

SAFETY DATA SHEET

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

Product Name: Acetonitrile
CAS: 75-05-8
Application: Laboratory chemicals, Manufacture of substances
Manufacturer: Sinopharm Chemical Reagent Co., Ltd. No. 52 Ning Bo Road, Shanghai 200002, China
Fax: 86-021-6321403
Emergency Telephone: 86-0532-83889090
Email: sj_zjzx@sinopharm.com
Website: <http://www.reagent.com.cn>
MSDS No: SCRC CSDS75-05-8 Acetonitrile

2. Hazards identification

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flammable liquids (Category 2), H225 Acute toxicity, Oral (Category 4), H302 Acute toxicity, Inhalation (Category 4), H332 Acute toxicity, Dermal (Category 4), H312 Eye irritation (Category 2A), H319

Label elements

Labelling according Regulation (EC) No 1272/2008

Pictogram



Signal word: Danger

Hazard statement(s): H225 Highly flammable liquid and vapour. H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled. H319 Causes serious eye irritation.

Precautionary statement(s):

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P233 Keep container tightly closed. P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. P264 Wash skin thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P280 Wear protective gloves/ eye protection/ face protection
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 If eye irritation persists: Get medical advice/ attention. P363 Wash contaminated clothing before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
P403 + P235 Store in a well-ventilated place. Keep cool.
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards

none

3. Composition/information on ingredients

Substance/Mixture: Substance

| Component | CAS RN | Concentration |
|--------------|---------|---------------|
| Acetonitrile | 75-05-8 | ≤100 |

4. First aid measures

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled

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

In case of skin contact

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

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

no data available

5. Firefighting measures

Extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

no data available

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

No data available

6. Accidental release measures

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. For personal protection see section 8.

Environmental precautions

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

Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

Reference to other sections

For disposal see section 13.

7. Handling and storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge. For precautions see section 2.2.

Conditions for safe storage, including any incompatibilities

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. Handle and store under inert gas

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. Exposure controls/personal protection

Control parameters

Components with workplace control parameters

MAC: No data available

PC-STEL: No data available

TLV-TWA: 40ppm

PC-TWA: No data available

TLV-C: No data available

TLV-STEL: 60ppm

Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU)

Skin 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.

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. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose 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).

Control of environmental exposure

Do not let product enter drains.

9. Physical and chemical properties

Information on basic physical and chemical properties

a) Appearance

Form: clear, liquid Colour: colourless

b) Odour

ether-like

c) Odour Threshold

No data available

d) pH

No data available

e) Melting point/freezing point

-48°C

f) Initial boiling point and boiling range

80-82°C/760mmHg

g) Flash point

35.6°F/2°C

h) Evaporation rate

5.8

| | |
|---|--|
| i) Flammability (solid, gas) | No data available |
| j) Upper/lower flammability or explosive limits | 16 3 |
| k) Vapour pressure | 13.33 (27°C) |
| l) Vapour density | 1.42 |
| m) Relative density | ρ (20) 0.781-0.785g/mL |
| n) Water solubility | completely soluble |
| o) Partition coefficient: noctanol/water | -0.34 |
| p) Auto-ignition temperature | 524 |
| q) Decomposition temperature | 274.7 |
| r) Viscosity | 0.39mPa · s(20°C) |
| s) Explosive properties | Not explosive |
| t) Oxidizing properties | The substance or mixture is not classified as oxidizing. |

Other safety information

No data available.

10. Stability and reactivity

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

Heat, flames and sparks. Extremes of temperature and direct sunlight.

Incompatible materials

acids, Bases, Oxidizing agents, Reducing agents, Alkali metals

Hazardous decomposition products

Other decomposition products - No data available
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Nitrogen oxides (NOx)
In the event of fire: see section 5

11. Toxicological information

Information on toxicological effects

Acute toxicity

LD50 Oral - Rat - male - 1,320 - 6,690 mg/kg
LC50 Inhalation - Mouse - 4 h - 3587 ppm(OECD Test Guideline 403)
LC50 Inhalation - Rat - 4 h - 26.8 mg/l
LD50 Dermal - Rabbit - male and female - > 2,000 mg/kg(OECD Test Guideline 402)

Skin corrosion/irritation

Skin - Rabbit Result: No skin irritation(OECD Test Guideline 404)

Serious eye damage/eye irritation

Eyes - Rabbit Result: Irritating to eyes. (OECD Test Guideline 405)

Respiratory or skin sensitization

Buehler Test - Guinea pig Did not cause sensitisation on laboratory animals. (OECD Test Guideline 406)

Germ cell mutagenicity

Hamster ovary Result: negative Mutation in mammalian somatic cells. Ames test S. typhimurium Result: Not mutagenic in Ames Test
Hamster ovary Result: Equivocal evidence. Sister chromatid exchange Mutagenicity (micronucleus test) Mouse Result: Positive results were obtained in some in vivo tests.

Carcinogenicity

No evidence of carcinogenicity in animal studies. IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels g

Reproductive toxicity

Animal testing did not show any effects on fertility.

Specific target organ toxicity - single exposure

The substance or mixture is not classified as specific target organ toxicant, single exposure.

Specific target organ toxicity - repeated exposure

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Aspiration hazard

No aspiration toxicity classification

Additional Information

RTECS: AL7700000 Treat as cyanide poisoning., Always have on hand a cyanide first-aid kit, together with proper instructions., The onset of symptoms is generally delayed pending conversion to cyanide., Nausea, Vomiting, Diarrhoea, Headache, Dizziness, Rash, Cyanosis, excitement, depression, Drowsiness, impaired judgment, Lack of coordination, stupor, death

12. Ecological information

Toxicity

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 1,640.00 mg/l - 96 h NOEC - Oryzias latipes - 102 mg/l - 21 d
Toxicity to daphnia and other aquatic invertebrates EC50 - Daphnia magna (Water flea) - 3,600 mg/l - 48 h (OECD Test Guideline 202) NOEC - Daphnia magna (Water flea) - 160 mg/l - 21 d

Persistence and degradability

Biodegradability Result: 84 % - Readily biodegradable(OECD Test Guideline 301C)

Bioaccumulative potential

No bioaccumulation is to be expected (log Pow <= 4).

Mobility in soil

Not expected to adsorb on soil.

Results of PBT and vPvB assessment

No data available

Other adverse effects

Avoid release to the environment. Stability in water Remarks: Hydrolyses slowly.

13. Disposal considerations**Waste treatment methods**

Product 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. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. Transport information**UN number**

ADR/RID:1648 IMDG:1648 IATA:1648

UN proper shipping name

ADR/RID:Acetonitrile IMDG:Acetonitrile IATA:Acetonitrile

Transport hazard class(es)

ADR/RID:3 IMDG:3 IATA:3

Packaging group

ADR/RID:II IMDG:II IATA:II

Environmental hazards

ADR/RID:no IMDG:no IATA:no

Special precautions for user

no data available

15. Regulatory information

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

No data available

Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

16. Other information**Full text of H-Statements referred to under sections 2 and 3.**

H225 Highly flammable liquid and vapour. H302 + H312 + H332 Harmful if swallowed, in contact with skin or if inhaled H319 Causes serious eye irritation.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sinopharm Chemical Reagent Co., Ltd. and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product.