novichem
Your Chemical Partner

Material Safety Data Sheet

Revision Date: 10.12.2022

ACETIC ACID GLACIAL

1. PRODUCT AND COMPANY IDENTIFICATION

1.1. Identification

Substance name	: Acetic Acid Glacial
CAS #	: 64-19-7
Synonyms	: Ethanoic acid; Acetic acid; Methanecarboxylic acid

1.2. Recommended use and restrictions on use

Applications of the substance/mixture

- Industrial solvent
- Manufacture of other industrial chemicals and auxiliaries
- Photographic chemicals
- Other: Latex coagulant, oil-well acidiser, textile printing

1.3. Supplier

Address : Novichem Co.
30 Magnolia Str, Qaem Maqam Farahani Ave.
Tehran 15886-13941 IRAN

1.4. Emergency telephone number

Emergency number : +98-21-88329799 (Product information)

2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids	: Category 3
Skin corrosion	: Category 1A
Serious eye damage	: Category 1

GHS label elements

Hazard pictograms :

Signal word Hazard : Danger

statements : H226 Flammable liquid and vapour.
H314 Causes severe skin burns and eye damage.

Precautionary statements : **Prevention:**
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting equip-ment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P264 Wash skin thoroughly after handling.

Response:
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 + P310 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305 + P351 + P338 + P310 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/doctor.
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
Storage:
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture:

Hazardous components

CAS No.	Chemical name	Weight %
64-19-7	Acetic acid	90 - 100

Molecular formula : C2H4O2

4. FIRST AID MEASURES

First Aid Procedures:

Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Get medical attention immediately.

Ingestion: Do not induce vomiting. If vomiting occurs, keep head low so that vomit does not enter lungs. Never give anything by mouth to an unconscious person. GET MEDICAL ATTENTION IMMEDIATELY.

Skin Contact: Flush affected area with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Get medical attention immediately.

Eye Contact: Check for and remove contact lenses. Immediately flush eyes with gentle but large stream of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

General Advice: In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. FIREFIGHTING MEASURES

Clear fire area of all non-emergency personnel.

Specific Hazards : Carbon monoxide may be evolved if incomplete combustion occurs. Will float and can be reignited on surface water. The vapour is heavier than air, spreads along the ground and distant ignition is possible.

Extinguishing Media : Foam, water spray or fog. Dry chemical powder, carbon dioxide, sand or earth may be used for small fires only. Do not discharge extinguishing waters into the aquatic environment.

Unsuitable Extinguishing Media : Do not use water in a jet.

Protective Equipment for Firefighters : Wear full protective clothing and self-contained breathing apparatus.

Additional Advice : Keep adjacent containers cool by spraying with water.

6. ACCIDENTAL MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Observe all relevant local and international regulations.
Notify authorities if any exposure to the public or the environment occurs or is likely to occur.

Local authorities should be advised if significant spillages cannot be contained.
Avoid contact with skin, eyes and clothing.
Isolate hazard area and deny entry to unnecessary or unprotected personnel. Do not breathe fumes, vapour.
Do not operate electrical equipment

Environmental Precautions

Shut off leaks, if possible without personal risks. Remove all possible sources of ignition in the surrounding area. Use appropriate containment to avoid environmental contamination.
Prevent from spreading or entering drains, ditches or rivers by using sand, earth, or other appropriate barriers. Attempt to disperse the vapour or to direct its flow to a safe location for example by using fog sprays. Take precautionary measures against static discharge. Ensure electrical continuity by bonding and grounding (earthing) all equipment.
Monitor area with combustible gas indicator.

Methods And Materials For Containment and Cleaning Up

For small liquid spills (< 1 drum), transfer by mechanical means to a labelled, sealable container for product recovery or safe disposal. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely Remove contaminated soil and dispose of safely.
For large liquid spills (> 1 drum), transfer by mechanical means such as vacuum truck to a salvage tank for recovery or safe disposal. Do not flush away residues with water. Retain as contaminated waste. Allow residues to evaporate or soak up with an appropriate absorbent material and dispose of safely. Remove contaminated soil and dispose of safely.
Ventilate contaminated area thoroughly. If contamination of site occurs, remediation may require specialist advice.

Additional Advice

For guidance on selection of personal protective equipment, see Chapter 8 of this Safety Data Sheet. For guidance on disposal of spilled material, see Chapter 13 of this Safety Data Sheet.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Handle product only in closed system or provide appropriate exhaust ventilation. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Hygroscopic. It absorbs moisture from the air. Protect from moisture. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Store locked up. Keep out of the reach of children. Store away from other materials.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits .

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetic Acid, glacial 64-19-7	No data available	10 ppm TWA 25 mg/m³ TWA	-

Appropriate engineering controls

Engineering controls

Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tight sealing safety goggles. Face protection shield.

Hand protection

Wear suitable gloves. Impervious gloves.

Skin and body protection

Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots.

