According to Regulation (EC) No 1907/2006

Acetic Acid, Glacial

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

1.1. Product identifier

Trade name

Acetic Acid, Glacial

CAS number

64-19-7

EC number

200-580-7

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

Relevant identified uses

Research and development.

Not suitable for use in

Not suitable for human consumption or veterinary purposes.

1.3. Details of the supplier of the safety data sheet

Supplier

Molekula Group

Street address
Molekula Ltd, Lingfield Way, Darlington,
DL1 4XX Darlington
United Kingdom

Telephone
+44 (0) 3302 000 333

Email
info@molekula.com

Web site
www.molekula.com

Contact person

Kevin Banks

Email address

+44 (0) 7769276927

1.4. Emergency telephone number

Poison center/Additional emergency number

0344 892 0111 - National Poisons Information Service (Newcastle Centre)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Classification

Flammable liquids, hazard category 3
Skin corrosion, hazard category 1A
Serious eye damage, hazard category 1

Hazard statements

H226, H314, H318

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms

Signal word

Danger

Hazard statements

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

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P220 Keep away from clothing and other combustible materials.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302 + P352 IF ON SKIN: Wash with plenty of water/.
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: Get medical advice/attention.

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
acetic acid … %	64-19-7 200-580-7 01-2119475328-30 607-002-00-6	100%	Flam. Liq. 3, Skin Corr. 1A	H226, H314 - -	Skin Corr. 1A; H314: C ≥ 90 % Skin Corr. 1B; H314: 25 % ≤ C < 90 % Skin Irrit. 2; H315: 10 % ≤ C < 25 % Eye Irrit. 2; H319: 10 % ≤ C < 25 %; B

Molecular weight
60.05

Substance additional information
For the complete text of H- / EUH-statements mentioned in this section, see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

Get medical attention if any discomfort continues. Show this Safety Data Sheet (SDS) to medical personnel.

Inhalation
IF INHALED: Remove person to fresh air and keep comfortable for breathing. In case of persistent throat irritation or coughing: Seek medical attention and bring these instructions.

Skin contact
IF ON SKIN: Wash with plenty of soap and water. Continue to rinse for at least 15 minutes. Get medical advice/attention if you feel unwell.

Eye contact
Remove contact lenses if present. Rinse eyes with water. Continue to rinse for at least 15 minutes and seek medical attention.

Ingestion
Rinse mouth. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

Information for doctors
No data available.

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

The severity of the symptoms described will vary dependant of the concentration and the length of exposure.

Inhalation
Single exposure may cause the following adverse effects: Upper respiratory irritation. Difficulty in breathing.

Skin contact
Single exposure may cause the following adverse effects: Severe skin irritation.

Eye contact
May cause temporary eye irritation.

Ingestion
Single exposure may cause the following adverse effects: Severe abdominal pain. Nausea, vomiting.

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically. No special treatment requirement.

SECTION 5: Firefighting measures

5.1. Extinguishing media
Suitable extinguishing media
In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

Unsuitable extinguishing media
No specific fire fighting procedure given.

5.2. Special hazards arising from the substance or mixture
Specific hazards: FLAMMABLE. Containers can burst violently when heated, due to excess pressure build-up. Vapours may form explosive mixture with air at room temperature. Carbon monoxide (CO). Carbon dioxide (CO2). Vapours are heavier than air and may travel along the floor and in the bottom of containers. Forms explosive mixtures with air on intense heating.

5.3. Advice for firefighters
Special protective equipment for fire-fighters
Evacuate area. Avoid breathing gas, fume, vapours or spray. Prevent skin contact by maintaining a safe distance and by wearing suitable protective equipment/ clothing. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Avoid inhalation of vapours and spray mist and contact with skin and eyes. For personal protection, see section 8. Provide adequate ventilation. Remove sources of ignition. Beware of the explosion danger. Take action to prevent static discharges.

