

**Safety Data Sheet**  
according to UK REACH (SI 2020/1577) as amended

Printing date 16.10.2025

Version number 1

Revision: 16.10.2025

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

· **1.1 Product identifier**

· **Trade name:** Acetic Acid - 2M

· **Product Code:** 20-5520

· **Registration number** Mixture

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

· **Product category** PC21 Laboratory chemicals

· **Application of the substance / the mixture** Laboratory chemicals

· **Uses advised against**

Any use carrying a risk of direct contact with eyes/skin where workers are exposed without adequate personal protective equipment (PPE).

Any use involving aerosol formation or vapour release in excess of the assigned Workplace Exposure Limit where workers are exposed without suitable Respiratory Protective Equipment.

Processes involving the use of incompatible substances - refer to section 10.

Processes involving extreme heat use advised against.

The product is strictly intended for industrial or professional use only.

· **1.3 Details of the supplier of the safety data sheet**

· **Supplier:**

Severn Biotech Ltd.

Unit 2,

Park Lane,

Kidderminster,

Worcestershire.

DY11 6TJ

UK

Tel: 0044 1562 825286

Fax: 0044 1562 825284

email: info@severnbiotech.com

· **Further information obtainable from:** Product safety department.

· **1.4 Emergency telephone number:**

Members of the public seeking specific information on poisons should contact:

In England and Wales: NHS 111 - dial 111

In Scotland: NHS 24 - dial 111

**SECTION 2: Hazards identification**

· **2.1 Classification of the substance or mixture**

· **Classification according to GB-CLP**

Met. Corr.1 H290 May be corrosive to metals.

Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation.

· **2.2 Label elements**

· **Labelling according to GB-CLP** The product is classified and labelled according to the GB CLP regulation.

· **Hazard pictograms**



GHS05

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- **Signal word** Warning
- **Hazard statements**
  - H290 May be corrosive to metals.
  - H315 Causes skin irritation.
  - H319 Causes serious eye irritation.
- **Precautionary statements**
  - P280 Wear protective gloves / eye protection / face protection.
  - P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
  - P332+P313 If skin irritation occurs: Get medical advice/attention.
  - P362+P364 Take off contaminated clothing and wash it before reuse.
  - P337+P313 If eye irritation persists: Get medical advice/attention.
  - P406 Store in a corrosion resistant container / container with a resistant inner liner.
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

### SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** An aqueous solution of acetic acid.

- **Dangerous components:**

CAS: 64-19-7 EINECS: 200-580-7 Index number: 607-002-00-6 Reg.nr.: 01-2119475328-30-XXXX	Acetic acid ⚠ Flam. Liq. 3, H226; ⚠ Skin Corr. 1A, H314 Note: B Specific concentration limits: 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 % Met. Corr.1; H290: C ≥ 10 %	10 – < 25%
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- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

### SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** Immediately remove any clothing soiled by the product.
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:**
  - Immediately rinse with water.
  - If skin irritation continues, consult a doctor.
- **After eye contact:**
  - Check for and remove any contact lenses.
  - Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:**
  - Rinse out mouth and then drink plenty of water.
  - Do not induce vomiting; call for medical help immediately.
  - If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

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- **Information for doctor:** Treat symptomatically and supportively.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### **SECTION 5: Firefighting measures**

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**  
CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.  
Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture**  
In case of fire, the following can be released:  
Carbon monoxide and carbon dioxide  
Hydrocarbons  
Reacts with most metals to produce hydrogen gas, which can form explosive mixtures with air.
- **5.3 Advice for firefighters**
- **Protective equipment:**  
Wear self-contained respiratory protective device.  
Wear fully protective suit.  
Do not inhale explosion gases or combustion gases.
- **Additional information**  
Absorb gas/vapours with water spray.  
Cool endangered receptacles with water spray.  
Collect contaminated fire fighting water separately. It must not enter the sewage system.

