SAFETY DATA SHEET

ACETIC ACID

Compilation date: 26/10/2018

Revision No: 1

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

1.1. Product identifier

Product name: ACETIC ACID

CAS number: 64-19-7

EINECS number: 200-580-7

Product code: GPC8005

Synonyms: GLACIAL ACETIC ACID

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

Use of substance / mixture: PC21: Laboratory chemicals.

1.3. Details of the supplier of the safety data sheet

Company name: Atom Scientific Ltd

2b East Tame Business Park

Hyde

Manchester

SK14 4GX

Tel: 0161 366 5123

Fax: 01704 337167

Email: technical@atomscientific.com

1.4. Emergency telephone number

Emergency tel: 07833453806

Section 2: Hazards identification

2.1. Classification of the substance or mixture

Classification under CLP: Flam. Liq. 3: H226; Met. Corr. 1: H290; Skin Corr. 1A: H314; Eye Dam. 1: H318

Classification under CHIP: -: R10; C: R35

Most important adverse effects: Flammable liquid and vapour. May be corrosive to metals. Causes severe skin burns and eye damage.

2.2. Label elements

Label elements under CLP:

Hazard statements: H226: Flammable liquid and vapour.

H290: May be corrosive to metals.

H314: Causes severe skin burns and eye damage.

Signal words: Danger

Hazard pictograms: GHS02: Flame

GHS05: Corrosion

[cont...]

Precautionary statements: P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P303+361+353: IF ON SKIN (or hair): Remove immediately all contaminated clothing. Rinse skin with water.
P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310: Immediately call a POISON CENTER or doctor.
P305+351+338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P370+378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

2.3. Other hazards

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.

PBT: This product is not identified as a PBT/vPvB substance.

Section 3: Composition/information on ingredients

3.1. Substances

Chemical identity: ACETIC ACID

CAS number: 64-19-7

EINECS number: 200-580-7

Contains: Molecular Formula : C2H4O2
Molecular Weight : 60.05 g/mol

Section 4: First aid measures

4.1. Description of first aid measures

Skin contact: Remove all contaminated clothes and footwear immediately unless stuck to skin. Wash immediately with plenty of soap and water. Consult a doctor.

Eye contact: Bathe the eye with running water for 15 minutes. Consult a doctor.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Wash out mouth with water. Consult a doctor.

Inhalation: Move to fresh air in case of accidental inhalation of vapours. If unconscious, check for breathing and apply artificial respiration if necessary. Consult a doctor.

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

Skin contact: Direct contact or exposure to high concentrations could cause erythema, blisters, tissue

[cont...]

destruction with slow healing, skin blackening, hyperkeratosis, fissures, corneal erosion, opacification, iritis, conjunctivitis, and possible blindness

Eye contact: May cause permanent blindness.

Ingestion: There may be shortness of breath due to congestion of the lungs. There may be vomiting. Headaches or general malaise may result.

Inhalation: There may be a feeling of tightness in the chest with shortness of breath. There may be vomiting.

Delayed / immediate effects: No data available.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate / special treatment: No data available.

Section 5: Fire-fighting measures

5.1. Extinguishing media

Extinguishing media: Dry chemical powder. Dry sand. Do NOT use water jet.

5.2. Special hazards arising from the substance or mixture

Exposure hazards: Not applicable.

5.3. Advice for fire-fighters

Advice for fire-fighters: Wear self-contained breathing apparatus.

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions: Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Eliminate all sources of ignition. Evacuate the area immediately. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. Refer to section 8 of SDS for personal protection details.

6.2. Environmental precautions

Environmental precautions: Do not discharge into drains or rivers.

6.3. Methods and material for containment and cleaning up

Clean-up procedures: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

6.4. Reference to other sections

Reference to other sections: Refer to section 13 of SDS.

Section 7: Handling and storage

7.1. Precautions for safe handling

Handling requirements: Avoid inhalation of vapour or mist. Keep away from sources of ignition - No

[cont...]

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

Storage conditions: Keep container tightly closed. Store in cool, well ventilated area. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Suitable packaging: Not applicable.

7.3. Specific end use(s)

Specific end use(s): No special requirement.

Section 8: Exposure controls/personal protection

8.1. Control parameters

Workplace exposure limits: **Respirable dust**

State	8 hour TWA	15 min. STEL	8 hour TWA	15 min. STEL
EU	25 mg/m3	50 mg/m3	25 mg/m3	-

8.1. DNEL/PNEC Values

DNEL / PNEC No data available.

8.2. Exposure controls

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

Respiratory protection: Self-contained breathing apparatus must be available in case of emergency.

