMICAL CO. assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.