## **Propionic Acid**



#### Section 1 Product Description

Product Name: Propionic Acid

**Recommended Use:** Science education applications

Synonyms: Carboxyethane; Propionic Acid; Methyl Acetic Acid

Distributor: Carolina Biological Supply Company

2700 York Road, Burlington, NC 27215

1-800-227-1150

Chemical Information: 800-227-1150 (8am-5pm (ET) M-F)

Chemtrec: 800-424-9300 (Transportation Spill Response 24 hours)

#### Section 2 Hazard Identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

**DANGER** 





Flammable liquid and vapor. Causes severe skin burns and eye damage. Causes serious eye damage. Harmful to aquatic life.

#### **GHS Classification:**

Skin Corrosion/Irritation Category 1B, Serious Eye Damage/Eye Irritation Category 1, Flammable Liquid Category 3, Hazardous to the aquatic environment - Acute Category 3, Acute Toxicity - Oral Category 5

## Section 3 Composition / Information on Ingredients

 Chemical Name
 CAS #
 %

 Propionic Acid
 79-09-4
 100

## Section 4 First Aid Measures

**Emergency and First Aid Procedures** 

Inhalation: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Eyes: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy

to do. Continue rinsing.

Skin Contact: IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with

water/shower. Wash contaminated clothing before reuse.

Ingestion: IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

## Section 5 Firefighting Procedures

**Extinguishing Media:** Use dry chemical, CO2 or appropriate foam.

Fire Fighting Methods and Protection: Firefighters should wear full protective equipment and NIOSH approved self-contained

breathing apparatus.

Fire and/or Explosion Hazards: Contact with water liberates extremely flammable gases. Fire or excessive heat may

produce hazardous decomposition products. Explosive when mixed with oxidising

substances.

Hazardous Combustion Products: Carbon dioxide, Carbon monoxide

## Section 6 Spill or Leak Procedures

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Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

Section 7

## **Handling and Storage**

**Handling:** Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed.

Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/.../

equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection. Keep container tightly closed in a cool, well-

ventilated place. Protect containers against physical damage.

Storage: Keep container tightly closed. Store in a well-ventilated place. Keep cool. Store locked up. Keep container tightly

closed in a cool, well-ventilated place.

Storage Code: White - Corrosive. Separate acids from bases; separate oxidizer acids from organic acids.

#### Section 8 Protection Information

ACGIH OSHA PEL

 Chemical Name
 (TWA)
 (STEL)
 (TWA)
 (STEL)

 Propionic Acid
 10 ppm TWA
 N/A
 N/A
 N/A

**Control Parameters** 

**Engineering Measures:** No exposure limits exist for the constituents of this product. General room ventilation

might be required to maintain operator comfort under normal conditions of use.

Personal Protective Equipment (PPE): Lab coat, apron, eye wash, safety shower.

**Respiratory Protection:** No respiratory protection required under normal conditions of use.

**Eye Protection:** Wear chemical splash goggles when handling this product. Have an eye wash station

available.

**Skin Protection:** Avoid skin contact by wearing chemically resistant gloves, an apron and other protective

equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving

work.

Gloves: Butyl rubber

## Section 9 Physical Data

Formula: CH3CH2COOH

Molecular Weight: 74.08

Appearance:

Odor: No data available

Vapor Pressure: 3.53 mmHg at 25 °C

Evaporation Rate (BuAc=1): 0.24

Vapor Density (Air=1): 2.56

Specific Gravity: 0.993 at 20 °C

Odor Threshold: No data available pH: 2.5 at 100 g/l at 20 °C Solubility in Water: Soluble Log Pow (calculated): 0.25 - 0.33 Melting Point: 22 C Autoignition Temperature: 465 C

Boiling Point: No data available 141 C Decomposition Temperature: No data available

Flash Point: No data available Viscosity: 100%

Flammable Limits in Air: LEL: 2.9% UEL: 12.1% Percent Volatile by Volume: 100%

#### Section 10 Reactivity Data

**Reactivity:** Not generally reactive under normal conditions.

Chemical Stability: Stable under normal conditions.

**Conditions to Avoid:** Sparks, open flame, other ignition sources, and elevated temperatures.

Hazardous Decomposition Products: Carbon oxides Hazardous Polymerization: Will not occur

## Section 11 Toxicity Data

Routes of Entry Inhalation, ingestion, eye or skin contact.

Symptoms (Acute): N/A

**Delayed Effects:** No data available

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Acute Toxicity:

Chemical NameCAS NumberOral LD50Dermal LD50Inhalation LC50Propionic Acid79-09-4Oral LD50 RatDermal LD50Not determined

2600 mg/kg Rabbit 500 mg/kg

Carcinogenicity:

Chemical NameCAS NumberIARCNTPOSHANo data available79-09-4Not listedNot listedNot listed

**Chronic Effects:** 

**Mutagenicity:** No evidence of a mutagenic effect.

**Teratogenicity:** No evidence of a teratogenic effect (birth defect).

**Sensitization:** No evidence of a sensitization effect.

**Reproductive:** No evidence of negative reproductive effects.

**Target Organ Effects:** 

Acute: See Section 2

**Chronic:** Not listed as a carcinogen by IARC, NTP or OSHA.

#### Section 12

#### **Ecological Data**

**Overview:** This material is not expected to be harmful to the ecology.

Mobility:No dataPersistence:No dataBioaccumulation:No dataDegradability:No dataOther Adverse Effects:No data

Chemical Name CAS Number Eco Toxicity

Propionic Acid 79-09-4 96 HR LC50 PIMEPHALES PROMELAS > 1 MG/L [STATIC]

96 HR LC50 ONCORHYNCHUS MYKISS 51 MG/L [STATIC] 72 HR EC50 DESMODESMUS SUBSPICATUS 45.8 MG/L 96 HR EC50 DESMODESMUS SUBSPICATUS 43 MG/L

#### Section 13

#### **Disposal Information**

Disposal Methods: Dispose in accordance with all applicable Federal, State and Local regulations. Always

contact a permitted waste disposer (TSD) to assure compliance.

Waste Disposal Code(s): Not Determined

#### Section 14

#### **Transport Information**

Ground - DOT Proper Shipping Name: Air - IATA Proper Shipping Name:

UN3463, Propionic acid, 8 (3), II UN number: 3463 Class: 8 (3) Packing group: II Proper

shipping name: Propionic acid

#### Section 15

## **Regulatory Information**

**TSCA Status:** All components in this product are on the TSCA Inventory.

Chemical Name CAS § 313 Name § 304 RQ CERCLA RQ § 302 TPQ CAA 112(2)

Number TQ

Propionic Acid 79-09-4 No 5000 lb 5000 lb final No No

RQ RQ; 2270 kg final RQ

**Section 16** 

#### Additional Information

Revised: 09/09/2015 Replaces: 09/03/2014 Printed: 10-29-2015

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

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Glossary			
ACGIH	American Conference of Governmental	NTP	National Toxicology Program
	Industrial Hygienists	OSHA	Occupational Safety and Health Administration
CAS	Chemical Abstract Service Number	PEL	Permissible Exposure Limit
CERCLA	Comprehensive Environmental Response,	ppm	Parts per million
	Compensation, and Liability Act	RCRA	Resource Conservation and Recovery Act
DOT	U.S. Department of Transportation	SARA	Superfund Amendments and Reauthorization Act
IARC	International Agency for Research on Cancer	TLV	Threshold Limit Value
N/A	Not Available	TSCA	Toxic Substances Control Act
		IDLH	Immediately dangerous to life and health

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