

SAFETY DATA SHEET
Section 1: Product and Company Identification
1.1 GHS Product Identifier

Product Name: Acetic Acid 56% Solution

1.2 Other Means of Identification

SDS Code: 600006
 Synonyms: Ethanoic Acid / Vinegar Acid / Ethylic Acid / Pyroligneus Acid / Methanecarboxylic Acid
 CAS Number: 64-19-7
 EC Number: 200-580-7
 Reach Registration Number: 01-2119475328-30-XXXX
 Index Number: 607-002-00-6
 Molecular Formula: $C_2H_4O_2$
 Molecular Weight: 60.05 g/mol

1.3 Recommended / Restricted Use

Identified Uses: Commercial Organic Synthesis / Tanning / Printing / Fabric Dyeing / Acidulant and Preservative in Foods / Solvent
 Restrictions: Processes involving incompatible materials. Processes that could lead to over-exposure of personnel.

1.4 Supplier Detail

Supplier: Deep South Chemical, Inc.
 229 Millstone Rd.
 Broussard, LA 70518
 USA
 337-837-9931 (Telephone)
 337-837-9565 (FAX)

1.5 Emergency Phone Number

CHEMTREC 800-424-9300

Section 2: Hazard Identification
2.1 GHS Classification

Acute Toxicity, Oral (Category 4)
 Skin Corrosion / Irritation (Category 1B)
 Serious Eye Damage / Eye Irritation (Category 1)
 Hazardous to the Aquatic Environment, Acute Hazard (Category 3)

2.2 GHS Label Elements, Including Precautionary Statements
Pictogram(s)

Signal Word

Danger

Hazard Statement(s)

H302 Harmful if swallowed.
 H314 Causes severe skin burns and eye damage.
 H318 Causes serious eye damage.
 H402 Harmful to aquatic life.

Precautionary Statement(s) - Prevention

P260 Do not breathe dust / fume / gas / mist / vapors / spray.
 P264 Wash skin thoroughly after handling.
 P270 Do not eat, drink or smoke when using this product.
 P273 Avoid release to the environment.
 P280 Wear protective gloves / protective clothing / eye protection / face protection.

Section 2: Hazard Identification - continued

Precautionary Statement(s) – Response

P301 + P312	IF SWALLOWED: Call a POISON CENTER / physician if you feel unwell.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water / shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER / physician.
P321	Specific treatment (see Section 4 of this SDS).
P330	Rinse mouth.
P363	Wash contaminated clothing before reuse.

Precautionary Statement(s) – Storage

P405	Store locked up.
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Precautionary Statement(s) – Disposal

P501	Dispose of contents / container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.
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2.3 Other Hazards

No data available.

Section 3: Composition / Information on Ingredients

3.1 Substances / Mixtures

Components	Concentration
Acetic Acid (64-19-7)	56.00%

Section 4: First Aid Measures

4.1 Description of First Aid Measures

Eye Contact

Immediately flush eyes with water, while lifting the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control center immediately. In case of irritation from airborne exposure, move to fresh air. Seek prompt medical attention if irritation develops or persists.

Skin Contact

Remove contaminated clothing and shoes. Wash exposed area immediately with plenty of water for at least 15 minutes. Call a physician or poison control center immediately. Wash clothing separately before reuse. Destroy or thoroughly clean contaminated shoes.

Inhalation

Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Seek medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and seek medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie, belt or waistband.

Ingestion

Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison control center immediately. Do not induce vomiting. If victim is fully conscious, give a cupful of water. If vomiting occurs spontaneously, keep head low so that stomach content does not get into the lungs. Never give anything by mouth to a victim who is unconscious or is having convulsions. If unconscious, place in recovery position and seek medical attention immediately. Maintain an open airway. Loosen tight clothing such as collar, tie, belt or waistband.

4.2 Most Important Symptoms / Effects – Acute & Delayed

May irritate and cause redness and pain.

4.3 Indication of Immediate Medical Attention / Special Treatment

Provide general supportive measures and treat symptomatically. Symptoms may be delayed. Keep victim under observation.

Section 5: Firefighting Measures

5.1 Suitable Extinguishing Media

Use water spray, dry chemical, carbon dioxide or alcohol foam.

5.2 Unsuitable Extinguishing Media

None known.

Section 5: Firefighting Measures - continued

5.3 Specific Hazards Arising from the Chemical

Vapor may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentration.

5.4 Special Protective Actions for Firefighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Water may be ineffective in fighting the fire. Use water spray to keep fire-exposed containers cool.

Section 6: Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

6.2 Environmental Precautions

Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways. Notify relevant authorities in accordance with all applicable regulations.

