

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

Product identifier:

Product name: Acetic Acid 80% Tech Grade.

Relevant identified uses of the substance or mixture and uses advised against:

Identified uses: Agrochemicals. Intermediate. Cleaning agent.

Company name:

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Leycroft Road
Leicester
LE4 1ET
Tel: 0116 2311130
24/7 Emergency Tel: 0800 246 1274
Email: sales@nexchem.co.uk

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture:

Classification (SI 2019 No. 720):

Physical hazards: Not Classified.

Health hazards: Skin Corr. 1B - H314 Eye Dam. 1 - H318.

Environmental hazards: Not Classified.

Label elements:

Hazard pictograms:



Signal word:

Danger.

Hazard statements:

H314 Causes severe skin burns and eye damage.

Precautionary statements:

P260 Do not breathe vapour/ spray.

P264 Wash contaminated skin thoroughly after handling.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

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 CENTER/ doctor.

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Contains: Acetic acid.

Supplementary precautionary statements: P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P363 Wash contaminated clothing before reuse.
P405 Store locked up.
P501 Dispose of contents/ container in accordance with national regulations.

Other hazards: This product does not contain any substances classified as PBT or vPvB.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures: Acetic acid...% <80%

CAS number: 64-19-7

EC number: 200-580-7

Classification: Flam. Liq. 3 – H226
Skin Corr. 1A – H314
Eye Dam. 1 – H318

The Full Text for all R-Phrases and Hazard Statement are Displayed in Section 16.

4. FIRST AID MEASURES

Description of first aid measures:

General information: Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.
Chemical burns must be treated by a physician.

Inhalation: Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place. Get medical attention immediately.

Ingestion: Rinse mouth thoroughly with water. Give plenty of water to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Get medical attention.

Skin contact: It is important to remove the substance from the skin immediately. Wash with plenty of water. Continue to rinse for at least 15 minutes. Get medical attention.

Eye contact: Rinse immediately with plenty of water. Continue to rinse for at least 10 minutes. Get medical attention immediately.

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Protection of first aiders: First aid personnel should wear appropriate protective equipment during any rescue. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.

Most important symptoms and effects, both acute and delayed:

General information: The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation: Severe irritation of nose and throat.

Ingestion: May cause chemical burns in mouth, oesophagus and stomach. Severe stomach pain. Nausea, vomiting.

Skin contact: Causes severe burns. Pain or irritation. Redness. Blistering may occur.

Eye contact: Causes serious eye damage. Pain. Profuse watering of the eyes. Redness.

Indication of any immediate medical attention and special treatment needed:

Notes for the doctor: Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Extinguishing media:

Suitable extinguishing media: Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media: Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture:

Specific hazards: Severe corrosive hazard. Water used for fire extinguishing, which has been in contact with the product, may be corrosive. Control run-off water by containing and keeping it out of sewers and watercourses.

Hazardous combustion products: Thermal decomposition or combustion products may include the following substances: Corrosive gases or vapours. Carbon dioxide (CO₂). Carbon monoxide (CO).

Advice for firefighters:

Protective actions during firefighting: Avoid breathing fire gases or vapours. Evacuate area. Keep upwind to avoid inhalation of gases, vapours, fumes and smoke. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak. Avoid discharge to the aquatic environment. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.

Special protective equipment for firefighters: Regular protection may not be safe. Wear chemical protective suit. Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

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6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Personal precautions:

No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Provide adequate ventilation. No smoking, sparks, flames or other sources of ignition near spillage. Promptly remove any clothing that becomes contaminated. Avoid inhalation of dust and vapours. Use suitable respiratory protection if ventilation is inadequate. Avoid contact with skin and eyes. Avoid contact with contaminated tools and objects.

Environmental precautions:

The product may affect the acidity (pH) of water which may have hazardous effects on aquatic organisms. Avoid discharge to the aquatic environment. Large Spillages: Inform the relevant authorities if environmental pollution occurs (sewers, waterways, soil or air).

Methods and material for containment and cleaning up:

Methods for cleaning up:

Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. This product is corrosive. Approach the spillage from upwind. Contain and absorb spillage with sand, earth or other non-combustible material. Place waste in labelled, sealed containers. Clean contaminated objects and areas thoroughly, observing environmental regulations. The contaminated absorbent may pose the same hazard as the spilled material. Wash thoroughly after dealing with a spillage. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Reference to other sections:

For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

7. HANDLING AND STORAGE

Precautions for safe handling:

Usage precautions:

Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists. This product is corrosive. Immediate first aid is imperative. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on general occupational hygiene: Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

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Conditions for safe storage, including any incompatibilities:

Storage precautions: Store in accordance with local regulations. Store away from incompatible materials (see Section 10). Keep only in the original container. Store in tightly closed, original container in a dry, cool and well-ventilated place. Keep containers upright. Protect containers from damage.

