

## Acetic Acid 78-80%



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

#### 1.1 Product identifier

Product name:	Acetic Acid 78-80%
CAS Number:	64-19-7
EC Number:	200-580-7
REACH Number:	01-2119475328-30-xxxx

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

Identified use: Laboratory chemicals, manufacture of substances

#### 1.3 Details of the supplier of the safety data sheet

Company name:	East Harbour Group Ltd Miranda House, The Quay Harwich, Essex, CO12 3HH United Kingdom
Telephone:	+44 (0) 333 242 0100
Email:	<a href="mailto:info@eastharbourgroup.com">info@eastharbourgroup.com</a>

#### 1.4 Emergency telephone number

Emergency telephone:	0800 246 1274
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### Section 2: Hazardous identification

#### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008  
Flammable liquids (Category 3), H226  
Skin corrosion (Category 1B), H314  
Classification according to EU Directive 67/548/EEC or 1999/45/EC  
C: Corrosive: R10  
R34

#### 2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008  
Pictogram





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Signal word: Danger

Hazard statements:

H314:

Causes severe skin burns and eye damage

Precautionary statements:

P303+P361+P353 - IF ON SKIN (or hair):

Remove immediately all contaminated clothing. Rinse skin with water/shower.

P210:

Keep away from hot surfaces and open flames. No smoking.

P241:

Use explosion-proof electrical/ventilating/lighting/... equipment.

P260:

Do not breathe dust/fume/gas/mist/vapours/spray.

P280:

Wear protective gloves/protective clothing/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.

P310:

Immediately call a POISON CENTRE or doctor/physician.

P501:

Dispose of this material and its container to hazardous or special waste collection point.

S-phrases:

S26:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39:

Wear suitable protective clothing, gloves and eye/face protection.

S45:

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

### 2.3 Other hazards

Physical/chemical hazards:

Attacks metals with liberation of hydrogen gas.

Hazards for the health:

A health dangerous concentration in the air will very quickly be reached by evaporation of this substance at app. 20°C; even faster by spraying.

Hazards for the environment:

Product causes a strong drop of the pH-value of water and soil. This product is no substance or contains no PBT or vPvB (in accordance with Annex XIII).

Hazards for the safety:

Vapor mixes readily with air. At or above flash point, available vapours may burn in open or explode if confined when mixed with air and exposed to ignition source.

## Section 3: Composition/information on ingredients

### 3.2 Mixtures

CAS #	Content (W/W)	Ingredients
64-19-7	50-80%	Acetic Acid



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Chemical name: Acetic Acid 78-80%

Common name / synonyms: Glacial acetic acid

### Section 4: First aid measures

#### 4.1 Description of first aid measures

In case of skin contact: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact: Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

If swallowed: Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

If inhaled: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

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

The most important known symptoms and effects are described in the labelling

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

No information available

### Section 5: Fire-fighting measures

#### 5.1 Fire Fighting Media and Instructions:

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### 5.2 Special hazards arising from the substance or mixture

Carbon oxides.

#### 5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

### Section 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation.

Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

#### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.



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### 6.3 Methods and material for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or wet-brushing and place in container for disposal according to local regulations.

## Section 7: Handling and storage

### 7.1 Precautions for safe handling

Avoid inhalation of vapour or mist. Keep away from sources of ignition – No smoking. Take measures to prevent the build up of electrostatic charge.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

## Section 8: Exposure controls/personal protection

### 8.1 Control parameters

Occupational Exposure Limits :

Acetic acid ...% : Limit value (BE) : 10 ppm (25 mg/m<sup>3</sup>) (2014)

Acetic acid ...% : Short time value (BE) : 15 ppm (38 mg/m<sup>3</sup>) (2014)

Biological limit values : They will be included when available.

DNELs :

Acetic acid ...% : Worker, acute - local effects, inhalation : 25 mg/m<sup>3</sup>

Acetic acid ...% : Worker, long-term - local effects, inhalation : 25 mg/m<sup>3</sup>

Acetic acid ...% : Consumer, acute - local effects, inhalation : 25 mg/m<sup>3</sup>

Acetic acid ...% : Consumer, long-term - local effects, inhalation : 25 mg/m<sup>3</sup>

PNECs :

Acetic acid ...% : Fresh water : 3,058 mg/l

Acetic acid ...% : Marine water : 0,3058 mg/l

Acetic acid ...% : Fresh water sediment : 11,36 mg/kg

Acetic acid ...% : Marine water sediment : 1,136 mg/kg

Acetic acid ...% : Soil : 0,478 mg/kg

Acetic acid ...% : Intermittent release : 30,58 mg/l

Acetic acid ...% : Sewage treatment plant : 85 mg/l

### 8.2 Exposure controls

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

### 8.3 Personal protective equipment

Eye/face protection: Tightly fitting safety goggles. Faceshield (8-inches minimum). Use equipment for eye protection tested and approved under appropriate government standards.