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

- **6.1 Personal precautions, protective equipment and emergency procedures**  
Ensure adequate ventilation  
Keep ignition sources away - no smoking.  
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**  
Do not allow to penetrate the ground/soil.  
Do not allow product to reach sewage system or any water course in the undiluted form.
- **6.3 Methods and material for containment and cleaning up:**  
Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.  
Ensure adequate ventilation.  
Lime slurry can be used to neutralize material (e.g. 10 - 50% potassium carbonate solution or 10 - 30% sodium carbonate solution).  
Wash the area with plenty of water.
- **6.4 Reference to other sections**  
See Section 7 for information on safe handling.  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

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### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Avoid direct contact (skin/eye contact, ingestion and/or inhalation of fume/mist/dust) with the product in the undiluted form.

Safety showers and eye wash facilities should be available at the work area.

Conduct maintenance and other work on or in storage/reactor/mixing vessels or closed spaces ONLY under strict Permit to Work conditions.

- **Information about fire - and explosion protection:** Fumes can combine with air to form an explosive mixture.

- **7.2 Conditions for safe storage, including any incompatibilities**

- **Storage:**

- **Requirements to be met by storerooms and receptacles:**

Prevent any seepage into the ground.

Store only in the original receptacle.

- **Information about storage in one common storage facility:**

Store away from metals.

Do not store together with alkalis (caustic solutions).

- **Further information about storage conditions:**

Protect from frost.

Store in cool, dry conditions in well sealed receptacles.

- **Storage class:** 12

- **7.3 Specific end use(s)** No further relevant information available.

### SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

**CAS: 64-19-7 Acetic acid**

WEL	Short-term value: 50 mg/m <sup>3</sup> , 20 ppm
	Long-term value: 25 mg/m <sup>3</sup> , 10 ppm

- **DNELs**

**CAS: 64-19-7 Acetic acid**

Inhalative	Long-term local effects	25 mg/m <sup>3</sup> (general population)
		25 mg/m <sup>3</sup> (worker)
	Short-term local effects	25 mg/m <sup>3</sup> (general population)
		25 mg/m <sup>3</sup> (worker)

- **PNECs**

**CAS: 64-19-7 Acetic acid**

Freshwater	3.058 mg/L
Freshwater - Intermittent releases	30.58 mg/L
Marine water	305.8 µg/L
Sewage Treatment Plant	85 mg/L
Sediment (freshwater)	11.36 mg/kg
Sediment (marine water)	1.136 mg/kg

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Soil	470 µg/kg
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· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Appropriate engineering controls** No further data; see section 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

Take note of assigned Workplace Exposure Limits.

Do not eat, drink, smoke or sniff while working.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Ensure that eyewash stations and safety showers are close to the workstation location.

· **Respiratory protection:**

Use suitable respiratory protective device in case of insufficient ventilation.

Filter A for organic vapours

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

If respiratory protection is required, institute a complete respiratory protection program including selection, fit testing, training, maintenance and inspection.

· **Hand protection**



Protective gloves.

Use gloves tested and approved under appropriate government standards such as NIOSH (US) or EN374 (EU).

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

Nitrile rubber, NBR

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

Break-through time: > 480 minutes

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye/face protection**



Safety glasses with side-shields conforming to EN166.

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

· **Body protection:**



Acid resistant protective clothing

Body protection must be chosen depending on product properties, activity and possible exposure.

· **Environmental exposure controls** Do not allow to enter drains, sewers or watercourses.

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### SECTION 9: Physical and chemical properties

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

##### · General Information

· Physical state	Liquid
· Colour:	Colourless - pale yellow
· Odour:	Vinegar
· Odour threshold:	1 - 5ppm
· Melting point/freezing point:	Undetermined.
· Boiling point or initial boiling point and boiling range	100 °C (CAS: 7732-18-5 Water)
· Lower and upper explosion limit	
· Lower:	4 Vol % (CAS: 64-19-7 Acetic acid)
· Upper:	17 Vol % (CAS: 64-19-7 Acetic acid)
· Flash point:	Not applicable.
· Auto-ignition temperature:	485 °C (CAS: 64-19-7 Acetic acid)
· pH at 20 °C	2 – 3
· Viscosity:	
· Dynamic:	Not determined.
· Solubility	
· water:	Fully miscible.
· Partition coefficient n-octanol/water (log value)	-0.17 log POW
· Vapour pressure at 20 °C:	23 hPa (CAS: 7732-18-5 Water)
· Density and/or relative density	
· Density at 20 °C:	1.006 g/cm <sup>3</sup>