Specific end use(s): The identified uses for this product are detailed in Section 1.2.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters:

Occupational exposure limits: Acetic acid ... %
Long-term exposure limit (8-hour TWA): WEL 10 ppm 25 mg/m³
Short-term exposure limit (15-minute): WEL 20 ppm 50 mg/m³
WEL = Workplace Exposure Limit.

Acetic acid ... % (CAS: 64-19-7)

DNEL: Workers - Inhalation; Short term local effects: 25 mg/m³
General population - Inhalation; Short term local effects: 25 mg/m³
Workers - Inhalation; Long term local effects: 25 mg/m³
General population - Inhalation; Long term local effects: 25 mg/m³

PNEC: Fresh water; 3.058 mg/l
Marine water; 0.3058 mg/l
Intermittent release; 30.58 mg/l
STP; 85 mg/l
Sediment (Freshwater); 11.36 mg/kg
Sediment (Marine water); 1.136 mg/kg
Soil; 0.47 mg/kg

Exposure controls:

Appropriate engineering controls: Provide adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimise worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimise exposure. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits.

Eye/face protection: Wear tight-fitting, chemical splash goggles or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection: Wear appropriate clothing to prevent any possibility of skin contact.

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- Hygiene measures:** Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.
- Respiratory protection:** Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Gas filter, type E.
- Environmental exposure controls:** Keep container tightly sealed when not in use. Avoid release to the environment.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties:

- Appearance:** Clear liquid.
- Colour:** Colourless.
- Odour:** Pungent.
- Odour threshold:** Not available.
- pH:** Aqueous solutions are acidic.
- Flash point:** 73.5°C Closed cup.
- Evaporation factor:** Not available.
- Flammability (solid, gas):** Not applicable.
- Bulk density:** ~ 1.01 - 1.07 kg/l
- Solubility(ies):** Miscible with water. Miscible with the following materials: Ethanol. Acetone. Benzene. Chloroform.
- Partition coefficient:** Not applicable.
- Decomposition Temperature:** Not applicable.
- Explosive properties:** Not applicable.
- Oxidising properties:** Not applicable.
- Other information:**

10. STABILITY AND REACTIVITY

- Reactivity:** Stable at normal ambient temperatures and when used as recommended.
- Chemical stability:**
- Stability:** Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
- Possibility of hazardous reactions:** Under normal conditions of storage and use, no hazardous reactions will occur.
- Conditions to avoid:** Avoid heat, flames and other sources of ignition.
- Incompatible materials:**
- Materials to avoid:** Amines. Alkalis. Oxidising agents. Reducing agents. Alcohols.
- Hazardous decomposition products:** Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Corrosive gases or vapours.

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11. TOXICOLOGICAL INFORMATION

Information on toxicological effects:

Toxicological information on ingredients: Acetic acid ... %

Acute toxicity – dermal:

Notes (dermal LD₅₀): No data available.

Acute toxicity – inhalation:

Acute toxicity inhalation (LC₅₀ vapours mg/l): 40.0

ATE inhalation (vapours mg/l): 40.0

Skin corrosion/irritation:

Skin corrosion/irritation: Skin Corr. 1A - H314 Causes severe burns.

Serious eye damage/irritation:

Serious eye damage/irritation: Eye Dam. 1 - H318 Corrosive to skin and eyes.

Respiratory sensitisation:

Respiratory sensitisation: Not sensitising.

Skin sensitisation:

Skin sensitisation: Not sensitising.

Germ cell mutagenicity:

Genotoxicity - in vitro: Based on available data the classification criteria are not met.

Carcinogenicity:

Carcinogenicity: Based on available data the classification criteria are not met.

Reproductive toxicity:

Reproductive toxicity – fertility: Based on available data the classification criteria are not met.

Reproductive toxicity – development: Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure:

STOT - single exposure: No data available.

Specific target organ toxicity - repeated exposure:

STOT - repeated exposure: No data available.

Aspiration hazard:

Aspiration hazard: No data available.

[cont...]