Respiratory protection

No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations

Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Remove and wash contaminated clothing and gloves, including the inside, before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Clear
Color	Colorless
Odor	Vinegar-like
Odor threshold	No information available

Property	**Values**
pH	pH of a 1% solution: 2 [Acidic]
Melting point / freezing point	16.6 °C / 61.9 °F
Boiling point / boiling range Flash point	118 °C / 244.4 °F 40 °C / 104 °F
Evaporation rate	no data available
Flammability (solid, gas)	no data available
Flammability Limit in Air	
Upper flammability or explosive limits	No data available
Lower flammability or explosive limits	No data available
Vapor pressure	1.5
Vapor density	no data available
Relative density	1.05
Water solubility	Miscible in water
Solubility(ies)	Miscible with alcohol Miscible in Benzene Soluble in Acetone Soluble in Ether Soluble in Glycerin
Partition coefficient	No data available
Autoignition temperature	no data available
Decomposition temperature	
~~Kinematic viscosity~~	no data available
Dynamic viscosity	No data available

Other information	
Explosive properties	No information available
Oxidizing properties	No information available
Softening point	No information available

Molecular weight	60.05
VOC Content (%)	No information available
Liquid Density	No information available
Bulk density	No information available

10. STABILITY AND REACTIVITY

Reactivity	No information available.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	Heat, flames and sparks. Exposure to air or moisture over prolonged periods. Excessive heat.
Incompatible materials	Acids. Bases. Oxidizing agent.
Hazardous decomposition products	None known based on information supplied.

11. TOXICOLOGICAL INFORMATION

Skin corrosion/irritation

Product:
Remarks: Extremely corrosive and destructive to tissue.

Components:

64-19-7:
Species: Rabbit
Result: Causes severe burns.

Serious eye damage/eye irritation

Product:
Remarks: May cause irreversible eye damage.

Carcinogenicity

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcino-gen by ACGIH.

Further information

Product:
Remarks: Solvents may degrease the skin.

12. ECOLOGICAL INFORMATION

Ecotoxicity

No data available

Persistence and degradability

Product:

Biodegradability : Test Type: aerobic Biodegradation:
96 % Exposure time: 20 d
Remarks: Readily biodegradable

Components:

64-19-7:

Bioaccumulative potential

Product:

Bioaccumulation : Bioconcentration factor (BCF): 3.16
Remarks: Bioaccumulation is unlikely.

Mobility in soil

No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Pro-tection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufac-tured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological infor-mation : No data available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture of weld containers.

14. TRANSPORT INFORMATION

IATA

UN number	UN2789
Proper Shipping Name:	Acetic acid solution
Transport hazard class(es)	8
Subsidiary hazard class	3
Packing group	II
Description:	UN2789, Acetic acid solution, 8 (3), II

IMDG

UN number	UN2789
Proper shipping name	Acetic acid, glacial
Transport hazard class(es)	8
Subsidiary hazard class	3
Packing group	II
EmS-No	F-E, S
Marine pollutant	NP1
Description	UN2789, Acetic acid, glacial, 8 (3), II, (40°C c.c.)

ICAO (air)

UN-No:	UN2789
Proper Shipping Name:	Acetic acid solution
Hazard class	8
Subsidiary hazard class	3
Packing Group:	II
Description:	UN2789, Acetic acid solution, 8 (3), II

ADR

UN number	2789
Proper Shipping Name:	Acetic acid, glacial
Transport hazard class(es)	8
Subsidiary hazard class	3
Packing group	II
Classification code	CF1
Tunnel restriction code	(D/E)
Description:	2789, Acetic acid, glacial, 8 (3), II, (D/E)

15. REGULATORY INFORMATION

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	This product complies with ENCS:
IECSC	This product complies with China:
KECL	Complies
PICCS	Complies
AICS	All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

Legend:
TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
ENCS - Japan Existing and New Chemical Substances
IECSC - China Inventory of Existing Chemical Substances
KECL - Korean Existing and Evaluated Chemical Substances
PICCS - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313
Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories
Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)
This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA
This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

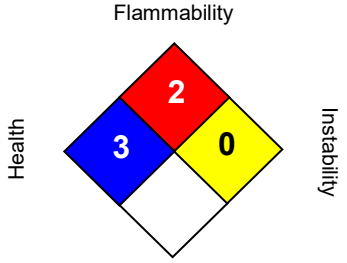
Chemical name	Hazardous Substances RQs	Extremely Hazardous Substances RQs
Acetic Acid, glacial 64-19-7	5000 lb final RQ 2270 kg final RQ	-

US State Regulations

California Proposition 65
This product does not contain any Proposition 65 chemicals.

16. OTHER INFORMATION

NFPA:



HMIS III:

HEALTH	3
FLAMMABILITY	2
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
2 = Moderate, 3 = High
4 =Extreme, * = Chronic

Information contained herein is provided in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.