

Product Name	Acetic Acid Glacial
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## **Section 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

### **1.1. Product identification:**

**Product Description:** Acetic acid Glacial

**Synonyms:** Ethanoic acid, Glacial Acetic acid, Methane carboxylic acid

**CAS-No:** 64-19-7

**EC-No.:** 200-580-7

**Molecular Formula:** CH<sub>3</sub>COOH

**REACH Registration No:** A registration number is not available for this substance as the substance or its use are exempted from registration according to Article 2 REACH Regulation (EC) No 1907/2006, the annual tonnage does not require a registration, or the registration is Envisaged for a later registration deadline.

### **1.2. Relevant identified uses of the substance or mixture and uses advised against:**

**Recommended Use:** Laboratory chemicals, used as a pharma excipient.

### **1.3. Details of the supplier of the safety data sheet:**

- Company** **Finar Limited**  
184-186/P, Chacharwadi Vasna,  
Sarkhej-Bavla Highway,  
Ta.: Sanand, Dist.: Ahmedabad-382110, Gujarat, India.  
Web: [www.finarchemicals.com](http://www.finarchemicals.com)
- E-Mail Address** [safety.finar@actylis.com](mailto:safety.finar@actylis.com); [info.finar@actylis.com](mailto:info.finar@actylis.com)

### **1.4. Emergency Telephone Number:**

- For Emergency contact on: +91 - 2717 - 616 717

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## **SECTION 2: HAZARDS IDENTIFICATION**

### **2.1. Classification of the substance or mixture:**

#### **Classification according to Regulation (EC) No 1272/2008**

Flammable liquid, Category 6, H226

Skin corrosion, Category 1A, H314

For the full text of the H-Statements mentioned in this Section, see Section 16.

### **2.2. Label Elements:**

#### **Labeling according Regulation (EC) No 1272/2008**

##### **Pictogram**



**Signal word:**                      **Danger**

Hazard statement(s)

H226 Flammable liquid and vapour.

H314 Causes severe skin burn and eye damage.

##### **Precautionary statement(s)**

Prevention

P210 Keep away from heat.

P280 Wear protective gloves / protective clothing / eye protection / face protection.

Response

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do not induce vomiting.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Immediately call a doctor / physician.

**Reduced labelling ( $\leq 125$  ml)**

**Pictogram**

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**Signal word:**            **Danger**

Hazard statement(s)

H314 Causes severe skin burn and eye damage.

**Precautionary statement(s)**

P280 Wear protective gloves / protective clothing / eye protection / face protection.

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do not induce vomiting.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Immediately call a doctor / physician.

**2.3. Other Hazards:**

None Known

### **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

**3.1. Substances:** Acetic acid Glacial

**3.2. Mixtures:**

Component	CAS-No	EC-No.	Weight %
Acetic acid Glacial	64-19-7	200-580-7	>99

### **SECTION 4: FIRST AID MEASURES**

**4.1. Description of first aid measures:**

- **General advice**

First aider needs to protect himself.

- **If inhaled**

Fresh air. Immediately call in physician.

- **If Contact with skin**

Take off immediately all contaminated clothing. Rinse skin with water/ shower. Call a physician immediately.

- **In case of eye contact**

Rinse immediately with plenty of water, Call in ophthalmologist. Remove contact lenses.

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- **If swallowed**

Immediately make victim drink water (two glasses at most), avoid vomiting (risk of perforation).

Call a physician immediately. Do not attempt to neutralise.

**4.2. Most important symptoms and effects, both acute and delayed:**

Irritation and corrosion, bronchitis, Shortness of breath, gastric spasms, Nausea, Vomiting, Circulatory collapse, shock. Risk of corneal clouding. Risk of blindness!

**4.3. Indication of any immediate medical attention and special treatment needed:**

No information Available

## **SECTION 5: FIREFIGHTING MEASURES**

**5.1. Extinguishing media:**

**Suitable Extinguishing Media-** Use water, alcohol-resistant foam, dry chemical or carbon dioxide.

**5.2. Special hazards arising from the substance or mixture:**

Combustible.

Forms explosive mixtures with air at ambient temperatures.

Vapours are heavier than air and may spread along floors.

Development of hazardous combustion gases or vapours possible in the event of fire.

Fire may cause evolution of: Acetic acid vapours

**5.3. Advice for firefighters:**

Special protective equipment for fire-fighters

Stay in danger area only with self-contained breathing apparatus.

Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

**5.4 Further Information:**

Suppress (knock down) gases/vapours/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

Remove container from danger zone and cool with water.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

**6.1. Personal precautions, protective equipment and emergency procedures:**

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Avoid substance contact.

Ensure adequate ventilation. Keep away from heat and sources of ignition. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders: Protective equipment see section 8.

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**6.2. Environmental precautions:**

Do not let product enter drains. Risk of explosion.