6.3 Methods and Materials for Containment and Cleaning Up

Eliminate sources of ignition. Stop spill / release if it can be done safely. Move undamaged containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material (e.g. sand, earth, vermiculite or diatomaceous earth) and place in a suitable container for disposal according to local / state / federal / national regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product.

Section 7: Handling and Storage

7.1 Precautions for Safe Handling

Put on appropriate personal protective equipment. Avoid contact with eyes, skin and clothing. Avoid breathing vapor, mist or dust. Do not ingest. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for Safe Storage, Including any Incompatibilities

Store in accordance with local regulations. Store this material in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials, and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Protect container(s) against physical damage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.

Section 8: Exposure Controls / Personal Protection

8.1 Control Parameters

Components with Workplace Control Parameters

Components	CAS No.	Value	Control Parameters	Basis
Acetic Acid	64-19-7	TWA	10 ppm	USA. ACGIH Threshold Limit Values (TLV)
		STEL	15 ppm	USA. ACGIH Threshold Limit Values (TLV)
		PEL	10 ppm 25 mg/m ³	USA. OSHA Table Z-1 Limits for Air Contaminants

8.2 Appropriate Engineering Controls

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.

Eye wash facilities and emergency shower must be available when handling this product.

8.3 Individual Protection Measures, Such as Personal Protective Equipment (PPE)**Eye/Face Protection**

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles with face shield.

Hand Protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufactures. In the case of mixtures, consisting of multiple substances, the protection time of the gloves cannot be accurately estimated.

Skin Protection

Personal protective equipment for the body, appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory Protection

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Thermal Hazards

No data available.

Section 9: Physical and Chemical Properties**9.1 Physical and Chemical Data**

Physical State	Liquid
Color	Colorless
Odor	Pungent
Odor Threshold	0.48 ppm
pH	2.4 (60 g/L)
Specific Gravity (Water = 1)	1.0600
Melting Point / Freezing Point	16.64° C (61.95° F)
Initial Boiling Point / Range	117.9° C (244.22° F)
Flash Point	55° C (131° F) (Tagliabue Closed Cup)
Evaporation Rate (BuA = 1)	0.97
Flammability (solid, gas)	N/A
Lower Explosion Limit	4% (V)
Upper Explosion Limit	19.9% (V)
Vapor Pressure	1.5 kPa @ 25° C (77° F)
Vapor Density (Air = 1)	2.1
Relative Density	N/D
Water Solubility	Completely Miscible
Partition Coefficient	N/D
n-octanol / water	
Auto-Ignition Temperature	463° C (865.4° F)
Decomposition Temperature	N/D
Viscosity	N/D

Section 10: Stability and Reactivity**10.1 Reactivity**

No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical Stability

This material is stable under normal conditions.

10.3 Possibility of Hazardous Reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to Avoid

Avoid heat, sparks, flames and contact with incompatible materials.

10.5 Incompatible Materials

This product is incompatible with strong oxidizing agents.

10.6 Hazardous Decomposition Products

Under fire conditions, carbon dioxide and carbon monoxide may be produced.

Section 11: Toxicological Information

11.1 Information on Toxicological Effects

Acute Toxicity

LD₅₀ Oral: Rat – 3320 mg/kg

LD₅₀ Dermal: Rabbit – 1060 mg/kg

LC50 Inhalation: Rat (4 Hrs.) – >16,000 ppm

Skin Corrosion / Irritation

Rabbit (24 Hrs.) – Severe

Serious Eye Damage / Eye Irritation

Rabbit – Severe

Respiratory or Skin Sensitization

No data available.

Germ Cell Mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive Toxicity

No data available.

Specific Target Organ Toxicity – Single Exposure

No data available.

Specific Target Organ Toxicity – Repeated Exposure

No data available.

Aspiration Hazard

No data available.

11.2 Information on the Likely Routes of Exposure

Inhalation

None known.

Ingestion

May cause burns of the gastrointestinal tract if swallowed.

Skin

Causes severe skin burns.

Eyes

Causes severe eye burns.

11.3 Symptoms Related to the Physical, Chemical and Toxicological Characteristics

No data available.

11.4 Delayed and Immediate Effects / Chronic Effects from Short Term and Long Term Exposure

No data available.

11.5 Numerical Measures of Toxicity

No data available.

11.6 Interactive Effects

No data available.

11.7 Other Information

No data available.

Section 12: Ecological Information

12.1 Toxicity

LC₅₀: Pimephales promelas (Fathead Minnow) (96 Hrs.) – 300.82 mg/L

EC₅₀: Daphnia magna (Water Flea) (48 Hrs.) – 300.82 mg/L

12.2 Persistence and Degradability

Readily biodegradable.

