Material Safety Data Sheet
Propionic Acid

ACC# 19750

Section 1 - Chemical Product and Company Identification

MSDS Name: Propionic Acid
Catalog Numbers: S80149, S80149-1, A258 500, A258-500, A258500, S801491
Synonyms: Carboxyethane; Ethane carboxylic acid; Ethylformic acid; Methyl acetic acid; Propanoic acid grain preserver; Psuedoacetic acid
Company Identification:
Fisher Scientific
1 Reagent Lane
Fairlawn, NJ 07410
For Information, call: 201-796-7100
Emergency Number: 201-796-7100
For CHEMTREX assistance, call: 800-424-9300
For International CHEMTREX assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>79-09-4</td>
<td>Propionic acid</td>
<td>100</td>
<td>201-176-3</td>
</tr>
</tbody>
</table>

Hazard Symbols: C
Risk Phrases: 34

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Combustible liquid. Causes eye and skin burns. Causes digestive and respiratory tract burns.
Target Organs: None.
Potential Health Effects

**Eye**: Causes severe eye burns.

**Skin**: Causes severe burns with delayed tissue destruction.

**Ingestion**: Causes digestive tract burns with immediate pain, swelling of the throat, convulsions, and possible coma. Possible aspiration hazard.

**Inhalation**: May cause irritation of the respiratory tract with burning pain in the nose and throat, coughing, wheezing, shortness of breath and pulmonary edema. May cause ulceration and perforation of the nasal septum if inhaled in excessive quantities.

**Chronic**: Prolonged or repeated skin contact may cause defatting and dermatitis.

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**Section 4 - First Aid Measures**

**Eyes**: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Get medical aid immediately.

**Skin**: Get medical aid immediately. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion**: Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

**Inhalation**: Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

**Notes to Physician**: Treat symptomatically and supportively.

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**Section 5 - Firefighting 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.

**Extinguishing Media**: Use water spray to cool fire-exposed containers. Use dry chemical, carbon dioxide, or alcohol-resistant foam.

**Autoignition Temperature**: 955 deg F (512.78 deg C)

**Flash Point**: 126 deg F (52.22 deg C)

**NFPA Rating**: Health-3; flammability-2; reactivity-0. Explosion Limits, Lower: 2.9, Upper: 12.10

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**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., dry sand or earth), then place into a chemical waste container. Use water spray to dilute spill to a non-flammable mixture. Use water spray to disperse the gas/vapor. Remove all sources of ignition. Provide ventilation.

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**Section 7 - Handling and Storage**

**Handling**: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well ventilated area. Follow all MSDS and label precautions even after container is emptied because they may contain product residues. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

**Storage**: Store in a cool, dry place. Keep container closed when not in use.
Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propionic acid</td>
<td>10 ppm; 30 mg/m3</td>
<td>10 ppm TWA; 30 mg/m3 TWA</td>
<td>none listed</td>
</tr>
</tbody>
</table>

OSHA Vacated PELs: Propionic acid: 10 ppm TWA; 30 mg/m3 TWA

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear a chemical apron. 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. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: clear

Odor: putrid odor

pH: Acidic

Vapor Pressure: 3 mm Hg @ 20 C.

Vapor Density: 2.56

Evaporation Rate:

Viscosity: Not available.

Boiling Point: 141.0 deg C

Freezing/Melting Point:-20.7 deg C

Decomposition Temperature: Not available.

Solubility: Miscible in water.

Specific Gravity/Density: 0.930

Molecular Formula: CH₃CH₂COOH

Molecular Weight:

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Incompatible materials.

Incompatibilities with Other Materials: Bases; oxidizing agents; reducing agents; reactive metals; amines; halogens

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#: 

CAS#: 79-09-4: UE5950000
**Section 12 - Ecological Information**

Ecotoxicity: Not available.
Environmental Fate: Not available.
Physical/Chemical: Not available.
Other: Not available.

**Section 13 - Disposal Considerations**

Dispose of in a manner consistent with federal, state, and local regulations.
RCRA D-Series Maximum Concentration of Contaminants: None listed.
RCRA D-Series Chronic Toxicity Reference Levels: None listed.
RCRA F-Series: None listed.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

**Section 14 - Transport Information**

<table>
<thead>
<tr>
<th>US DOT</th>
<th>IATA</th>
<th>RID/ADR</th>
<th>IMO</th>
<th>Cat</th>
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<td>No information available.</td>
<td>No information availablePROPIONIC ACID</td>
<td>8(9.2)</td>
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<tr>
<td>8</td>
<td>UN1848</td>
<td>III</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Section 15 - Regulatory Information**

**US FEDERAL**

TSCA
CAS# 79-09-4 is listed on the TSCA inventory.

Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.

Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)
CAS# 79-09-4: final RQ = 5000 pounds (2270 kg)

Section 302 (TPQ)
None of the chemicals in this product have a TPQ.

SARA Codes
CAS # 79-09-4: acute, flammable.

Section 313
No chemicals are reportable under Section 313.

Clean Air Act:
This material does not contain any hazardous air pollutants. This material does not
contain any Class 1 Ozone depleters. This material does not contain any Class 2
Ozone depleters.

Clean Water Act:
CAS# 79-09-4 is listed as a Hazardous Substance under the CWA. None of the
chemicals in this product are listed as Priority Pollutants under the CWA. None of the
chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.

STATE
CAS# 79-09-4 can be found on the following state right to know lists: California, New
Jersey, Florida, Pennsylvania, Minnesota, Massachusetts.

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols:
C

Risk Phrases:
R 34 Causes burns.

Safety Phrases:
S 23 Do not inhale gas/fumes/vapour/spray. S 36 Wear suitable protective clothing.
S 45 In case of accident if you feel unwell, seek medical advice immediately (show
the label where possible).

WAG (Water Danger/Protection)
CAS# 79-09-4: 1

Canada
CAS# 79-09-4 is listed on Canada's DSL/NDSL List.
This product has a WHMIS classification of B3, D1B, E.
CAS# 79-09-4 is not listed on Canada's Ingredient Disclosure List.

Exposure Limits
CAS# 79-09-4: OEL-AUSTRALIA: TWA 10 ppm (30 mg/m3); STEL 15 ppm (45 mg
/m3)
OEL-BELGIUM: TWA 10 ppm (30 mg/m3); STEL 16 ppm (45 mg/m3)
OEL-DE
NMARK: TWA 10 ppm (30 mg/m3) OEL-FRANCE: TWA 10 ppm (30 mg/m3)
OEL-GER
MANY: TWA 10 ppm (30 mg/m3) OEL-THE NETHERLANDS: TWA 10 ppm (30
mg/m3)
OEL-RUSSIA: STEL 20 mg/m3 OEL-SWITZERLAND: TWA 10 ppm (30 mg/m3); STEL
20 ppm (60 mg/m3) OEL-UNITED KINGDOM: TWA 10 ppm (30 mg/m3); STEL 15 pp
m (45 mg/m3) OEL IN BULGARIA, COLOMBIA, JORDAN, KOREA check ACGIH
TLV
OEL IN NEW ZEALAND, SINGAPORE, VIETNAM check ACGIH TLV

Section 16 - Additional Information

MSDS Creation Date: 3/23/1995
Revision #5 Date: 12/12/1997

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