



SAFETY DATA SHEET

Date of issue: 11/10/05

1. Identification of the substance/preparation and of the company/undertaking

Identification of the product

Catalogue No: 27013

ID No.: 1000100

Product name: **Acetic acid GPR**

Use of the substance/preparation: General chemical reagent

Manufacturer/supplier identification

Company: VWR International Ltd
Hunter Boulevard, Magna Park, Lutterworth, Leicestershire, England, LE17 4XN
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2. Composition/information on ingredients

Chemical characterization

Organic acid

Product name: Acetic acid

CAS number: 64-19-7

EC-No.: 200-580-7

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

Molecular formula: $\text{CH}_3\text{COOH} = 60.05 \text{ g/mol}$

3. Hazards identification

Flammable. Causes severe burns.

4. First aid measures

- Eye contact: Irrigate thoroughly with water for at least 10 minutes. OBTAIN MEDICAL ATTENTION.
- Inhalation: Remove from exposure, rest and keep warm. In severe cases, or if exposure has been great, OBTAIN MEDICAL ATTENTION.
- Skin contact: Drench the skin thoroughly with water. Remove contaminated clothing and wash before re-use. Unless contact has been slight, OBTAIN MEDICAL ATTENTION.
- Ingestion: Wash out mouth thoroughly with water and give plenty of water to drink. OBTAIN MEDICAL ATTENTION.

5. Fire-fighting measures

Special risks:

Flammable. Vapours heavier than air. Vapour/air mixture explosive.

Suitable extinguishing media:

Water spray, dry powder or vaporising liquids

Do not stay in dangerous zone without chemical protection suit and respiratory protective equipment. Prevent fire fighting water entering watercourses or ground-water.

6. Accidental release measures

Shut off all sources of ignition. Wear appropriate protective clothing. Inform others to keep at a safe distance. Absorb on an inert absorbent, (e.g. BDH Spillage absorption granules), transfer to a suitable container and arrange removal by disposal company. Wash site of spillage thoroughly with water and detergent. For large spillages liquids should be contained with sand or earth and both liquids and solids transferred to salvage containers. Any residues should be treated as for small spillages.

7. Handling and storage

Handling:

Take precautions against static discharge. Keep away from sources of ignition. Avoid contact with skin and eyes. Do not breathe vapour. Immediately change contaminated clothing. Wash hands and face after working with substance.

Unsuitable working materials: various metals.

Storage:

Store in a warm place (above 20°C) to prevent freezing. Keep well closed and protected from direct sunlight and moisture.

8. Exposure controls/personal protection

UK Exposure Limits:

WEL, Acetic acid:
Long-term: 25 mg/m³ (10 ppm) Short term: 37 mg/m³ (15 ppm) (ILV)

Personal protective equipment:

As appropriate to the situation and the quantity handled. Engineering methods to control or prevent exposure are preferred. Methods could include process enclosure or mechanical ventilation.

- Ventilation: Fume cupboard, flameproof
- Respirator: Self-contained breathing apparatus required when vapours/aerosols are generated.
- Gloves: Butyl rubber, Viton™ or PE/EVAL (Silver Shield). Gloves subject to permeation or any sign of degradation must be removed and replaced immediately.
- Eye Protection: Goggles or face-shield
- Other Precautions: Plastic apron, sleeves, boots - if handling large quantities

9. Physical and chemical properties

General information:

Form: liquid
Colour: colourless

Odour: pungent

Health, safety and environmental information:

Melting temperature	16.7°C
Boiling temperature	118°C
Density(g/ml)	1.05
Vapour pressure	15.4 hPa (20°C)
Relative vapour density:	2.07
Solubility in water	Miscible in all proportions
pH value	2.5 (10 g/l H ₂ O)
Flash point	40°C
Explosion limits:	lower: 4 % v/v
	upper: 19 % v/v
Auto-ignition temperature	426°C
Viscosity:	kinematic: 1.17 mm ² /sec (20°C)
dynamic: 1.26 mPa.s (20°C)	
Log P(o/w):	-0.17
Additional data:	Refractive index: 1.3716 (20°C, 589 nm)
Dielectric constant : 6.1 (20°C)	
Dipole moment: 1.5 Debye (20°C)	

10. Stability and reactivity

Stable.

Substances to be avoided: bases, aldehydes, alcohols, halogen-halogen compounds, oxidizing agents, metals, alkali hydroxides, nonmetallic halides, ethanolamine.

The possibility of reaction with other substances cannot be excluded.

11. Toxicological information

Strongly corrosive substance.

- After inhalation of vapours: Irritation symptoms in the respiratory tract. Inhalation may lead to the formation of oedemas in the respiratory tract.
- After skin contact: burns The onset of symptoms may be delayed.
- After eye contact: Burns. Risk of blindness!
- After ingestion: Burns in oesophagus and stomach. gastric spasms, bloody vomiting, dyspnoea. Risk of perforation in the oesophagus and stomach. Pulmonary failure possible after aspiration of vomit. Cannot be excluded: shock, cardiovascular failure, acidosis, Damage to: kidneys.

The product should be handled with the care usual when dealing with chemicals.

Further data

LD50 (oral, rat): 3310 mg/kg
LC50 (inhalation, rat): 11.4 mg/l/4h
LD50 (dermal, rabbit): 1060 mg/kg
Eye irritation test (rabbit): burns
Skin irritation test (rabbit): burns
Ames-Test: negative

We have no evidence of carcinogenic effects. We have no evidence of mutagenic or teratogenic effects.

12. Ecological information

Adverse ecological effects cannot be excluded in the event of improper handling or disposal. Harmful effect due to pH shift.

Further ecological data:

Bioaccumulation potential: low (Log Pow < 2).

Biological degradability: good.

Fish toxicity: LC50 (L. macrochirus): 75 mg/l/96hr.

LC50 (P. promelas): 88 mg/l/96hr

Daphnia toxicity: LC50 (Daphnia magna): 47-95 mg/l/24hr

Bacterial toxicity: EC50 (Photobacterium phosphoreum): 11 mg/l/15 min

Remarks:

Do not allow to enter drinking water supplies, waste water, or soil!

13. Disposal considerations

Chemical residues are generally classified as hazardous or special waste, and as such are covered by regulations which vary according to location. Contact your local waste disposal authority for advice, or pass to a chemical disposal company. Rinse out empty containers thoroughly before returning for recycling.

When recovery and recycling is not possible, incineration in a high temperature incinerator is the recommended method of disposal.

14. Transport information

UN-No.: 2789

Class: 8

Packaging group: II

Proper shipping name: ACETIC ACID, GLACIAL

15. Regulatory information

Labelling according to EC directives

Symbol(s): C Corrosive.

R-phrases: R10-35

Flammable. Causes severe burns.

S-phrases: S23B-26-45

Do not breathe vapour. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

EC-No.: 200-580-7

Local Regulations

Within the UK, the use of this material must be assessed under the Control of Substances Hazardous to Health (COSHH) regulations.

Within the UK, the use of this material must be assessed under the Dangerous Substances and Explosive Atmospheres (DSEAR) Regulations.

16. Other information

Revision.

Supersedes edition of: 17/10/00
Reason for alteration: Changes in Section : 4

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