**6.3. Methods and material for containment and cleaning up:**

Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up carefully with liquid-absorbent material and neutralising material. e.g. (Chemizorb®).

Dispose of properly.

Clean up affected area.

**6.4. Reference to other sections:**

For disposal see Sections 13.

## **SECTION 7: HANDLING AND STORAGE**

**7.1. Precautions for safe handling:****Advice on safe handling**

Observe label precautions

**Advice on protection against fire and explosion**

Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

**Hygiene measures**

Immediately change contaminated clothing. Apply preventive skin protection.

Wash hands and face after working with substance.

**7.2. Conditions for safe storage, including any incompatibilities:****Storage conditions**

Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition. Recommended storage temperature see product label.

**7.3. Specific end use(s):**

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

**8.1. Control parameters:**

Acetic acid

IN OEL

Short Term Exposure Limit (STEL) : 15 PPM / 37 mg/m<sup>3</sup>

Time weighted average (TWA) : 10 PPM / 25 mg/m<sup>3</sup>

**8.2. Exposure Controls:****Appropriate Engineering Controls:**

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Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7.1.

**Personal Protective Equipment:**

Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the respective supplier.

- **Eye & Face Protection-**

safety goggles

- **Hand Protection -**

Full contact: -

Glove material : Butyl- Rubber

Glove thickness : 0.70 mm

Break through time: 480 min

Flash contact: -

Glove material : Natural latex

Glove thickness : 0.60 mm

Break through time: 30 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 898 Butoject® (full contact), KCL 706 Lapren® (splash contact).

The breakthrough times stated above were determined by KCL in laboratory tests acc. to EN374 with samples of the recommended glove types. This recommendation applies only to the product stated in the safety data sheet, supplied by us and for the designated use. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves.

- **Other Protective equipment-**

Flame retardant antistatic protective clothing.

- **Respiratory Protection-**

Required when vapours/aerosols are generated.

Recommended Filter type: Filter E- (P2)

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

- **Environmental Exposure Controls-**

Do not let product enter drains. Risk of explosion.

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## **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

### **9.1. Information on basic physical and chemical properties:**

- **Appearance:** Colorless
- **Physical State:** Liquid
- **Odor:** Stinging-Vinegar like
- **Odor Threshold:** No information available
- **pH:** 2.5 at 50 g/l at 20 °C
- **Melting Point:** 17°C
- **Critical Temperature:** No data available
- **Vapor Pressure:** 1.52 kPa at 20 °C
- **Relative Vapor Density:** 2.10
- **Specific Gravity / Density:** 1.05 g/cm<sup>3</sup> at 20°C
- **Auto-Ignition Temperature:** 427°C
- **Ignition Temperature:** 485°C
- **Volatility:** No data available
- **Bulk Density:** No data available
- **Viscosity, dynamic:** 1.22 mPa.s at 20 °C
- **Viscosity, Kinematic:** 1.17mm<sup>2</sup>/s at 20 °C
- **Water/Oil Dist. Co eff.:** No data available
- **Partition Co-efficient: n-octanol/Water:** Log Pow: -0.17 at 25 °C
- **Ionicity (in Water):** No data available
- **Lower Explosion Limit:** 4 % (V)
- **Upper Explosion Limit:** 19.9 % (V)
- **Boiling Point/Range:** 116 °C – 118°C
- **Flash Point:** 39°C
- **Water Solubility:** 602.9 g/l at 25°C
- **Molecular Weight:** 60.05

### **9.2. Other information:**

**Molecular Formula:** CH<sub>3</sub>COOH

## **SECTION 10: STABILITY AND REACTIVITY**

### **10.1. Reactivity: -**

Vapor/air-mixtures are explosive at intense warming.

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**10.2. Chemical stability:**

The product is chemically stable under standard ambient conditions (room temperature).

**10.3. Possibility of hazardous reactions:**

Risk of explosion with: peroxi compounds, perchloric acid, fuming sulfuric acid, phosphorus halides, hydrogen peroxide, chromium(VI) oxide, potassium permanganate, Peroxides, Strong oxidizing agents

Risk of ignition or formation of inflammable gases or vapours with: Metals, Iron, Zinc, magnesium, Mild steel

Possible formation of: Hydrogen

Violent reactions possible with: strong alkalis, Aldehydes, alkali hydroxides, nonmetallic halides, ethanolamine, Acetaldehyde, Alcohols, halogen-halogen compounds, chlorosulfonic acid, chromosulfuric acid, Potassium hydroxide, Nitric acid

**10.4. Conditions to avoid:** - Temperature < 17°C. Heating**10.5. Incompatible materials:** - No data available**10.6. Hazardous decomposition products:-** In the event of fire : See section 5.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

**11.1 Information on toxicological effects****Acute Oral toxicity**

LD50 Rat: 3,310 mg/kg (RTECS)

Symptoms: If ingested, severe burns of the mouth and throat, as well as a danger of perforation of the oesophagus and the stomach., Nausea, Vomiting, Risk of aspiration upon vomiting., Pulmonary failure possible after aspiration of vomit.

