



Acetic Acid 99.85% GPC8005

According to REACH Regulation (EC) No 1907/2006, as amended by UK REACH Regulations SI 2019/758 and SI 2020/1577

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product Name Acetic Acid 99.85%
 Synonyms Glacial acetic acid
 Chemical Name Ethanoic Acid
 Chemical Formula C₂H₄O₂
 Product code GPC8005
 CAS No. 64-19-7
 EC No. 200-580-7
 REACH Registration No. Not known.

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

Identified Use(s) Industrial/professional : PROC15 Use as laboratory reagent
 Uses Advised Against Not known.

1.3 Details of the supplier of the safety data sheet

Manufacturer
 Company Identification Atom Scientific Ltd
 Address of Manufacturer Unit 2A East Tame Business Park
 Rexcine Way
 Hyde
 Cheshire
 SK14 4GX
 Postal code
 Telephone: 0161 3665123
 Fax 01704 337167
 E-mail technical@atomscientific.com
 Office hours 08:00 - 17:00
 Supplier

Company Identification Atom Scientific Ltd
 Address of Supplier Unit 2A East Tame Business Park
 Rexcine Way
 Hyde
 Cheshire
 SK14 4GX
 Postal code
 Telephone: 0161 3665123
 Fax 01704 337167
 E-mail technical@atomscientific.com
 Office hours 08:00 - 17:00

1.4 Emergency telephone number

Emergency Phone No. 07833453806
 Contact Peter Keenan

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GB CLP Regulation, UK SI 2019/720 and Flam. Liq. 3 :Flammable liquid and vapour.
 UK SI 2020/1567 Skin Corr. 1A :Causes severe skin burns and eye damage.
 Eye Dam. 1 :Causes serious eye damage.

2.2 Label elements

According to GB CLP Regulations, UK SI 2019/720 and UK SI 2020/1567
 Product Name Acetic Acid 99.85%

Hazard Pictogram(s)



GHS02



GHS05

Signal Word(s)

Danger

Hazard Statement(s)

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



Acetic Acid 99.85% GPC8005

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+P310: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTRE/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 CENTRE/doctor.
 P370+P378: In case of fire: Use water spray, dry powder or carbon dioxide to extinguish.

2.3 Other hazards

None known.

2.4 Additional Information

For full text of H/P Statements see section 16.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

HAZARDOUS INGREDIENT(S)	CAS No.	EC No. / Registration number(s)	%W/ W	Hazard Statement(s)	Hazard Pictogram(s)
Acetic acid	64-19-7	200-580-7	=<100	Flam. Liq. 3 H226 Skin Corr. 1A H314	GHS02 GHS05

3.2 Mixtures

Not applicable.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: Immediately call a POISON CENTRE/doctor.
 Skin Contact: Take off immediately all contaminated clothing. Rinse skin with water. Wash contaminated clothing before reuse. Immediately call a POISON CENTRE/doctor.
 Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE/doctor.
 Ingestion: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTRE/doctor.

4.2 Most important symptoms and effects, both acute and delayed

Causes burns.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable Extinguishing media: Use water spray, dry powder or carbon dioxide to extinguish.
 Unsuitable extinguishing media: Water jet spray

5.2 Special hazards arising from the substance or mixture

Flammable liquid and vapour. Combustion or thermal decomposition will evolve toxic and irritant vapours.

5.3 Advice for firefighters

Fire fighters should wear complete protective clothing including self-contained breathing apparatus. If it is safe to do so, containers should be removed from fire area because they are likely to rupture under fire conditions.



Acetic Acid 99.85% GPC8005

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Provide adequate ventilation. Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Wear suitable protective clothing, gloves and eye/face protection.

6.2 Environmental precautions

This material and its container must be disposed of in a safe way.

6.3 Methods and material for containment and cleaning up

Absorb spillages onto sand, earth or any suitable adsorbent material. Transfer to a container for disposal. Containers must not be punctured or destroyed by burning, even when empty.

6.4 Reference to other sections

See Also Section 8, 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Use explosion-proof electrical/ventilating/lighting/equipment. Use non-sparking tools. Take action to prevent static discharges. Wash hands and exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in a well-ventilated place. Keep cool. Store locked up.

Storage temperature

Ambient.

Storage life

Stable under normal conditions.

Incompatible materials

None known.

7.3 Specific end use(s)

Industrial/professional : PROC15 Use as laboratory reagent

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

8.1.1 Occupational Exposure Limits

Occupational Exposure Limits						
SUBSTANCE.	CAS No.	LTEL (8 hr TWA ppm)	LTEL (8 hr TWA mg/m³)	STEL (ppm)	STEL (mg/m³)	Note
Acetic acid	64-19-7	10	25	20	50	

Region
United Kingdom

Source
UK Workplace Exposure Limits EH40/2005 (Fourth edition, published 2020)

Remark

Notes

8.2 Exposure controls

8.2.1. Appropriate engineering controls

Use non-sparking ventilation systems, approved explosion-proof equipment, and intrinsically safe electrical systems. Ensure adequate ventilation. A washing facility/water for eye and skin cleaning purposes should be present.