#### · 9.2 Other information

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

##### · Appearance:

##### · Form:

Liquid

##### · Important information on protection of health and environment, and on safety.

##### · Ignition temperature:

Product is not self-igniting.

##### · Explosive properties:

Product is not explosive. However, formation of explosive air/vapour mixtures are possible.

##### · Solvent content:

##### · VOC (EC)

20.00 %

#### · Information with regard to physical hazard classes

##### · Corrosive to metals

May be corrosive to metals.

##### · Corrosion rate (steel)

&gt;6.25mm/year

##### · Corrosion rate (aluminium)

&gt;6.25mm/year

### SECTION 10: Stability and reactivity

· **10.1 Reactivity** No further relevant information available.

· **10.2 Chemical stability**

· **Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

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- **10.3 Possibility of hazardous reactions**  
 Reacts with oxidising agents.  
 Exothermic reaction with alkalis  
 Reacts with metals forming hydrogen.
- **10.4 Conditions to avoid** Heat and static discharge.
- **10.5 Incompatible materials:**  
 Finely powdered metals.  
 Strong oxidising agents.  
 Substances specifically listed in section 10.3 as incompatible.
- **10.6 Hazardous decomposition products:**  
 Carbon monoxide and carbon dioxide  
 Hydrocarbons

### SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· <b>LD/LC50 values relevant for classification:</b>
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<b>CAS: 64-19-7 Acetic acid</b>
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Inhalative	LC50/4 h	40 mg/l (rat)
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- **Primary irritant effect:**
- **Skin corrosion/irritation**  
 Causes skin irritation.
- **Serious eye damage/irritation**  
 Causes serious eye irritation.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.
- **Subacute to chronic toxicity:**  
 Prolonged or repeated skin contact may irritate and cause dermatitis.  
 May have effects on the teeth, resulting in teeth erosion.
- **Additional toxicological information:**  
 ROUTES OF EXPOSURE: Can be absorbed into the body by inhalation and by ingestion.  
 Inhalation of decomposition products may cause lung oedema. The symptoms of lung oedema often do not become manifest until a few hours have passed and they are aggravated by physical effort. Rest and medical observation are therefore essential. Attention by a doctor should be considered.
- **11.2 Information on other hazards**

· <b>Endocrine disrupting properties</b>
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None of the ingredients are listed.
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### SECTION 12: Ecological information

**12.1 Toxicity****Aquatic toxicity:****CAS: 64-19-7 Acetic acid**

EC50 (96 h) &gt; 300.82 mg/l (Daphnia)

&gt; 300.82 mg/l (Fish)

EC50 (72 h) 300.82 mg/l (Algae)

- 12.2 Persistence and degradability** Readily biodegradable
- 12.3 Bioaccumulative potential** Product is not expected to bioaccumulate.
- 12.4 Mobility in soil** No further relevant information available.
- 12.5 Results of PBT and vPvB assessment**
- PBT:** Not applicable.
- vPvB:** Not applicable.
- 12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- 12.7 Other adverse effects**
- Additional ecological information:**
- General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

### SECTION 13: Disposal considerations

**13.1 Waste treatment methods****Recommendation**

Recommended Hierarchy of Controls:

- Minimise waste;
- Reuse if not contaminated;
- Recycle, if possible; or
- Safe disposal (if all else fails).

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Contact waste processors for recycling information.

Used, degraded or contaminated product may be classified as hazardous waste. Anyone classifying hazardous waste and determining its fate must be qualified in accordance with state and international legislation.

Do not mix with other waste streams.

