

# Material Safety Data Sheet

## Acetic acid

Version 1.05

Revision Date 08.02.2007



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

<b>Trade name</b>	<b>Acetic acid</b>
<b>Synonyms</b>	<b>Acetic acid (Glacial), Glacial acetic acid</b>
<b>Use</b>	raw material for photochemicals, industrial use, raw material for pharmaceutical products, raw material for textile finishing agents
<b>Company</b>	Hitech Chemicals

### 2. Composition/information on ingredients

acetic acid...%  
content: 99.00 %W/W

**CAS-No.** 64-19-7  
**Symbol(s)** C

**Index-No.** 607-002-00-6  
**R-phrase(s)** -R10 -R35

**EC-No.** 200-580-7

For the full text of the R phrases mentioned in this Section, see Section 16.

### 3. Hazards identification

#### Identification of the risks

R10 Flammable.  
R35 Causes severe burns.

### 4. First aid measures

**General advice** In the case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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<b>Inhalation</b>	Move to fresh air in case of accidental inhalation of vapours. If breathing is irregular or stopped, administer artificial respiration. Monitor breathing, seek medical advice immediately.
<b>Skin contact</b>	Take off contaminated clothing and shoes immediately. Wash off immediately with soap and plenty of water. Call a physician immediately.
<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Protect unharmed eye.
<b>Ingestion</b>	If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.

### 5. Fire-fighting measures

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<b>Suitable extinguishing media</b>	Water spray, Dry powder, Foam, Carbon dioxide (CO2)
<b>Specific hazards during fire fighting</b>	Do not allow run-off from fire fighting to enter drains or water courses.
<b>Special protective equipment for fire-fighters</b>	Wear self-contained breathing apparatus and protective suit.
<b>Further information</b>	In the event of fire, cool tanks with water spray.

### 6. Accidental release measures

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<b>Personal precautions</b>	Use personal protective equipment. Do not breathe vapours or spray mist.
<b>Environmental precautions</b>	Do not flush into surface water or sanitary sewer system.
<b>Methods for cleaning up</b>	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
<b>Additional advice</b>	Never return spills in original containers for re-use.

### 7. Handling and storage

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#### Handling

<b>Safe handling advice</b>	Wear personal protective equipment. Do not breathe vapours or spray mist. Avoid contact with skin and eyes.
<b>Advice on protection against fire and explosion</b>	Provide sufficient air exchange and/or exhaust in work rooms. Keep away from open flames, hot surfaces and sources of ignition.

#### Storage

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**Requirements for storage areas and containers** Keep containers tightly closed in a dry, cool and well-ventilated place.

### 8. Exposure controls / personal protection

#### Components with workplace control parameters

##### NATIONAL OCCUPATIONAL EXPOSURE LIMITS

no data available

##### EUROPEAN OCCUPATIONAL EXPOSURE LIMITS

Components	Type	Control parameters	Update	Basis
ACETIC ACID	TWA TWA	25 mg/m <sup>3</sup> 10 ppm	05 2003 05 2003	EU Exposure Limit Values EU Exposure Limit Values

#### Engineering measures

Provide sufficient air exchange and/or exhaust in work rooms.

#### Personal protective equipment

**Respiratory protection** suitable respiratory equipment:

**Hand protection**

gloves suitable for permanent contact:

Material: butyl-rubber

Break through time: 4 h

Material thickness: 0.5 mm

unsuitable gloves

Material: Polyvinylchloride, leather, nitrile rubber/nitrile latex, natural rubber/natural latex

**Eye protection**

Tightly fitting safety goggles

**Skin and body protection**

protective suit

**Hygiene measures**

Wash hands before breaks and immediately after handling the product. Handle in accordance with good industrial hygiene and safety practice.

**Protective measures**

Do not breathe vapours or spray mist. Avoid contact with the skin and the eyes. Wear suitable protective equipment.