8.2.2. Personal protection equipment

Eye Protection

Wear eye protection with side protection (EN166).



Skin protection

Wear protective clothing and gloves: Impervious gloves (EN 374).





Acetic Acid 99.85% GPC8005



Respiratory protection

Normally no personal respiratory protection is necessary. Handling of larger amounts A suitable mask with filter type A (EN14387 or EN405) may be appropriate.



Thermal hazards

None known.

8.2.3. Environmental Exposure Controls Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Colour : Almost colourless.
Odour	Pungent. Characteristic vinegar.
Odour threshold	Not known.
pH	~ 2.5.
Melting point/freezing point	16.2°C
Initial boiling point and boiling range	117 - 118°C
Flash Point	39°C [Closed cup]
Evaporation rate	Not known.
Flammability (solid, gas)	Not known.
Upper/lower flammability or explosive limits	Upper explosive limit: 19.9% (v) Lower explosive limit: 4% (v)
Vapour pressure	20.79hPa (25°C)
Vapour density	Not known.
Density (g/ml)	Not known.
Relative density	1.049g/cm³ (25°C)
Solubility(ies)	Solubility (Water) : Very soluble. Solubility (Other) : log P : - 0.17(25°C)
Partition coefficient: n-octanol/water	Not known.
Auto-ignition temperature	463°C
Decomposition Temperature (°C)	Distillable in an un-decomposed state at normal pressure
Viscosity	Kinematic Viscosity : 1.17 mm²/s (20°C) Dynamic viscosity : 1.05mPa•s (25 °C)
Explosive properties	Not known.
Oxidising properties	Not known.

9.2 Other information

None.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

None anticipated.

10.2 Chemical Stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

No hazardous reactions known if used for its intended purpose.

10.4 Conditions to avoid

Avoid friction, sparks, or other means of ignition.

10.5 Incompatible materials

Not known.

10.6 Hazardous decomposition products

No hazardous decomposition products known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity - Ingestion	Not classified. LD50 (oral,rat) mg/kg: 3,310
Acute toxicity - Skin Contact	Not classified.



Acetic Acid 99.85% GPC8005

Acute toxicity - Inhalation	Not classified.
Skin corrosion/irritation	Causes severe skin burns and eye damage. Skin - Rabbit Result: Causes burns. - 4 h
Serious eye damage/irritation	Causes serious eye damage. Eyes - Rabbit Result: Risk of serious damage to eyes. (OECD Test Guideline 405)
Skin sensitization data	Not classified.
Respiratory sensitization data	Not classified.
Germ cell mutagenicity	Not classified.
Carcinogenicity	Ames test <i>S. typhimurium</i> : Result: negative
Reproductive toxicity	Mutagenicity (mammal cell test) Chinese hamster ovary cells: Result: negative
Lactation	Not classified.
STOT - single exposure	Not classified.
STOT - repeated exposure	Not classified.
Aspiration hazard	Not classified.
11.2 Other information	Not known.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Toxicity - Aquatic invertebrates	EC50 <i>Daphnia magna</i> : >1000mg/l - 48h
Toxicity - Fish	LC50 (rainbow trout) mg/l >1000mg/l - 96h
Toxicity - Algae	Low toxicity to algae.
Toxicity - Sediment Compartment	Not classified.
Toxicity - Terrestrial Compartment	Not classified.

12.2 Persistence and degradability

Readily biodegradable (according to OECD criteria).

12.3 Bioaccumulative potential

Not known.

12.4 Mobility in soil

Not known.

12.5 Results of PBT and vPvB assessment

Not known.

12.6 Other adverse effects

None known.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of contents in accordance with local, state or national legislation. Recycle only completely emptied packaging. Containers must not be punctured or destroyed by burning, even when empty. Do not allow to enter drains, sewers or watercourses. Do NOT landfill. Normal disposal is via incineration operated by an accredited disposal contractor. Send to a licensed recycler, reclaimer or incinerator. Dispose at suitable refuse site.

