Section 1. Product and Company Identification

Product Name: Pyruvic Acid
CAS Number: 127-17-3

Parchem - fine & specialty chemicals
415 Huguenot Street
New Rochelle, NY 10801
(914) 654-6800
(914) 654-6899
parchem.com
info@parchem.com

Section 2. Hazards Identification

Classification of the substance or mixture
Flammable liquids (Category 4), H227
Skin corrosion (Category 1B), H314
Serious eye damage (Category 1), H318

GHS Label Elements
Pictograms:

Signal word: DANGER

Hazard and precautionary statements

Hazard Statements
H227 Combustible liquid.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

Precautionary Statements
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P264 Wash skin thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove...
contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P235 Store in a well-ventilated place. Keep cool.
P405 Store locked up.
P501 Dispose of contents/container to an approved waste disposal plant.

**Hazards not otherwise classified (HNOC) or not covered by GHS:** None

### Section 3. Composition / Information on Ingredients

<table>
<thead>
<tr>
<th>Common Name</th>
<th>Pyruvic Acid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Synonym(s)</td>
<td>2-Oxopropionic acid; a-Ketopropionic acid</td>
</tr>
<tr>
<td>Formula</td>
<td>C₃H₄O₃</td>
</tr>
<tr>
<td>CAS Number</td>
<td>127-17-3</td>
</tr>
</tbody>
</table>

### Section 4. First Aid Measures

**Description of first-aid measures**

**General advice:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

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

**Skin contact:** Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

**Eye contact:** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

**Ingestion:** 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) and/or in section 11.

**Indication of any immediate medical attention and special treatment needed:** No data available

### Section 5. Firefighting Measures

**Extinguishing media**

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

**Special hazards arising from the substance or mixture:** Carbon oxides

**Advice for firefighters:** Wear self-contained breathing apparatus for firefighting if necessary.
Further information: Use water spray to cool unopened containers.

Section 6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures: Use personal protective equipment. Avoid breathing vapors, mist, or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors 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). Keep in suitable, closed containers for disposal.

Reference to other sections: For disposal see section 13.

Section 7. Handling and Storage

Precautions for safe handling: Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the build-up of electrostatic charge. For precautions see section 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. Store under inert gas.

Recommended storage temperature 2 - 8°C

Storage class (TRGS 510): Combustible, corrosive hazardous materials

Section 8. Exposure Controls / Personal Protection

Control parameters

Components with workplace control parameters: Contains no substances with occupational exposure limit values.

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: Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).
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. 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 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: Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

### Section 9. Physical and Chemical Properties

**Appearance:** Transparent syrupy liquid, having an acid taste.

**Form:** Liquid

**Odor:** Characteristic odor

**Odor Threshold:** No data available

**pH:** No data available

**Melting point/freezing point:** 11 - 12°C (52 - 54°F) - lit.

**Initial boiling point and boiling range:** 165°C (329°F) - lit.

**Flash point (Closed Cup):** 82°C (180°F)

**Evaporation rate:** No data available

**Flammability (solid, gas):** No data available

**Upper/lower flammability or explosive limits:** No data available

**Vapor pressure:** No data available

**Vapor density:** No data available

**Relative density:** 1.267 g/cm³ at 25°C (77°F)

**Water solubility:** No data available

**Partition coefficient (n-Octanol/water):** No data available

**Auto-ignition temperature:** No data available

**Decomposition temperature:** No data available

**Viscosity:** No data available

**Explosive properties:** No data available

**Oxidizing properties:** No data available

**Other safety information:** No data available
Section 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.  
**Incompatible materials:** Bases, Oxidizing agents, Reducing agents

**Hazardous decomposition products**  
**Other decomposition products:** No data available  
In the event of fire: see section 5

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**Section 11. Toxicological Information**

**Information on toxicological effects**

**Acute toxicity**

**Inhalation:** No data available  
**Dermal:** No data available

**LD50 Subcutaneous - Mouse:** 3,533 mg/kg

**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.  
**ACGIH:** No component of this product, present at levels greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by ACGIH.  
**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 greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by OSHA.

**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
Additional Information

RTECS: UZ0829800
Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.
Cough, Shortness of breath, Headache, Nausea

Section 12. Ecological Information

Toxicity: No data available
Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: No data available
Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted
Other adverse effects: No data available

Section 13. Disposal Considerations

Waste Treatment Methods: Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

DOT (US)
UN number: 3265
Class: 8
Packing group: II
Proper shipping name: Corrosive Liquid, Acidic, Organic, N.O.S. (Pyruvic acid)
Reportable Quantity (RQ): N/A
Poison Inhalation Hazard: No

IMDG
UN Number: 3265
Class: 8
Packing group: II
EMS-No: F-A, S-B
Proper shipping name: Corrosive Liquid, Acidic, Organic, N.O.S. (Pyruvic acid)

IATA
UN number: 3265
Class: 8
Packing group: II
Proper shipping name: Corrosive Liquid, Acidic, Organic, N.O.S. (Pyruvic acid)
Section 15. Regulatory Information

**SARA 302 Components:** No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components:** This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**
Fire Hazard, Acute Health Hazard

**Massachusetts Right to Know Components**
No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right to Know Components**
Pyruvic acid (CAS-No. 127-17-3)

**New Jersey Right to Know Components**
Pyruvic acid (CAS-No. 127-17-3)

**California Prop. 65 Components:** This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**HMIS Rating**
- Health: 3
- Flammability: 2
- Reactivity: 0

**NFPA Rating**
- Health: 3
- Flammability: 2
- Reactivity: 0

Section 16. Other Information

**Disclaimer:** 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.

**REVISION DATE:** 4/7/2017