

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

Product name : Cyanoacetic acid

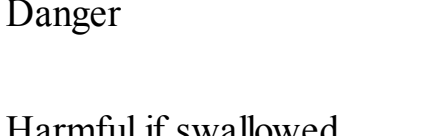
2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

According to Regulation (EC) No1272/2008  
Acute toxicity, Oral (Category 4)  
Skin corrosion (Category 1B)

According to European Directive 67/548/EEC as amended.  
Harmful if swallowed. Contact with acids liberates toxic gas. Causes burns.

Label elements

Pictogram	
Signal word	Danger
Hazard statement(s)	
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
EUH029	Contact with water liberates toxic gas.
Precautionary statement(s)	
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 CENTER or doctor/ physician.
Hazard symbol(s)	
C	Corrosive
R-pharse(s)	
R22	Harmful if swallowed.
R31	Contact with acids liberates toxic gas.
R34	Causes burns.
S-pharse(s)	
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).

Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : C3H3NO2  
Molecular Weight : 85,06 g/mol

CAS-No.	EC-No.	Classification	Concentration
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**Cyanoacetic aci d**  
372-09-8 206-743-9 - Acute Tox. 4; Skin Corr. 1B; H302, H314, EUH029 C, R22 - R31 - R34

For the full text of the H-Statements mentioned in this Section, see Section 16.

4. 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

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.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Carbon dioxide (CO2) Dry powder

Extinguishing media which shall not be used for safety reasons

Water

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

Environmental precautions

Do not let product enter drains.

Methods and materials for containment and cleaning up

Pick up and arrange disposal without creating dust. Sweep up and shovel. Do not flush with water. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols.

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage

Keep container tightly closed in a dry and well-ventilated place. Store in cool place. Never allow product to get in contact with water during storage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) 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).

Hand 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.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Eye 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 and body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form crystalline  
Colour light yellow

Safety data

pH 2  
Melting point 64 - 70 °C - lit.  
Boiling point 108 °C at 0,20 hPa - lit.  
Flash point 107 °C - closed cup  
Ignition temperature no data available  
Lower explosion limit no data available  
Upper explosion limit no data available  
Vapour pressure 0,1 hPa at 100 °C  
Water solubility soluble

10. STABILITY AND REACTIVITY

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

Reacts violently with water.

Conditions to avoid

Avoid moisture.  
Exposure to moisture.

Materials to avoid

acids, Bases, Strong oxidizing agents, Strong reducing agents

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

Thermal decomposition

166 °C

11. TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral - rat - 1.500 mg/kg  
Remarks: Behavioral:Change in motor activity (specific assay). Lungs, Thorax, or Respiration:Dyspnea. Skin and Appendages: Other: Hair.

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

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.

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Potential health effects

**Inhalation** May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.  
**Ingestion** Harmful if swallowed. Causes burns.  
**Skin** May be harmful if absorbed through skin. Causes skin burns.  
**Eyes** Causes eye burns.

Signs and Symptoms of Exposure

Cough, Shortness of breath, Headache, Nausea, Vomiting

Additional Information

RTECS: AG3675000

12. ECOLOGICAL INFORMATION

Toxicity

no data available

Persistence and degradability

no data available

Bioaccumulative potential

no data available

Mobility in soil

no data available

PBT and vPvB assessment

no data available

Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

ADR/RID

UN-Number: 3261 Class: 8 Packing group: II  
Proper shipping name: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (Cyanoacetic acid)

IMDG

UN-Number: 3261 Class: 8 Packing group: II EMS-No: F-A, S-B  
Proper shipping name: CORROSIVE SOLID, ACIDIC, ORGANIC, N.O.S. (Cyanoacetic acid)  
Marine pollutant: No

IATA

UN-Number: 3261 Class: 8 Packing group: II  
Proper shipping name: Corrosive solid, acidic, organic, n.o.s. (Cyanoacetic acid)

15. REGULATORY INFORMATION

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

16. OTHER INFORMATION

Text of H-code(s) and R-pharse(s) mentioned in Section 3

Acute Tox. Acute toxicity  
EUH029 Contact with water liberates toxic gas.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
Skin Corr. Skin corrosion  
C Corrosive  
R22 Harmful if swallowed.  
R31 Contact with acids liberates toxic gas.  
R34 Causes burns.

Further information

For R&D use only. Not for drug, household or other uses.



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WARRANTY:

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. Lookchem shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.