

# Acetic Acid Glacial CAS No 64-19-7

# MATERIAL SAFETY DATA SHEET SDS/MSDS

#### SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : Acetic Acid Glacial

CAS-No. : 64-19-7

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Laboratory chemicals, Industrial & for professional use only.

1.3 Details of the supplier of the safety data sheet

Company : Pallav Chemicals & Solvents Pvt. Ltd

253, Shiv Shakti Industrial Estate, Opp

Mittal Estate

Andheri Kurla Road, Andheri (E),

Mumbai - 400050

INDIA

Telephone : +91 22 4928 4000

Email : sales@pallavchemicals.com

1.4 Emergency telephone number

Emergency Phone # : +91 22 4928 4000 (9:00am - 6:00 pm) [Office hours]

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

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

Flammable liquids (Category 3), 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

## Labelling according Regulation (EC) No 1272/2008

Pictogram

Signal word Danger

Hazard statement(s)

H226 Flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other

ignition sources. No smoking.

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

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

protection.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing.

Rinse skin with water/shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing.

P370 + P378 In case of fire: Use dry powder or dry sand to extinguish.

Supplemental Hazard no

Statements

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances

Synonyms : Glacial acetic acid

Formula : CH3COOH

Molecular weight : 60.05 g/mol

CAS-No. : 64-19-7

EC-No. : 200-580-7

Index-No. : 607-002-00-6

Registration number : 01-2119475328-30-XXXX

## Hazardous ingredients according to Regulation (EC) No 1272/2008

Component Classification Concentration

Acetic acid

CAS-No. 64-19-7 Flam. Liq. 3; Skin Corr. 1A; <= 100 %

EC-No. 200-580-7 H226, H314

Index-No. 607-002-00-6 Concentration limits:

>= 90 %: Skin Corr. 1A,

H314; 25 - < 90 %: Skin Corr. 1B, H314; 10 - < 25 %: Skin Irrit. 2, H315; 10 - < 25 %: Eye

Irrit. 2, H319;

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

#### **SECTION 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.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

## In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

## 4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

## 4.3 Indication of any immediate medical attention and special treatment

needed No data available

## **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

#### Suitable extinguishing media

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

#### 5.2 Special hazards arising from the substance or

mixture Carbon oxides

#### 5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

#### 5.4 Further information

Use water spray to cool unopened containers.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

#### 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).\'20 Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet - brushing and place in container for disposal according to local regulations (see section 13).

## 6.4 Reference to other sections

For disposal see section 13.

#### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Avoid inhalation of vapour or mist.

Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

For precautions see section 2.2.

## 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Moisture sensitive.

Storage class (TRGS 510): Flammable liquids

#### 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

#### **Derived No Effect Level (DNEL)**

| Application Area | Exposure<br>routes | Health effect           | Value        |
|------------------|--------------------|-------------------------|--------------|
| Workers          | Inhalation         | Acute local effects     | 25 mg/m3     |
| Workers          | Inhalation         | Long-term local effects | 25 mg/m3     |
| Workers          | Skin contact       | Long-term local effects | 10mg/kg BW/d |
| Consumers        | Inhalation         | Acute local effects     | 25 mg/m3     |
| Consumers        | Inhalation         | Long-term local effects | 25 mg/m3     |

#### **Predicted No Effect Concentration (PNEC)**

| Compartment                  | Value       |
|------------------------------|-------------|
| Soil                         | 0.478 mg/kg |
| Marine water                 | 0.3058 mg/l |
| Fresh water                  | 3.058 mg/l  |
| Marine sediment              | 1.136 mg/kg |
| Fresh water sediment         | 11.36 mg/kg |
| Sewage treatment plant       | 85 mg/l     |
| Aquatic intermittent release | 30.58 mg/l  |

## 8.2 Exposure controls

## Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## Personal protective equipment

## Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

#### Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

## **Body Protection**

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

## Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use (US) or type ABEK (EN 14387) respirator cartridges as a backup to enginee protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

## **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

a) Appearance Form: liquid

Colour: colourless

b) Odour pungent

c) Odour Threshold No data availabled) pH 2.4 at 60.05 g/l

e) Melting point/freezing Melting point/range: 16.2 °C - lit.

point

f) Initial boiling point and 117 - 118 °C - lit.

boiling range

g) Flash point 40.0 °C - closed cuph) Evaporation rate No data available

i) Flammability (solid, gas) No data available

j) Upper/lower Upper explosion limit: 19.9 %(V) flammability or Explosive limits

k) Vapour pressure 55.0 mmHg at 50.0 °C

11.4 mmHg at 20.0 °C

I) Vapour density No data available
 m) Relative density 1.049 g/cm3 at 25 °C
 n) Water solubility completely miscible
 o) Partition coefficient: n- log Pow: -0.17

octanol/water

485.0 °C

p) Auto-ignition temperature

q) Decomposition No data available

temperature

r) Viscosity No data available
 s) Explosive properties No data available
 t) Oxidizing properties No data available

9.2 Other safety information

Surface tension 28.8 mN/m at 10.0 °C

#### **SECTION 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

Heat, flames and sparks.