6.2. Environmental precautions
Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up
Collect with absorbent, non-combustible material into suitable containers. Remove sources of ignition. Beware of the explosion danger. Use spark-proof tools and explosion-proof equipment.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling precautions

For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities

Store at room temperature. Store in a dry place. Store in a closed container.

7.3. Specific end use(s)

No specific usage precautions noted.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits

No occupational exposure limit assigned.

8.2. Exposure controls

Eye / face protection

Wear eye protection.

Hand protection

Wear protective gloves. No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals.
Wash contaminated skin thoroughly after handling.

Other skin protection

Wash skin thoroughly after handling.

Respiratory protection

Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided.

Environmental exposure controls

Avoid discharge into drains. Risk of explosion.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

Liquid

Colour

Colourless.

Odour
No data available

Melting point / freezing point
No data available

Boiling point or initial boiling point and boiling range
117 - 118 °C

Flammability
No data available

Lower and upper explosion limit
Upper explosion limit: 19.9 %(V) / Lower explosion limit: 4 %(V)

Flash point
39 °C
Method
CC (Closed cup).

Auto-ignition temperature
463°C / 865.4°F

Decomposition temperature
No data available

pH
2.5 (50 g/l) 20°C/68°F

Kinematic viscosity
No data available

Viscosity, dynamic
Viscosity, kinematic: 1.17 mm2/s at 20 °C

Solubility
Soluble in water.

Partition coefficient n-octanol/water
Log pow: -0.17 (25°C/77°F)

Vapour pressure
20.79 hPa 25°C/77°F

Density and/or relative density
1.049g/cm3 25°C/77°F

Relative vapour density
No data available

Particle characteristics
No data available

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Vapor/air-mixtures are explosive at intense warming.

10.2. Chemical stability

Stable under normal temperature conditions. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

There are no known conditions that are likely to result in a hazardous situation.

10.4. Conditions to avoid

Heat, sparks, flames.

10.5. Incompatible materials

Strong oxidising agents. Metals. Amines. Alcohols Nitric acid. phosphates Soluble carbonates Hydroxides Peroxides permanganates potassium permanganate

10.6. Hazardous decomposition products

See section 5.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

No data available

SECTION 12: Ecological information

12.1. Toxicity

No data available

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal considerations

Dispose of contents/container in accordance with local regulations.

SECTION 14: Transport information

14.1. UN number

2789

14.2. UN proper shipping name

ADR / RID / ADN proper shipping name

ACETIC ACID, GLACIAL

IMDG proper shipping name

ACETIC ACID, GLACIAL or ACETIC ACID SOLUTION, more than 80% acid, by mass

IATA proper shipping name

Acetic acid, glacial

14.3. Transport hazard class(es)

Label

ADR/RID/ADN

8 *3*

IMDG

8 *3*

IATA

8 *3*

ADR / RID Class
8

ADR / RID Classification code
CF1

ADR / RID hazard identification number
83

IMDG Class
8 (3)

IATA Class
8 (3)

ADN Class
8

ADN Class Code
CF1

14.4. Packing group
ADR / RID / ADN: II
IMDG: II
IATA: II

14.5. Environmental hazards
IMDG EmS
F-E, S-C

14.6. Special precautions for user
Tunnel restriction code: D/E
Transport category: 2

14.7. Maritime transport in bulk according to IMO instruments
IBC Instruction: IBC02

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
EU regulations
This SDS is not mandated under REACH Regulation (EC) No 1907/2006 and is provided for information only.

National regulations
No data available

15.2. Chemical safety assessment
No chemical safety assessment has been carried out.

Acetic Acid, Glacial

SECTION 16: Other information

Phrase meaning

Flam. Liq. 3 - Flammable liquids, hazard category 3
Skin Corr. 1A - Skin corrosion, hazard category 1A
Eye Dam. 1 - Serious eye damage, hazard category 1
H226 Flammable liquid and vapour.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.