**UK List of Waste**

Waste key numbers in accordance with the UK List of Waste are origin-referred defined. Since this product is used in several industries, no waste key can be provided by the supplier. The waste key number should be determined in arrangement with your waste disposal partner or the responsible authority.

**Uncleaned packaging:****Recommendation:**

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

Disposal must be made according to official regulations.

Container remains hazardous when empty. Continue to observe all precautions.

Containers, even those that are "empty," may contain residues that can develop flammable and/or hazardous vapours upon heating. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers.

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- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

### SECTION 14: Transport information

- **14.1 UN number or ID number**

- **ADR, IMDG, IATA** UN2790

- **14.2 UN proper shipping name**

- **ADR** UN2790 ACETIC ACID SOLUTION
- **IMDG, IATA** ACETIC ACID SOLUTION

- **14.3 Transport hazard class(es)**

- **ADR**



- **Class** 8 (C3) Corrosive substances.
- **Label** 8

- **IMDG, IATA**



- **Class** 8 Corrosive substances.
- **Label** 8

- **14.4 Packing group**

- **ADR, IMDG, IATA** III

- **14.5 Environmental hazards:**

- **Marine pollutant:** No

- **14.6 Special precautions for user**

- **Warning:** Corrosive substances.

- **Hazard identification number (Kemler code):** 80

- **Emergency Action Code:** 2R

- **EMS Number:** F-A,S-B

- **Segregation groups** (SGG1) Acids

- **Stowage Category** A

- **14.7 Maritime transport in bulk according to IMO instruments**

Not applicable.

- **Transport/Additional information:**

- **ADR**

- **Limited quantities (LQ)** 5L

- **Excepted quantities (EQ)** Code: E1

Maximum net quantity per inner packaging: 30 ml

Maximum net quantity per outer packaging: 1000 ml

- **Transport category** 3

- **Tunnel restriction code** E

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· <b>IMDG</b>	
· <b>Limited quantities (LQ)</b>	5L
· <b>Excepted quantities (EQ)</b>	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	UN 2790 ACETIC ACID SOLUTION, 8, III

**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Poisons Act**

- **Regulated explosives precursors**

None of the ingredients are listed.

- **Regulated poisons**

None of the ingredients are listed.

- **Reportable explosives precursors**

None of the ingredients are listed.

- **Reportable poisons**

None of the ingredients are listed.

- **Control Of Major Accident Hazards Regulations 2015 (COMAH)**
- **Named dangerous substances - ANNEX I** None of the ingredients are listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

**SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet is in compliance with Regulation (EC) No 1907/2006, Article 31 as amended by Regulation (EU) 2020/878.

- **Relevant phrases**

H226 Flammable liquid and vapour.  
H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.

- **Training hints**

This product should only be handled by workers who have received sufficient training in the safe handling and use of chemical products.

- **Department issuing SDS:** Product safety department.

- **Abbreviations and acronyms:**

UK- REACH: The UK REACH etc. (Amendment etc.) (EU Exit) Regulations 2019 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals  
GB- CLP: Retained GB CLP Regulation (EU) No. 1272/2008 as amended for Great Britain on the Classification, Labelling and Packaging of Chemicals.  
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)  
IMDG: International Maritime Code for Dangerous Goods

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IATA: International Air Transport Association  
GHS: Globally Harmonised System of Classification and Labelling of Chemicals  
EINECS: European Inventory of Existing Commercial Chemical Substances  
ELINCS: European List of Notified Chemical Substances  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
VOC: Volatile Organic Compounds (USA, EU)  
DNEL: Derived No-Effect Level (UK REACH)  
PNEC: Predicted No-Effect Concentration (UK REACH)  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
ATE: Acute toxicity estimate values  
Flam. Liq. 3: Flammable liquids – Category 3  
Met. Corr. 1: Corrosive to metals – Category 1  
Skin Corr. 1A: Skin corrosion/irritation – Category 1A  
Skin Irrit. 2: Skin corrosion/irritation – Category 2  
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

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