Section 1. Product and Company Identification

Product Name Propionic Acid
CAS Number 79-09-4

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

EMERGENCY RESPONSE NUMBER
CHEMTEL
Toll Free US & Canada: 1 (800) 255-3924
All other Origins: 1 (813) 248-0585
Collect Calls Accepted

Section 2. Hazards Identification

Classification of the substance or mixture
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Flammable liquids (Category 3): H226
Skin corrosion (Category 1B): H314
Serious eye damage (Category 1): H318
Specific target organ toxicity - single exposure (Category 3), Respiratory system: H335

GHS Label Elements
Pictograms:

Signal word: DANGER

Hazard and precautionary statements
Hazard Statements
H226: Flammable liquid and vapor.
H314: Causes severe skin burns and eye damage.
H318: Causes serious eye damage.
H335: May cause respiratory irritation.

Precautionary Statements
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/vapors/spray.
P264: Wash skin thoroughly after handling.
P271: Use only outdoors or in a well-ventilated area.
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): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 + P310: IF INHALED: Remove person to fresh air and keep 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 to extinguish.
P403 + P233: Store in a well-ventilated place. Keep container tightly closed.
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: Rapidly absorbed through skin.

Section 3. Composition / Information on Ingredients

Common Name Propionic Acid
Synonym(s) Propanyl acid; C3 Acid
Formula $C_3H_6O_2$
CAS Number 79-09-4

COMPONENT	CAS NUMBER	CONCENTRATION
Propionic Acid	79-09-4	≤ 100%

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 and/or in section 11.
Indication of any immediate medical attention and special treatment needed: No data available

Section 5. Firefighting Measures

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).

Reference to other sections: For disposal see section 13

Section 7. Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup 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.
Storage class (TRGS 510): Flammable liquids

Section 8. Exposure Controls / Personal Protection

Control parameters

Components with workplace control parameters

Component	CAS-No.	Value	Control parameters	Basis
Propionic acid	79-09-4	TWA	10 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Upper Respiratory Tract irritation Eye irritation Skin irritation		
		TWA	10.000000 ppm	USA. ACGIH Threshold Limit Values (TLV)
		Upper Respiratory Tract irritation Eye irritation Skin irritation		
		TWA	10.000000 ppm 30.000000 mg/m^3	USA. NIOSH Recommended Exposure Limits
		ST	15.000000 ppm 45.000000 mg/m^3	USA. NIOSH Recommended Exposure Limits
		TWA	10 ppm 30 mg/m^3	USA. NIOSH Recommended Exposure Limits
		ST	15 ppm 45 mg/m^3	USA. NIOSH Recommended Exposure Limits

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, 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

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

Information on basic physical and chemical properties
Appearance: Colorless, clear liquid
Odor: No data available
Odor Threshold: No data available
pH: 2.5 at 100 g/l at 20 °C (68 °F)
Melting point/freezing point: Melting point/range: -24°C (-11°F) - lit.
Initial boiling point and boiling range: 141°C (286°F) - lit.
Flash point: 54°C (129°F) - closed cup
Evaporation rate: No data available
Flammability (solid, gas): No data available

Upper/lower flammability or explosive limits
Upper explosion limit: 12.1% (V)
Lower explosion limit: 2.9% (V)

Vapor pressure: 3.2 hPa (2.4 mmHg) at 20°C (68°F)
Vapor density: 2.56 - (Air = 1.0)
Relative density: 0.993 g/mL at 25°C (77°F)
Water solubility: Soluble
Partition coefficient (n-octanol/water): log Pow: 0.25
Auto-ignition temperature: 440°C (824°F) at 1,013 hPa (760 mmHg)
Decomposition temperature: No data available
Viscosity: No data available
Explosive properties: No data available
Oxidizing properties: No data available

Other safety information
Surface tension: 27.21 mN/m at 15°C (59°F)
Dissociation constant: 4.88
Relative vapor density: 2.56 - (Air = 1.0)

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: Strong oxidizing agents

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

Section 11. Toxicological Information

Information on toxicological effects
Acute toxicity
LD50 Oral: Rat - male and female - 3,455.1 mg/kg (OECD Test Guideline 401)
LC50 Inhalation: Rat - male and female - 4 h - > 20 mg/l (OECD Test Guideline 403)
LD50 Dermal: Rat - female - 3,235 mg/kg (OECD Test Guideline 402)
LD50 Intravenous: Mouse - 625 mg/kg Remarks: Behavioral: Convulsions or effect on seizure threshold.
LD50 Parenteral: Rat - 3,500 mg/kg

Skin corrosion/irritation
Skin: Rabbit
Result: Causes burns.

Serious eye damage/eye irritation
Eyes: Rabbit
Result: Risk of serious damage to eyes.

Respiratory or skin sensitization: No data available

Germ cell mutagenicity
Reverse mutation assay: S. typhimurium
Result: Negative

OECD Test Guideline 474
Hamster: Male and female
Result: Negative

Carcinogenicity
IARC: No components 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 components 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 components 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 components 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
Repeated dose toxicity: Mouse - female - Lowest observed adverse effect level - 136.9 mg/kg
RTECS: UE595000
May cause an asthmatic-like bronchitis. Nausea, Dizziness, Headache, Blood disorders, May cause irritation to eyes and respiratory passages to workers briefly exposed to high concentrations
Liver - Irregularities - Based on Human Evidence

Section 12. Ecological Information

Toxicity: No data available

Persistence and degradability
Biodegradability
Aerobic: Exposure time 20 d
Result: 93% - Readily biodegradable

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: 3463
Class: 8 (3)
Packing group: II
Proper shipping name: Propionic acid
Reportable Quantity (RQ): 5000 lbs
Poison Inhalation Hazard: No

IMDG
UN number: 3463
Class: 8(3)
Packing group: II
EMS-No: F-E, S-C
Proper shipping name: Propionic Acid

IATA
UN number: 3463
Class: 8(3)
Packing group: II
Proper shipping name: Propionic 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, Chronic Health Hazard

Massachusetts Right to Know Components
Propionic acid (CAS-No. 79-09-4)
Pennsylvania Right to Know Components
Propionic acid (CAS-No. 79-09-4)
New Jersey Right to Know Components
Propionic acid (CAS-No., 79-09-4)

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.

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