

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	: Acetic Acid
uses of the substance:	It is widely used in commercial organic synthesis as a chemical reactant for various acetates, acetyl compounds, acetate rayon, plastics and rubber; in tanning, printing and dyeing of fabric. Also used as an acidulant and preservative in foods. Solvent for many substances.
CAS No.	: 64-19-7
Product Description	: Chemical for Industrial Use
Supplier	: TASNEE
Contact	: BUChemicalsMarketing@tasnee.com
Address	: Business Gate, Building # C3, King Khalid Int'l Airport Road, P.O. Box 26707, Riyadh 11496, Kingdom of Saudi Arabia
Emergency Telephone Numbers	
Contact at KSA	: +966 (013) 359 7111
Non-emergency Tel.	: +966 (011) 222 2205

2. HAZARD IDENTIFICATION**2.1 Classification**

According to Regulation 1272/2008/EC (CLP)

Hazard statement(s)

H226: Flammable liquid and vapour

H314: Causes severe skin burns and eye damage

Precautionary Statements

P233: Keep container tightly closed.

P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P240: Ground/Bond container and receiving equipment.

P241: Use explosion-proof electrical/ventilating/lighting/.../equipment.

P242: Use only non-sparking tools.

P243: Take precautionary measures against static discharge.

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

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P264: Wash ... thoroughly after handling

P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position 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 or doctor/physician.

P303+P361+P353: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P363: Wash contaminated clothing before reuse.

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

P321: Specific treatment (see ... on this label).

P370+P378: In case of fire: Use ... for extinction.

P403+P235: Store in a well-ventilated place. Keep cool.

P405: Store locked up.

P501: Dispose of contents/container to ...

2.2 LABELLING

Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS] :

Hazard pictograms



Flammable
Flammable liquids, category 3



Corrosive
Serious eye damage, category 1
Skin corrosion, category 1A

Signal word: DANGER

Supplemental Hazard Statements: None

2.3 Other Hazards

No data Available

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Chemical Listing No.	Content (W/W)
Acetic acid	CAS No.: 64-19-7	0-85 %
Methyl isobutyl ketone	CAS No.: 108-10-1	0-3 %
Water	CAS No.: 7732-18-5	0-10 %
Acrylic acid	CAS No.: 79-10-7	0-10 %

4. FIRST-AID MEASURES

4.1 Description of First Aid Measures

General advice	: Consult a physician. Show this safety data sheet to the doctor in attendance.
Skin contact	: IMMEDIATELY get under a safety shower. Wash affected skin areas thoroughly with soap and water. Remove and wash contaminated clothing before re-use. Get prompt medical attention
Eye contact	: IMMEDIATELY flush eyes with a large amount of water for at least 15 minutes. Get prompt medical attention.
If swallowed	: DO NOT induce vomiting. Neutralize by giving milk or egg whites. Otherwise, wash out mouth with water and dilute by giving large quantities of water to drink. NOTE: This is a corrosive material. Do not administer any other first aid before obtaining the advice of a physician.
Inhalation	: Move to fresh air. Oxygen or artificial respiration if needed. Get prompt medical attention

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable extinguishing media:

Water spray

Dry chemical

carbon dioxide

5.2 Special Hazards Arising from the Product or Mixture

Thermal Decomposition

No data available

5.3 Specific Hazards During Firefighting:

Vapors can travel to a source of ignition and flash back. Heated material can form flammable or explosive vapors with air.

5.4 Advice for Firefighters

Special Protective Equipment for Firefighters:

Wear self-contained breathing apparatus and protective suit. Material is corrosive. If exposed to material as-is or mixed with run-off water during fire-fighting, IMMEDIATELY remove all contaminated clothing and wash exposed skin areas with soap and water. See SECTION 4, First Aid Measures, for further information.

5.5 Further Information

Move containers promptly out of fire zone. If removal is impossible, cool containers with water spray. DO NOT permit water to enter containers.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Wear full protective equipment including: acid-resistant clothing, gloves and boots, chemical splash goggles and face shield (ANSI Z-87.1 or approved equivalent).

Wear a NIOSH approved (or equivalent) respirator (with organic vapor/acid gas cartridge and a dust/mist filter) during spill clean-ups and deactivation of this material.

If exposed to material during clean-up operations, IMMEDIATELY remove all contaminated clothing and wash exposed skin areas with soap and water. See SECTION 4, First Aid Measures, for further information.

6.2 Environmental Precautions

WARNING: keep spills and cleaning runoffs out of municipal sewers and open bodies of water.

6.3 Methods and Materials for Containment and Cleaning Up

Evacuate the spill area immediately.