### 9. Physical and chemical properties

**Form**

liquid

**Colour**

colourless

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<b>Odour</b>	pungent vinegar-like
<b>pH</b>	2
<b>Melting point/range</b>	16.63 °C
<b>Boiling point/range</b>	118 °C
<b>Flash point</b>	40 °C; closed cup
<b>Autoignition temperature</b>	426 °C
<b>Lower explosion limit</b>	4 % (V)
<b>Upper explosion limit</b>	16 % (V)
<b>Vapour pressure</b>	14.67 hPa
<b>Density</b>	1.049 g/cm <sup>3</sup>
<b>Partition coefficient (n-octanol/water)</b>	log Pow: -0.17
<b>Viscosity, dynamic</b>	1.22 mPa.s
<b>Relative vapour density</b>	2.1

### 10. Stability and reactivity

<b>Hazardous decomposition products</b>	Carbon monoxide Carbon dioxide (CO <sub>2</sub> ) Sodium oxides
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### 11. Toxicological information

<b>Acute oral toxicity</b>	LD50 rat: 3,310 mg/kg;
<b>Acute inhalation toxicity</b>	LC50 rat: 11.4 mg/l; ; 4 h LCLo rat: 16,000 mg/l; ; 4 h
<b>Acute dermal toxicity</b>	LD50 rabbit: 1,060 mg/kg;

### 12. Ecological information

<b>Biodegradability</b>	82 %; 10 d
<b>Bioaccumulation</b>	3.2
<b>Ecotoxicity effects</b>	
<b>Toxicity to fish</b>	LC50 Bluegill sunfish: 75 mg/l; 96 h
<b>Toxicity to daphnia and other aquatic invertebrates.</b>	EC50 Daphnia: 6,000 mg/l; 24 h

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### 13. Disposal considerations

<b>Product</b>	Dispose of in accordance with local regulations.
<b>Contaminated packaging</b>	Store containers and offer for recycling of material when in accordance with the local regulations.

### 14. Transport information

<b>ADR</b>	UN-No.: 2789; Class: 8, (3); Packaging group: II; CF1; Description of the goods: ACETIC ACID, GLACIAL
<b>RID</b>	UN-No.: 2789; Class: 8, (3); Packaging group: II; CF1; Description of the goods: ACETIC ACID, GLACIAL
<b>ADNR</b>	UN-No.: 2789; Class: 8, (3); Packaging group: II; CF1; Description of the goods: ACETIC ACID, GLACIAL
<b>IMDG</b>	UN-No.: 2789; Class: 8, (3); EmS: F-E, S-C; Packaging group: II; Description of the goods: ACETIC ACID, GLACIAL
<b>ICAO/IATA</b>	UN-No. : 2789; Class: 8, (3); Packaging group: II; Description of the goods: Acetic acid, glacial

### 15. Regulatory information

#### Labelling



<b>Regulatory base</b>	67/548/EEC
<b>Symbol(s)</b>	C: Corrosive
<b>R-phrase(s)</b>	R10: Flammable. R35: Causes severe burns.
<b>S-phrase(s)</b>	S 1/2: Keep locked up and out of the reach of children. S23: Do not breathe gas/fumes/vapour/spray. 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

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*advice immediately (show the label where possible).*

**Hazardous components which must be listed on the label**      *acetic acid...%*

### 16. Other information

*Full text of R-phrases referred to under sections 2 and 3*

R10                      *Flammable.*  
R35                      *Causes severe burns.*

*All reasonable efforts were exercised to compile this MSDS in accordance with ISO 11014 and ANSIZ400.1.1993. The MSDS provides information regarding the health, safety and environmental hazards, at the date of issue, to facilitate the safe receipt, use and handling of the product in the workplace. Since we cannot anticipate or control all conditions under which the product may be handled, used and received in the workplace, it remains the obligation of each user, receiver or handler to, prior to usage, review this MSDS in the context within which the product will be received, handled or used in the workplace. The user, handler or receiver must ensure that the necessary mitigating measures are in place as regards health and safety. This does not substitute the need or requirement for any relevant risk assessments to be conducted. It further remains the responsibility of the receiver, handler or user to communicate such information to all relevant parties that may be involved in the receipt, use or handling of the product.*

*Although all reasonable efforts were exercised in the compilation of this MSDS, we do not expressly warrant the accuracy or assume any liability for the incompleteness of the information contained herein or any advice given. The product is sold and risk passes in accordance with the specific terms and conditions of sale.*

*The MSDS was created by:  
The MSDS was approved by:*