**Acute inhalation toxicity**

LCLO Rat: 39.95 mg/l; 4 h (RTECS)

Symptoms: mucosal irritations, Cough, Shortness of breath, Possible damages:, damage of respiratory tract, Pneumonia, bronchitis, Inhalation may lead to the formation of oedemas in the respiratory tract., Symptoms may be delayed.

**Acute dermal toxicity**

This information is not available.

**Skin irritation**

Rabbit Result: Causes burns.

(IUCLID)

Causes severe burns.



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**Eye irritation**

Rabbit Result: Causes burns.

(IUCLID)

Causes serious eye damage. Risk of blindness!

**Sensitisation**

This information is not available.

**Germ cell mutagenicity**

Genotoxicity in vitro

Ames test Salmonella typhimurium

Result: negative

Method: OECD Test Guideline 471

Mutagenicity (mammal cell test): chromosome aberration.

Result: negative

Method: OECD Test Guideline 473

**Carcinogenicity**

This information is not available.

**Reproductive toxicity**

This information is not available.

**Teratogenicity**

Did not show teratogenic effects in animal experiments. (IUCLID)

**Specific target organ toxicity - single exposure**

This information is not available.

**Specific target organ toxicity - repeated exposure**

This information is not available.

**Aspiration hazard**

This information is not available.

**11.2 Further Information:**

Systemic effects: Shortness of breath, gastric spasms, shock, Circulatory collapse, acidosis

## **SECTION 12: ECOLOGICAL INFORMATION**

**12.1. Toxicity:****Toxicity to fish**

Semi-static test LC50 Oncorhynchus mykiss (rainbow trout): > 300.8 mg/l; 96 h

OECD Test Guideline 203

**Toxicity to daphnia and other aquatic invertebrates**

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EC5 E.sulcatum: 78 mg/l; 72 h

Neutral (maximum permissible toxic concentration) (Lit.)

EC50 Daphnia magna (Water flea): 47 mg/l; 24 h (Lit.)

#### **Toxicity to algae**

IC5 Scenedesmus quadricauda (Green algae): 4,000 mg/l; 16 h

(maximum permissible toxic concentration) (Lit.)

Toxicity to bacteria EC5 Pseudomonas putida: 2,850 mg/l; 16 h

Neutral (maximum permissible toxic concentration) (Lit.)

microtox test

EC50 Photobacterium phosphoreum: 11 mg/l; 15 min (IUCLID)

#### **12.2 Persistence and degradability:**

Biodegradability 99 %; 30 d

OECD Test Guideline 301D (HSDB)

Readily biodegradable 95 %; 5 d

OECD Test Guideline 302B

Readily eliminated from water

Biochemical Oxygen Demand (BOD) 880 mg/g (5 d)

(Lit.)

Ratio BOD/ThBOD BOD5 76 %

(IUCLID)

#### **12.3 Bioaccumulate potential:**

Partition Coefficient: - n-Octanol/water

Log Pow: -0.17 (25°C)

Bioaccumulation is not expected.

#### **12.4 Mobility in soil:**

No data available

#### **12.5 Results of PBT and vPvB assessment**

Substances does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

#### **12.6 Other adverse effects:**

Additional ecological information

Biological effects: Harmful effect due to pH shift. Caustic even in diluted form.

Discharge into the environment must be avoided.

### **SECTION 13: Disposal considerations**

#### **13.1 Waste treatment methods:**

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Waste material must be disposed of in accordance with the national and local regulations.

Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

### **SECTION 14: Transport information**

	<b>Land transport (ADR/RID)</b>	<b>Air transport (IATA)</b>	<b>Sea transport (IMDG)</b>
<b>14.1 UN number</b>	UN 2789		
<b>14.2 Proper shipping name</b>	ACETIC ACID, GLACIAL		
<b>14.3 Class</b>	8 (3)		
<b>14.4 Packing group</b>	II		
<b>14.5 Environmentally hazardous</b>	--		
<b>14.6 Special precautions for user</b>	Yes Tunnel Restriction code – D/E	No	Yes Ems F-E S-D
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> Not Relevant			

### **SECTION 15: Regulatory information**

**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:**

National Legislation

Storage class 3

**15.2 Chemical safety assessment:**

For this product a chemical safety assessment was not carried out.

### **SECTION 16: Other information**

**Full text of H-Statements referred to under sections 2 and 3.**

H226 Flammable liquid and vapor.

H314 Causes severe skin burn and eye damage.

**Training advice**

Provide adequate information, instruction and training for operators.

**References:** Not available

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**Created:** 29/07/2021

**Updated On:** 25/09/2023

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