Eliminate all ignition sources.

Ventilate the area.

Avoid all contact.

Contain spills immediately with inert materials (e.g., sand, earth).

Transfer liquids and solid diking material to separate suitable containers for recovery or disposal.

6.4 Reference to Other Sections

For disposal see section 13

7. HANDLING AND STORAGE

7.1 Precautions for Safe Handling

Avoid contact with skin, eyes and clothing. Vapors can be evolved when material is heated during processing operations. See SECTION 8, Exposure Controls/Personal Protection, for types of ventilation required. This material is corrosive. See SECTION 8, Exposure Controls/Personal Protection, prior to handling.

7.2 Conditions for Safe Storage, Including any Incompatibilities

Keep from freezing. Avoid temperature extremes during storage; ambient temperature preferred. Store away from excessive heat (e.g. steam pipes, radiators), from sources of ignition and from reactive materials. Material can burn; limit indoor storage to approved areas equipped

with automatic sprinklers. Keep container closed when not in use.
Storage temperature: > 17 °C (> 63 °F)

7.3 other information

Containers may be hazardous when empty. Since emptied containers retain product residue follow all MSDS and label warnings even after container is emptied.

Residual vapors in empty containers may explode on ignition. DO NOT cut, drill, grind or weld on or near container.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control Parameter

Components with workplace control parameters

Airborne Exposure Limits:

Component	Regulation	Type of listing	Value
Acetic acid	ACGIH	TWA	10 ppm
	STEL	STEL	15 ppm
	NIOSH/GUIDE	REL	25 mg/m3 10 ppm
	NIOSH/GUIDE	STEL	37 mg/m3 15 ppm
Methyl isobutyl ketone	OSHA_TRANS	REL	25 mg/m3 10 ppm
	Z1A	TWA	25 mg/m3 10 ppm
	ACGIH	TWA	50 ppm
	ACGIH	STEL	75 ppm
	ACGIHLIS_P	TWA	30ppm
	ACGIHLIS_P	STEL	75 ppm
	NIOSH/GUIDE	REL	205 mg/m3 50 ppm
	NIOSH/GUIDE	STEL	300 mg/m3 75 ppm
	OSHA_TRANS	PEL	410 mg/m3 100 ppm
	Z1A	TWA	205 mg/m3 50 ppm
Acrylic acid	Z1A	STEL	300 mg/m3 75 ppm
	ACGIH	TWA	2 ppm
	NIOSH/GUIDE	REL	6 mg/m3 2 ppm
	Z1A	TWA	30 mg/m3 10 ppm

8.2 Exposure Controls

Appropriate Engineering Controls

Use explosion-proof local exhaust ventilation with a minimum capture velocity of 100 ft/min (0.5 m/sec) at the point of vapor evolution. Refer to the current edition of Industrial Ventilation: A Manual of Recommended Practice published by the American Conference of Governmental Industrial Hygienists for information on the design, installation, use, and maintenance of exhaust systems.

Personal Protective Equipment

Eye/face protection

Use chemical splash goggles and face shield (ANSI Z87.1 or approved equivalent).
Eye protection worn must be compatible with respiratory protection system employed.

Skin protection

Where splashing is possible, full chemically resistant protective clothing (e.g. acid suit) and boots are required

Hand Protection

Chemical-resistant gloves should be worn whenever this material is handled. The glove(s) listed below may provide protection against permeation. (Gloves of other chemically resistant materials may not provide adequate protection): Neoprene gloves Nitrile rubber Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water.

Respiratory Protection

A respiratory protection program meeting OSHA 1910.134 and ANSI Z88.2 requirements or equivalent must be followed whenever workplace conditions warrant a respirator's use. None required if airborne concentrations are maintained below the exposure limit listed in Exposure Limit Information. Up to 10 times the exposure limit: Wear a properly fitted NIOSH approved (or equivalent) half-mask, air-purifying respirator. Up to 50 times the exposure limit: Wear a properly fitted NIOSH approved (or equivalent) full-facepiece, air-purifying respirator, OR full-facepiece, airline respirator in the pressure demand mode. Above 50 times the exposure limit or Unknown: Wear a properly fitted NIOSH approved (or equivalent) self-contained breathing apparatus in the pressure demand mode, OR full-facepiece, airline respirator in the pressure demand mode with emergency escape provision. Air-purifying respirators should be equipped with NIOSH approved (or equivalent) organic vapor and acid gas cartridges, and N95 filters. If oil mist is present, use R95 or P95 filters.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on Basic Physical and Chemical Properties**