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**Skin protection:** Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

**Body 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.

**Respiratory protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

### Section 9: Physical and chemical properties

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

<b>Appearance</b>	Colourless
<b>Physical State</b>	Liquid
<b>Odor</b>	Acetic odour
<b>Odor Threshold</b>	0.074 ppm
<b>pH</b>	< 2
<b>Melting Point/Range</b>	-26 C to 7 C
<b>Boiling Point/Range</b>	101-107 C
<b>Flash Point</b>	>61 C
<b>Evaporation Rate</b>	0.97 (Butyl acetate = 1)
<b>Flammability (solid, gas)</b>	No information available
<b>Explosion Limits</b>	No information available
<b>Vapor Pressure (20 C)</b>	1.0-1.5 kPa
<b>Relative density of saturated vapour/air mixture (air=1)</b>	1.02
<b>Relative density (water=1)</b>	App 1.02
<b>Specific Gravity / Density</b>	No information available
<b>Bulk Density</b>	No information available
<b>Water Solubility</b>	Completely soluble
<b>Solubility in other solvents</b>	Chloroform
<b>Viscosity</b>	2,043 - 2,547 mm <sup>2</sup> /s ( Kinematic)
<b>Partition Coefficient</b>	No information available
<b>Auto-ignition temperature</b>	485 C
<b>Decomposition temperature</b>	No information available

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### Section 10: Stability and Reactivity

#### 10.1 Reactivity

Reacts violently with oxidising agents and lyes

#### 10.2 Chemical Stability

Stable under recommended storage conditions

#### 10.3 Possibility of hazardous reactions

In contact with Potassium tert-butoxide, the substance ignites.

Violent reaction possible with Acetaldehyde and Acetic anhydride

#### 10.4 Conditions to avoid

Heat, flames and sparks

#### 10.5 Incompatible materials

Oxidising agents, metals, amines, alcohols, peroxides, permanganates, soluble carbonates and phosphates, hydroxides

#### 10.6 Hazardous decomposition products

No information available

### Section 11: Toxicological Information

#### Product Information

##### 11.1 Toxicological effects:

##### Acute toxicity

Inhalation: Inhalation can cause pneumonia and/or pulmonary oedema, but only after signs of corrosive effects on the mucous membranes of the eyes and/or the upper respiratory tract. Symptoms include: Sore throat , Cough , Burning feeling , Tears , Shortness of breath , Difficulty in breathing .

Acetic acid ...% : LC50 (Rat, inhalation, 4 h) : 11,4 mg/l ( Vapour; OECD Guideline 403)

Skin contact : Symptoms include: Redness , Pain , Severe burns , Blisters .

Acetic acid ...% : LD50 (Rat, dermal) : No data available.

Ingestion : Tooth erosion may occur Symptoms include: Burning feeling , Sore throat , Abdominal cramps , Diarrhea , Unconsciousness .

Acetic acid ...% : LD50 (Rat, oral) : 3310 mg/kg

Skin corrosion/irritation : Skin contact can damage eczema. Repeated exposure to high concentrations :

Thickening of the skin , Blackening of the hands . Serious eye damage/irritation : Repeated exposure to high concentrations : Conjunctivitis .

Aspiration hazard : May cause lung disorders. Repeated exposure to high concentrations : Histopathological changes in the airways . Exposure may cause asthmatic reaction

Respiratory or skin sensitisation : Not sensitive .

Carcinogenicity : Not listed as carcinogenic .

Mutagenicity : Not listed as mutagenic .

Reproductive toxicity : Not listed for reproductive toxicity .

Specific target organ toxicity - single exposure: To human : Listed not for organ toxicity. For animals : No effects known.

Specific target organ toxicity - repeated exposure: To human : Listed not for organ toxicity. For animals : Irritation of gastrointestinal tract .





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### Section 12: Ecological Information

#### 12.1 Toxicity

##### Ecotoxicity effects

- Acetic acid ...% : LC50 (Fish, 96 h) : 300,82 mg/l (Oncorhynchus mykiss) ( OECD Guideline 203)
- Acetic acid ...% : EC50 (Algae, 72 h) : 300,82 mg/l (Desmodesmus subspicatus) ( OECD Guideline 201)
- Acetic acid ...% : EC50 (Daphnia magna, 48 h) : 300,82 mg/l ( OECD Guideline 202)

Persistence and biodegradability: readily biodegradable

Bioaccumulative potential: bioaccumulation is not expected

Mobility in soil: low adsorption potential in soil

Results of PBT and vPvB assessment: No

### Section 13: Disposal considerations

#### 13.1 Waste treatment methods

##### Waste disposal of substance:

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

##### Container disposal:

Dispose of as unused product.

### Section 14: Transport Information

UN number

ADR/RID: 2790

IMDG: 2790

IATA: 2790

UN proper shipping name

ADR/RID: ACETIC ACID SOLUTION

IMDG: ACETIC ACID SOLUTION

IATA: Acetic Aid Solution

Transport hazard class(es)

ADR/RID: 8

IMDG: 8

IATA: 8

Packing group

ADR/RID: II

IMDG: II

IATA: II

Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

Special precautions

Danger number: 80



## **Acetic Acid 78-80%**

Hazard Label(s): 8

EmS-N°: F-A, S-B

Transport in bulk according to Annex II of MARPOL and the IBC Code

Type ship: 3

Pollution category: Z

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

### **Section 15: Regulatory Information**

Relevant EU Rule(s): Directive 98/24/EC of the Council of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work Decision 2001/118/EC of the Commission of 16 January 2001 amending Decision 2000/532/EC as regards the list of wastes Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 Regulation (EU) No 453/2010 of 20 May 2010 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorisation and Restriction of Chemicals (Reach)