Hand protection: Full contact

Material: butyl-rubber

Minimum layer thickness: 0.3 mm

Break through time: 480 min Splash contact

Material: Nature latex/chloroprene

Minimum layer thickness: 0.6 mm

Break through time: 32 min

Eye protection: Tightly fitting safety goggles. Face-shield.

Skin 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.

Environmental: Prevent from entering in public sewers or the immediate environment. Do not let product enter drains.

Section 9: Physical and chemical properties

[cont...]

9.1. Information on basic physical and chemical properties

State: Liquid

Colour: Colourless

Odour: Pungent

Boiling point/range°C: 117-118

Melting point/range°C: 16.2

Flammability limits %: lower: 4

upper: 19.9

Flash point°C: 40

Part.coeff. n-octanol/water: log Pow: -0.17

Autoflammability°C: 485

Vapour pressure: 15.2 hPa at 20.0 °C

Relative density: 1.049 g/cm3 at 25 °C

pH: 2.4 at 60.05 g/l

9.2. Other information

Other information: No data available.

Section 10: Stability and reactivity

10.1. Reactivity

Reactivity: No data available.

10.2. Chemical stability

Chemical stability: Stable under normal conditions.

10.3. Possibility of hazardous reactions

Hazardous reactions: No data available.

10.4. Conditions to avoid

Conditions to avoid: Heat. Flames. Sources of ignition.

10.5. Incompatible materials

Materials to avoid: Oxidising agents. Soluble carbonates and phosphates Hydroxides, Metals, Peroxides, permanganates, e.g. potassium permanganate, Amines, Alcohols, Nitric acid

10.6. Hazardous decomposition products

Haz. decomp. 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

Relevant hazards for substance:

Hazard	Route	Basis
Skin corrosion/irritation	DRM	Based on test data

[cont...]

Serious eye damage/irritation	OPT	Based on test data

Symptoms / routes of exposure

Skin contact: Direct contact or exposure to high concentrations could cause erythema, blisters, tissue destruction with slow healing, skin blackening, hyperkeratosis, fissures, corneal erosion, opacification, iritis, conjunctivitis, and possible blindness

Eye contact: May cause permanent blindness.

Ingestion: There may be shortness of breath due to congestion of the lungs. There may be vomiting. Headaches or general malaise may result.

Inhalation: There may be a feeling of tightness in the chest with shortness of breath. There may be vomiting.

Delayed / immediate effects: No data available.

Other information: Not applicable.

Section 12: Ecological information

12.1. Toxicity

Ecotoxicity values:

Species	Test	Value	Units
FISH	96H LC50	> 1,000	mg/l
DAPHNIA	48H EC50	> 300.82	mg/l

12.2. Persistence and degradability

Persistence and degradability: Readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential: No data available.

12.4. Mobility in soil

Mobility: No data available.

12.5. Results of PBT and vPvB assessment

PBT identification: This product is not identified as a PBT/vPvB substance.

12.6. Other adverse effects

Other adverse effects: No data available.

Section 13: Disposal considerations

13.1. Waste treatment methods

Disposal operations: Offer surplus and non-recyclable solutions to a licensed disposal company. Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. Leave chemicals in original containers. No mixing with other waste.

Handle uncleaned containers like the product itself.

[cont...]

Recovery operations: Not applicable.

Disposal of packaging: Dispose of as unused product.

NB: The user's attention is drawn to the possible existence of regional or national regulations regarding disposal.

Section 14: Transport information

14.1. UN number

UN number: UN2789

14.2. UN proper shipping name

Shipping name: ADR/RID: ACETIC ACID, GLACIAL

IMDG: ACETIC ACID, GLACIAL

IATA: Acetic acid, glacial

14.3. Transport hazard class(es)

Transport class: 8 (3)

14.4. Packing group

Packing group: 2

14.5. Environmental hazards

Environmentally hazardous: No **Marine pollutant:** No

14.6. Special precautions for user

Special precautions: No special precautions.

Section 15: Regulatory information

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

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

15.2. Chemical Safety Assessment

Chemical safety assessment: A chemical safety assessment has not been carried out for the substance or the mixture by the supplier.

Section 16: Other information

Other information

Other information: This safety data sheet is prepared in accordance with Commission Regulation (EU) No 453/2010.

* indicates text in the SDS which has changed since the last revision.

Phrases used in s.2 and 3: H226: Flammable liquid and vapour.

H290: May be corrosive to metals.

H314: Causes severe skin burns and eye damage.

[cont...]

R10: Flammable.

R35: Causes severe burns.

Legal disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.