## 10.5 Incompatible materials

Oxidizing agents, Soluble carbonates and phosphates, Hydroxides, Metals, Peroxides, permanganates, e.g. potassium permanganate, Amines, Alcohols, Nitric acid

## 10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides Other decomposition products - No data available

## In the event of fire: see section 5

# SECTION 11: Toxicological information 11.1 Information on toxicological effects

#### **Acute toxicity**

LD50 Oral - Rat - 3,310 mg/kg(Acetic acid)

LC50 Inhalation - Mouse - 1 h - 5620 ppm(Acetic acid)

Remarks: Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Conjunctive irritation. Sense Organs and Special Senses (Nose, Eye, Ear, and Taste):Eye:Other. Blood:Other changes.

LC50 Inhalation - Rat - 4 h - 11.4 mg/l(Acetic acid)

LD50 Dermal - Rabbit - 1,112 mg/kg(Acetic acid)

#### Skin corrosion/irritation

Skin - Rabbit(Acetic acid)
Result: Causes severe burns.

#### Serious eye damage/eye irritation

Eyes - Rabbit(Acetic acid) Result: Corrosive to eyes

## Respiratory or skin sensitisation

No data available(Acetic acid)

#### Germ cell mutagenicity

No data available(Acetic acid)

## 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.

## Reproductive toxicity

No data available(Acetic acid)

## Specific target organ toxicity - single exposure

No data available(Acetic acid)

#### Specific target organ toxicity - repeated exposure

No data available

## **Aspiration hazard**

No data available(Acetic acid)

#### **Additional Information**

RTECS: AF1225000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., spasm, inflammation and edema of the larynx, spasm, inflammation and edema of the bronchi, pneumonitis, pulmonary edema, burning sensation, Cough, wheezing, laryngitis, Shortness of breath, Headache, Nausea, Vomiting, Ingestion or inhalation of concentrated acetic acid causes damage to tissues of the respiratory and digestive tracts. Symptoms include: hematemesis, bloody diarrhea, edema and/or perforation of the esophagus and pylorus, pancreatitis, hematuria, anuria, uremia, albuminuria, hemolysis, convulsions, bronchitis, pulmonary edema, pneumonia, cardiovascular collapse, shock, and death. Direct contact or exposure to high concentrations of vapor with skin or eyes can cause: erythema, blisters, tissue destruction with slow healing, skin blackening, hyperkeratosis, fissures, corneal erosion, opacification, iritis, conjunctivitis, and possible blindness., To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.(Acetic acid)

#### **SECTION 12: Ecological information**

#### 12.1 Toxicity

Toxicity to fish semi-static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 1,000 mg/l -

96 h(Acetic acid)

(OECD Test Guideline 203)

Toxicity to daphnia and

EC50 - Daphnia magna (Water flea) - > 300.82 mg/l - 48 h(Acetic acid)

other aquatic

invertebrates

(OECD Test Guideline 202)

#### 12.2 Persistence and degradability

Biodegradability aerobic - Exposure time 30 d(Acetic acid)

Result: 99 % - Readily biodegradable Remarks: Expected to be biodegradable

Biochemical Oxygen Demand (BOD)

880 mg/g(Acetic acid)

## 12.3 Bioaccumulative potential

No data available

#### 12.4 Mobility in soil

No data available(Acetic acid)

#### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

Additional ecological

No data available

information

## **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### **Product**

Burn in a chemical incinerator equipped with an afterburner and scrubber b highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

## Contaminated packaging

Dispose of as unused product.

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

#### 14.1 UN number

ADR/RID: 2789 IMDG: 2789 IATA: 2789

#### 14.2 UN proper shipping name

ADR/RID: ACETIC ACID, GLACIAL IMDG: ACETIC ACID, GLACIAL IATA:

Acetic acid, glacial

## 14.3 Transport hazard class(es)

ADR/RID: 8 (3) IMDG: 8 (3) IATA: 8 (3)

## 14.4 Packaging group

ADR/RID: II IATA: II IMDG: II

#### 14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

## 14.6 Special precautions for user

No data available

## **SECTION 15: Regulatory information**

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

## 15.2 Chemical safety assessment

A Chemical Safety Assessment has been carried out for this substance.

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

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

H226 Flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

#### **Further information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Pallav Chemicals & Solvents Pvt. Ltd and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.pallavchemicals.com for additional terms and conditions of sale.