Appearance Form:	Liquid
Color:	Colorless
Odor:	Pungent odor
pH:	No data available
Melting Point:	17.00 °C (62.60 °F) estimated.
Boiling Point:	118 °C (244.40 °F) estimated
Flash point	40 °C (104.00 °F) Tag closed cup
Evaporation Rate:	<1.00
Upper explosion limit:	16 %(V) estimated
Lower explosion limit:	5.4 %(V) estimated
Vapor pressure:	15.7333 mmHg
Relative Vapor Density:	>1.0
Water Solubility:	completely soluble
Relative Density:	1.04 - 1.05 estimated
Viscosity, dynamic:	1.150 mPa.s approximately
Percent volatility:	100%

NOTE: The physical data presented above are typical values and should not be construed as a specification.

10. STABILITY AND REACTIVITY

10.1 Reactivity	: No Data Available
10.2 Chemical Stability	: Stable under recommended storage conditions.
10.3 Possibility of Hazardous Reactions	: No Data Available.
10.4 Conditions to Avoid	: No Data Available.
10.5 Incompatible Materials	: Avoid contact with the following: Peroxides Nitric acid Oxidizing agents.
10.6 Hazardous Decomposition Products	: No data Available.

11. TOXICOLOGICAL INFORMATION

11.1 Information on Toxicological Effects

No toxicity data are available for this material the toxicity data of the components are as below:

Acute oral toxicity	: Acetic acid, LD50 rat 3,310 mg/kg
	: Methyl isobutyl ketone, LD50 rat 2,080 mg/kg
Acute inhalation toxicity	: Acetic acid, LC50 rat 4 h 11.4 mg/l
	: Methyl isobutyl ketone, LC50 rat 4 h 8.2-16.4 mg/l
Acute dermal toxicity	: Acrylic acid, LD50 rabbit 951 mg/kg
	: Methyl isobutyl ketone, LD50 rabbit >16,000 mg/kg
Skin Corrosion / Irritation	: Acetic acid, rabbit Corrosive
	: Methyl isobutyl ketone, rabbit Moderate irritation
Serious Eye Damage / Eye Irritation	: rabbit Severe Eye Irritation

12. ECOLOGICAL INFORMATION

12.1 Toxicity

Acute Toxicity to Fish	: Methyl isobutyl ketone, flow-through test LC50 Fathead minnow (Pimephales promelas) 96 h 537 mg/l
	: Acrylic acid, LC50 Rainbow trout (Salmo gairdneri) 96 h 27 mg/l
Acute Toxicity to Aquatic Invertebrates	: Acetic acid, static test EC50 Daphnia magna 48 h 65 mg/l
	: Acrylic acid, static test EC50 Daphnia magna 48 h 95 mg/l
	: Methyl isobutyl ketone, EC50 Daphnia magna (Water flea) 48 h 170 mg/l

12.2 Persistence and Degradability Biodegradability

: Acetic acid, Readily biodegradable
: Methyl isobutyl ketone, Readily biodegradable

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

When a decision is made to discard this material as supplied, it is classified as a RCRA hazardous waste with the characteristic of ignitability and corrosivity. Arsenic (D004) Neutralize with an alkaline solution such as dilute caustic, soda ash or lime before disposal. For disposal, incinerate or landfill at a permitted facility in accordance with local, state, and federal regulations.

14. TRANSPORT INFORMATION

DOT

Proper shipping name	Acetic acid solution
UN-Number	UN 2789
Class	8 (3)
Packing group	II
Reportable Quantity	Acetic acid

IMO/IMDG

Proper shipping name	ACETIC ACID, GLACIAL
UN-Number	UN 2789
Class	8 (3)
Packing group	II

Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations

15. REGULATORY INFORMATION

This product is considered hazardous under the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Chemical Safety Assessment: For this product, a chemical safety assessment was not carried out

16. OTHER INFORMATION

Legend

ACGIH	American Conference of Governmental Industrial Hygienists
BAC	Butyl acetate
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
STEL	Short Term Exposure Limit (STEL):
TLV	Threshold Limit Value
TWA	Time Weighted Average (TWA):
	Bar denotes a revision from prior SDS.

TASNEE Acetic acid is byproducts chemicals produced at various stages of the process. Acetic acid may contain hazardous chemicals as components. TASNEE has not performed technical or clinical testing on the suitability of Acetic acid in use involving human contacts. This is the sole responsibility of the user to find the safety of use of this chemical for their intended use.

NOTE:

The information contained in this SDS is to the best of TASNEE knowledge and believed accurate and reliable as of the date indicated, however, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own use.