

## SAFETY DATA SHEET

## ACETIC ACID

## 1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

PRODUCT NAME ACETIC ACID  
 APPLICATION Laboratory chemical.  
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## 2 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
ACETIC ACID ...%	200-580-7	64-19-7	60-100%	R10 C;R35

The Full Text for all R-Phrases are Displayed in Section 16

## 3 HAZARDS IDENTIFICATION

Flammable. Causes severe burns.

CLASSIFICATION C;R35. R10.

## 4 FIRST-AID MEASURES

## INHALATION

Move the exposed person to fresh air at once. Perform artificial respiration if breathing has stopped. Keep the affected person warm and at rest. Get prompt medical attention.

## INGESTION

Immediately rinse mouth and provide fresh air. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Get medical attention immediately!

## SKIN CONTACT

Remove affected person from source of contamination. Promptly flush contaminated skin with water. Promptly remove clothing if soaked through and flush the skin with water. Get medical attention immediately.

## EYE CONTACT

Important! Immediately rinse with water for 15-30 minutes. Get medical attention immediately. Continue to rinse.

## 5 FIRE-FIGHTING MEASURES

## EXTINGUISHING MEDIA

Water spray, fog or mist. Foam, carbon dioxide or dry powder.

## SPECIAL FIRE FIGHTING PROCEDURES

Use water to keep fire exposed containers cool and disperse vapours. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Cool containers exposed to flames with water until well after the fire is out.

## UNUSUAL FIRE &amp; EXPLOSION HAZARDS

May explode in a fire. May travel considerable distance to source of ignition and flash back.

## 6 ACCIDENTAL RELEASE MEASURES

## PERSONAL PRECAUTIONS

Wear protective clothing as described in Section 8 of this safety data sheet.

## SPILL CLEAN UP METHODS

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Large spills, dilute, then neutralise with caustic solution. Flush area with plenty of water.

**ACETIC ACID****7 HANDLING AND STORAGE**

## USAGE PRECAUTIONS

Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

## STORAGE PRECAUTIONS

Flammable/combustible - Keep away from oxidisers, heat and flames.

**8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

Name	Std	LT - ppm	LT - mg/m3	ST - ppm	ST - mg/m3
ACETIC ACID	OES	10 ppm	25 mg/m3	15 ppm	37 mg/m3

## PROTECTIVE EQUIPMENT



## ENGINEERING MEASURES

Provide adequate ventilation. Observe Occupational Exposure Limits and minimise the risk of inhalation of vapours.

## RESPIRATORY EQUIPMENT

Chemical respirator with organic vapour cartridge and full facepiece.

## HAND PROTECTION

The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Protective gloves should be used if there is a risk of direct contact or splash. Neoprene. Polyethylene.

## EYE PROTECTION

Wear approved chemical safety goggles where eye exposure is reasonably probable. Contact lenses should not be worn when working with this chemical! Wear full-face visor or shield.

## OTHER PROTECTION

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station and safety shower.

**9 PHYSICAL AND CHEMICAL PROPERTIES**

APPEARANCE	Liquid Jelly-like		
COLOUR	Clear		
ODOUR	Strong. Pungent		
SOLUBILITY	Completely soluble in water		
MOL. WEIGHT	60.10	BOILING POINT (°C)	~117
MELTING POINT (°C)	~16	RELATIVE DENSITY	1.05 20
VAPOUR DENSITY (air=1)	2.7	VAPOUR PRESSURE	11.40
VAPOUR PRESSURE	20	EVAPORATION RATE	0.97
ODOUR THRESHOLD, LOWER	1.00	FLASH POINT (°C)	40
FLASH POINT (°C)	PM Closed cup.	AUTO IGNITION TEMPERATURE (°C)	426

**10 STABILITY AND REACTIVITY**

## STABILITY

Stable under normal temperature conditions and recommended use.

## CONDITIONS TO AVOID

Avoid heat, flames and other sources of ignition. Water, moisture.

## MATERIALS TO AVOID

Strong alkalis. Strong oxidizing substances. Strong reducing agents. Bases, alkalies (inorganic).

## HAZARDOUS DECOMPOSITION PRODUCTS

Toxic gases/vapours/fumes of: Carbon monoxide (CO).

**11 TOXICOLOGICAL INFORMATION**

TOXIC DOSE 1 - LD 50 3310 mg/kg (oral rat)

## INHALATION

Chronic inflammation of nose, throat and bronchial tubes.

## ACETIC ACID

### INGESTION

May cause chemical burns in mouth, oesophagus and stomach.

### SKIN CONTACT

Contact with concentrated chemical may cause severe skin damage.

### EYE CONTACT

Extreme irritation of eyes and mucous membranes, including burning and tearing.

## 12 ECOLOGICAL INFORMATION

### ECOTOXICITY

The product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

## 13 DISPOSAL CONSIDERATIONS

### DISPOSAL METHODS

Incinerate in suitable combustion chamber. Mix slowly with NaHCO<sub>3</sub>, neutralise and flush to sewer with lots of water. Dispose of waste and residues in accordance with local authority requirements.

## 14 TRANSPORT INFORMATION



UK ROAD CLASS	8		
PROPER SHIPPING NAME	ACETIC ACID SOLUTION		
AIR TRANSPORT NOTES	Pkg Inst. G Y809 max/package 0.5 L, Pkg Inst. I 809, max/pkg 1 L, Pkg Inst K 813, max/pkg 30 L		
UN NO. ROAD	2789	UK ROAD PACK GR.	II
UN NO. SEA	2789	IMDG CLASS	8.3
IMDG PACK GR.	II	EMS	F-E, S-C
UN NO. AIR	2789	ICAO CLASS	8
AIR SUB CLASS	3	AIR PACK GR.	II

## 15 REGULATORY INFORMATION

### LABELLING



Corrosive

CONTAINS	ACETIC ACID ...%	
RISK PHRASES	R10	Flammable.
	R35	Causes severe burns.
SAFETY PHRASES	S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
	S45	In case of accident or if you feel unwell, seek medical advice immediately (show label where possible).
	S51	Use only in well-ventilated areas.
	S24/25	Avoid contact with skin and eyes.
	S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
	S60	This material and/or its container must be disposed of as hazardous waste.

### UK REGULATORY REFERENCES

The Control of Substances Hazardous to Health Regulations Chemicals (Hazard Information & Packaging) Regulations.

### GUIDANCE NOTES

Occupational Exposure Limits EH40.

## ACETIC ACID

### 16 OTHER INFORMATION

#### INFORMATION SOURCES

Sax's Dangerous Properties of Industrial Materials, 10th ed., Lewis, R.J. Sr., (ed.). Product information provided by the commercial vendor(s).  
Material Safety Data Sheet, Misc. manufacturers.

#### ISSUED BY

Sarah Glover

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#### RISK PHRASES IN FULL

R10 Flammable.

R35 Causes severe burns.

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