12.3 Bioaccumulative Potential

Bioconcentration Factor (BCF): 3.16

12.4 Mobility in Soil

No data available.

12.5 PBT and vPvB Assessment

Not fulfilling PBT or vPvB criteria.

12.6 Other Adverse Effects

No data available.

Section 13: Disposal Considerations

13.1 Disposal Methods

The generation of waste should be avoided or minimized wherever possible. Disposal of this product should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

13.2 Contaminated Packaging

Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues.

Section 14: Transport Information

14.1 DOT (US)

UN Number: 2790 Class: 8 Packing Group: III
Proper Shipping Name: Acetic acid solution
Reportable Quantity (RQ): 8929 Lbs.
Marine Pollutant: No
Poison Inhalation Hazard: No



14.2 IMDG

UN Number: 2790 Class: 8 Packing Group: III
Proper Shipping Name: Acetic acid solution
Marine Pollutant: No

14.3 IATA

UN Number: 2790 Class: 8 Packing Group: III
Proper Shipping Name: Acetic acid solution

Section 15: Regulatory Information

15.1 Safety, Health and Environmental Regulations Specific for the Product

OSHA Hazard Communication Standard (29 CFR 1910.1200)

This material is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard.

Toxic Substances Control Act (TSCA)

This material is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

SARA – Section 311 / 312 Hazard Categories

Acute Health Hazard

SARA – Section 313 Components

This material does not contain any chemicals subject to the reporting requirements of SARA 313 and 40 CFR 372.

SARA – Section 302 Extremely Hazardous Substances

This material does not contain any chemicals subject to the reporting requirements of SARA 302 and 40 CFR 372.

SARA – Section 304 Emergency Planning & Notification

This product contains Acetic Acid (64-19-7) which is subject to the reporting requirements of SARA 304 and 40 CFR 372.

Clean Water Act (CWA)

This product contains Acetic Acid (64-19-7) which is regulated as a Hazardous Substance, Priority Pollutant or Toxic Pollutant pursuant to the Clean Water Act.

Clean Air Act (CAA)

This product contains no chemical(s) regulated as a Hazardous Air Pollutant (HAP), Class 1 Ozone Depletor or Class 2 Ozone Depletor pursuant to the Clean Air Act.

California Proposition 65

This material does not contain any chemicals which are known to the State of California to cause cancer, birth defects or other reproductive harm at concentrations that trigger the warning requirements of California Proposition 65.

Other U.S. State Inventories

Acetic Acid (64-19-7) is listed on the following State Hazardous Substance Inventories or Right-to-Know lists: MA / NJ / PA

15.2 International Regulations

Australia Inventory of Chemical Substances (AICS)

This product is listed on AICS.

Canada Domestic Substance List (DSL)

This product is listed on the DSL. Any impurities present in this product are exempt from listing.

China Existing Chemical Inventory (IECSC)

All components of this product are listed on the IECSC.

European Inventory of Existing Commercial Chemical Substances (EINECS)

No data available.

Japanese Existing and New Chemical Substances Inventory (ENCS)

This product is listed or has been approved by new substance notification.

Korea Toxic Chemical Control Law (KECL) or Existing Chemicals List (ECL)

This product is listed or otherwise complies with ECL.

Philippine Inventory of Chemicals and Chemical Substances (PICCS)

This product is listed or otherwise complies with PICCS.

New Zealand Inventory of Chemicals (NZIoC)

No data available.

Taiwan Inventory of Chemicals (CSNN)

No data available.

Section 16: Other Information

16.1 HMIS Classification

Health:	3
Flammability:	0
Physical Hazard:	0
Personal Protection:	H

16.2 NFPA Rating

Health Hazard:	3
Flammability:	0
Instability:	0
Special Hazards:	~

16.3 Prepared By

Industrial Chemicals, Inc.
Operations, Safety & Compliance
Regulatory@industrialchem.com
205-823-7330

16.4 Date of Preparation of Latest Version

March 17, 2015

16.5 Sections of SDS Revised

Section 1 – Other Means of Identification

Section 2 – GHS Classification & Label Elements, Including Precautionary Statements

Section 3 – Description of First Aid Measures

Section 15 – International Regulations

Section 16 – HMIS Classification / NFPA Rating

16.6 Further Information

The information and recommendations in this document are, to the best of our knowledge and belief, accurate as of the date of publication. However, none of this information and recommendations should be construed as a warranty, express or otherwise.

It is the responsibility of the user to determine the applicability of such information and recommendations and the suitability of the product for its own particular purpose.

This product may present hazards and should be used with caution. While certain hazards are described in this document, no guarantee is made that these are the only hazards that exist.

See the additional page of the bill of lading for additional terms and conditions of sale.