13.2 Additional Information

Disposal should be in accordance with local, state or national legislation.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

UN No. 2789

14.2 UN proper shipping name

UN proper shipping name ACETIC ACID SOLUTION

14.3 Transport hazard class(es)

ADR/RID

ADR/RID Class

8

ADR Classification Code

CF1

Special Provisions



Acetic Acid 99.85% GPC8005

Limited Quantities	1 L
Excepted Quantities	E2
Emergency Action Code	•2P
Packing Instructions for Packages	P001 IBC02
Special Packing Provisions for Packages	
Mixed Packing Instructions for Packages	MP15
Instructions for Portable Tanks	T7
Special Provisions for Portable Tanks	TP2
Tank Code for Tanks	L4BN
Special Provisions for Tanks	
Vehicle for Tank Carriage	FL
ADR Transport Category	2
Tunnel Restriction Code	D/E
Special Provisions for Carriage - Packages	
Special Provisions for Carriage - Bulk	
Special Provisions for Carriage - Loading, Unloading and Handling	
Special Provisions for Carriage - Operation	S2
ADR HIN	83
IMDG	
IMDG Class	8
Special Provisions	
Limited Quantities	1 L
Excepted Quantities	E2
Mixed Packing Instructions for Packages	P001 IBC02
Special Packing Provisions for Packages	
Instructions for Portable Tanks	T7
Special Provisions for Portable Tanks	TP2
IMDG EMS	F-E, S-C
Stowage and Handling	Category A
Segregation	SGG1 SG36 SG49
Marine Pollutant	
ICAO/IATA	
IATA Proper Shipping Name	ACETIC ACID SOLUTION
Excepted Quantities	E2
Passenger and Cargo Aircraft Limited Quantities Packing Instructions	Y840
Passenger and Cargo Aircraft Limited Quantities Max net Qty	0.5L
Passenger and Cargo Aircraft Packing Instructions	851
Passenger and Cargo Aircraft Max net Qty	1L
Cargo Aircraft Packing Instructions	855
Cargo Aircraft Max net Qty	30L
Special Provisions	
Emergency Response Guidebook (ERG) Code	8F
Labels	
Labels	8 +3



14.4 Packing group

Packing group II

14.5 Environmental hazards

Environmental hazards Not classified as a Marine Pollutant.

14.6 Special precautions for user

Special precautions for user Not known.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

No information available



Acetic Acid 99.85% GPC8005

SECTION 15: REGULATORY INFORMATION

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

United Kingdom Regulations - Authorisations and/or Restrictions On Use

UK REACH Candidate List of Substances Not listed
of Very High Concern for Authorisation

UK REACH Authorisation List (Annex XIV) list of substances subject to authorisation

UK REACH Restrictions List (Annex XVII) Acetic acid (64-19-7)

Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

UK REACH Rolling Action Plan (RAP) Not listed

The Persistent Organic Pollutants Regulations 2007 (SI 2007/3106) as amended Not listed

The Ozone-Depleting Substances and

Fluorinated Greenhouse Gases (Amendment etc.) (EU Exit) Regulations 2019 (SI 2019/583)

The Prior Informed Consent (PIC) Not listed

Regulations concerning the export and import of hazardous chemicals SI2008/2108 as amended

European Regulations - Authorisations and/or Restrictions On Use

Community Rolling Action Plan (CoRAP) Not listed

15.2 Chemical Safety Assessment

United Kingdom

A REACH chemical safety assessment has not been carried out.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements:

LEGEND

Hazard Pictogram(s)



GHS02



GHS05

Hazard classification

Flam. Liq. 3 : Flammable liquid, Category 3

Skin Corr. 1A : Skin corrosion/irritation, Category 1A

Eye Dam. 1 : Serious eye damage/irritation, Category 1

Hazard Statement(s)

H226: Flammable liquid and vapour.

H314: Causes severe skin burns and eye damage.

H318: Causes serious eye damage.

Precautionary Statement(s)

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233: Keep container tightly closed.

P240: Ground and bond container and receiving equipment.

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

P242: Use non-sparking tools.

P243: Take action to prevent static discharges.

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

P264: Wash hands and exposed skin thoroughly after handling.

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

P301+P330+P331+P310: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTRE/doctor.

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



Acetic Acid 99.85% GPC8005

clothing. Rinse skin with water.

P303+P361+P353+P310: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTRE/doctor.

P304+P340: IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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 CENTRE/doctor.

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

P363: Wash contaminated clothing before reuse.

P370+P378: In case of fire: Use water spray, dry powder or carbon dioxide to extinguish.

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

P405: Store locked up.

P501: Dispose of contents in accordance with local, state or national legislation.

Acronyms

ADN : European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways

ADR : European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE : Acute Toxicity Estimate

CAS : Chemical Abstracts Service

DNEL : Derived No Effect Level

EC : European Community

EINECS : European Inventory of Existing Commercial Chemical Substances

IATA : International Air Transport Association

IBC : Intermediate Bulk Container

ICAO : International Civil Aviation Organization

IMDG : International Maritime Dangerous Goods

LTEL : Long term exposure limit

PBT : Persistent, Bioaccumulative and Toxic

PNEC : Predicted No Effect Concentration

REACH : Registration, Evaluation, Authorisation and Restriction of Chemicals

RID : Regulations concerning the International Carriage of Dangerous Goods by Rail

STEL : Short term exposure limit

STOT : Specific Target Organ Toxicity

UN : United Nations

vPvB : very Persistent and very Bioaccumulative

Key literature references and sources for data used to compile the SDS

Training Advice

Disclaimers

Regular safety training as appropriate

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