12. ECOLOGICAL INFORMATION**Toxicity:**

Ecological information on ingredients. Acetic acid ... %

Acute aquatic toxicity:

Acute toxicity – fish: LC₅₀, 96 hour: >300.82 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates: EC₅₀, 96 hours: >300.82 mg/l, Daphnia magna

Acute toxicity - aquatic plants: EC₅₀, 72 hour: 300.82 mg/l, skeletonema costatum

Persistence and degradability:

Ecological information on ingredients. Acetic acid ... %

Persistence and degradability: The product is readily biodegradable.

Bioaccumulative potential:

Partition coefficient: Not applicable.

Ecological information on ingredients. Acetic acid ... %

Bioaccumulative potential: Bioaccumulation is unlikely.

Partition coefficient: log Pow: -0.17

Mobility in soil:

Ecological information on ingredients. Acetic acid ... %

Mobility: The product is water-soluble and may spread in water systems.

Adsorption/desorption coefficient: - Log Koc: 1.153 @ 20°C

Results of PBT and vPvB assessment:

Ecological information on ingredients. Acetic acid ... %

Results of PBT and vPvB assessment: This substance is not classified as PBT or vPvB according to current UK criteria.

Other adverse effects:

Ecological information on ingredients. Acetic acid ... %

Other adverse effects: Not known.

13. DISPOSAL CONSIDERATIONS**Waste treatment methods:****General information:**

The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods:

Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.

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14. TRANSPORT INFORMATION

UN number:

UN No. (ADR/RID): 2790
UN No. (IMDG): 2790
UN No. (ICAO): 2790
UN No. (ADN): 2790

UN proper shipping name:

Proper shipping name (ADR/RID): ACETIC ACID SOLUTION
Proper shipping name (IMDG): ACETIC ACID SOLUTION
Proper shipping name (ICAO): ACETIC ACID SOLUTION
Proper shipping name (ADN): ACETIC ACID SOLUTION

Transport hazard class(es):

ADR/RID class: 8
ADR/RID classification code: C3
ADR/RID label: 8
IMDG class: 8
ICAO class/division: 8
ADN class: 8

Transport labels:



Packing group:

ADR/RID packing group: II
IMDG packing group: II
ICAO packing group: II
ADN packing group: II

Environmental hazards:

Environmentally hazardous substance/marine pollutant: No.

Special precautions for user:

IMDG Code segregation group: 1. Acids
EmS: F-A, S-B
ADR transport category: 2
Emergency Action Code: •2R
Hazard Identification Number (ADR/RID): 80
Tunnel restriction code: (E)

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

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable.

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15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture:

National regulations:

Health and Safety at Work etc. Act 1974 (as amended).
The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2009 (SI 2009 No. 1348) (as amended) ["CDG 2009"].
EH40/2005 Workplace exposure limits.
Control of Substances Hazardous to Health Regulations 2002 (as amended). GB CLP Regulation.
The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 (SI 2020 No. 1577) (as amended).

Restrictions (SI 2020 No. 1577 Annex XVII): Entry number: 3

Chemical safety assessment: No chemical safety assessment has been carried out.

Note: The regulatory information given above only indicates the principal regulations specifically applicable to the product described in the safety data sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

16. OTHER INFORMATION

Abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.
RID: European Agreement concerning the International Carriage of Dangerous Goods by Rail.
IATA: International Air Transport Association.
ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air.
IMDG: International Maritime Dangerous Goods.
CAS: Chemical Abstracts Service.
ATE: Acute Toxicity Estimate.
LC50: Lethal Concentration to 50 % of a test population.
LD50: Lethal Dose to 50% of a test population (Median Lethal Dose).
EC₅₀: 50% of maximal Effective Concentration.
PBT: Persistent, Bioaccumulative and Toxic substance.
vPvB: Very Persistent and Very Bioaccumulative.
DNEL: Derived No Effect Level.
PNEC: Predicted No Effect Concentration.
REACH: The REACH etc. (Amendment etc.) (EU Exit) Regulations 2020 No. 1577.
UN: United Nations.
IBC: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code).

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Classification abbreviations and acronyms: Flam. Liq. = Flammable liquid.

Eye Dam. = Serious eye damage.

Skin Corr. = Skin corrosion.

Hazard statements in full:

H226 Flammable liquid and vapour.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

Legal disclaimer:

The information contained in this SDS does not constitute a risk assessment, and should not replace the user's own assessment of risks as required by other health and safety legislation.

This advice is given by Nexchem Ltd who accept no legal liability for it except otherwise provided by law. The information contained herein is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.