

Pyruvic acid 127-17-3 MSDS

Section 1 - Chemical Product MSDS Name:Pyruvic Acid Material Safety Data Sheet
Synonym:2-Oxopropanoic acid; alpha-Ketopropionic acid; 2-Oxopropionic acid; Acetylformic acid;
Pyroracemic acid

Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content	EINECS#
127-17-3	Pyruvic acid	98	204-824-3

Hazard Symbols: C

Risk Phrases: 34

Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Causes burns.Light sensitive.Air sensitive.

Potential Health Effects

Eye:

Causes eye burns.

Skin:

Causes skin burns.

Ingestion:

May cause severe gastrointestinal tract irritation with nausea, vomiting and possible burns.

Inhalation:

May cause severe irritation of the upper respiratory tract with pain, burns, and inflammation.

Chronic:

No information found.

Section 4 - FIRST AID MEASURES

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

Skin:

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Get medical aid immediately. Wash clothing before reuse.

Ingestion:

If swallowed, do NOT induce vomiting. Get medical aid immediately.

If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Notes to Physician:

Section 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Fire or excessive heat may result in violent rupture of the container due to bulk polymerization. Combustible liquid and vapor.

Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or chemical foam.

Section 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:

Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container.

Provide ventilation.

Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Do not get in eyes, on skin, or on clothing. Use only with adequate ventilation. Keep away from heat and flame. Do not breathe vapor or mist.

Storage:

Keep away from sources of ignition. Store in a tightly closed container. Keep refrigerated. (Store below 4°C/39°F.) Storage under a nitrogen blanket has been recommended. Store protected from light and air.

Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 127-17-3: Personal Protective Equipment Eyes: Wear chemical splash goggles.

Skin:

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to prevent skin exposure.

Respirators:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid

Color: clear amber

Odor: Resembling acetic acid

pH: Not available.

Vapor Pressure: 1.29 mm Hg @ 25 deg C
Viscosity: Not available.
Boiling Point: 165 deg C @ 760 mm Hg (dec)
Freezing/Melting Point: 11.8 deg C
Autoignition Temperature: 305 deg C (581.00 deg F)
Flash Point: 82 deg C (179.60 deg F)
Explosion Limits, lower: Not available.
Explosion Limits, upper: Not available.
Decomposition Temperature: 165 deg C
Solubility in water: Soluble.
Specific Gravity/Density: 1.25
Molecular Formula: C3H4O3
Molecular Weight: 88.06

Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures. Polymerizes and decomposes on standing unless pure and kept in container with airtight closure.

Conditions to Avoid:

Light, ignition sources, excess heat, prolonged exposure to air, contamination.

Incompatibilities with Other Materials:

Strong oxidizing agents, strong reducing agents, strong bases.

Hazardous Decomposition Products:

Carbon monoxide, carbon dioxide.

Hazardous Polymerization: May occur.

Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 127-17-3: UZ0829800 LD50/LC50:

Not available.

Mouse LD50 Subcutaneous; Dose: 3533 mg/kg.

Carcinogenicity:

Pyruvic acid - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicity:

Fish toxicity: Not toxic to brown trout, bluegill sunfish, yellow perch or goldfish at 5 ppm for 24 hr.

Test condition: pH 7.0; dissolved oxygen 7.5 ppm; total hardness (soap method) 300 ppm; methyl orange alkalinity 310 ppm; free carbon dioxide 5 ppm and 12.8°C.

[The Dictionary of Substances and their Effects, 1992]

Section 13 - DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

Section 14 - TRANSPORT INFORMATION

IATA

Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.*

Hazard Class: 8

UN Number: 3265

Packing Group: III

IMO

Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Hazard Class: 8

UN Number: 3265

Packing Group: III

RID/ADR

Shipping Name: CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S.

Hazard Class: 8

UN Number: 3265

Packing group: III

Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: C

Risk Phrases:

R 34 Causes burns.

Safety Phrases:

S 25 Avoid contact with eyes.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 127-17-3: No information available.

Canada

CAS# 127-17-3 is listed on Canada's DSL List.

CAS# 127-17-3 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 127-17-3 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

N/A