

## MATERIAL SAFETY DATA SHEET

PRODUCT NAME: PROPIONIC ACID

CAS Number: 79-09-4

**1. IDENTIFICATION:**

**Product Code** : 91157,93067,93360, 96060

**Company Name** : ADVENT CHEMBIO PRIVATE LIMITED

**Address** : W-279, MIDC, TTC INDUSTRIAL AREA, THANE-BELAPUR ROAD, RABALE,  
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**Company Phone Number** : 022-27690837

**2. HAZARDS IDENTIFICATION:****Hazard classification****Physical hazards**

**Flammable liquids** : Category 3


**Health hazards**

**Skin corrosion** : Sub-category 1B

**Serious eye damage** : Category 1

**Specific target organ toxicity - single exposure** : Category 3 - Respiratory system

**Labels elements** :

**Hazard symbol** : 

**Signal word** : Danger

**Hazard statement** : Flammable liquid and vapor.  
: Causes severe skin burns and eye damage.  
: May cause respiratory irritation.

**Precautionary statement**

**Prevention** : Obtain special instructions before use.  
Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. Do not handle until all safety precautions have been read and understood.  
Wear protective gloves/ protective clothing/ eye protection/ face protection.  
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.

**Response** : IF exposed or concerned: Get medical advice/ attention.  
IF ON SKIN (or hair): Take off immediately all contaminated clothing.  
Rinse skin with water/ shower.

**MATERIAL SAFETY DATA SHEET**

**PRODUCT NAME: PROPIONIC ACID**

CAS Number: 79-09-4

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

**Storage** : Store in a dry & well-ventilated place. Keep container tightly closed. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

**Disposal** : Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

**Other hazards which do not result in GHS classification** : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

**Ecological information:**  
 The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

**Toxicological information:**  
 The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.  
 Rapidly absorbed through skin.

**3. COMPOSITION/ INFORMATION ON INGREDIENTS:**

Ingredient	CAS Number	Percent	Hazardous
Propionic Acid	79-09-4	NLT 99.0%	Yes

**4. FIRST AID MEASURES:**

**General information** : Get medical advice/attention if you feel unwell. Show this safety data sheet to the doctor in attendance.

**Ingestion** : Call a physician or poison control center immediately. Rinse mouth. Do NOT induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**Inhalation** : Move to fresh air. Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen.

**Skin contact** : Get medical attention if symptoms persist.

**Skin contact** : Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

**Eye contact** : Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention.

**Most important symptoms/effects, acute and delayed** : The most important known symptoms and effects are described in the labelling.

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

## MATERIAL SAFETY DATA SHEET

Version :01

PRODUCT NAME: PROPIONIC ACID

CAS Number: 79-09-4

**5. FIRE FIGHTING MEASURES:**

**General information** : Flammable liquid and vapor.

**Suitable (and unsuitable) extinguishing media**

**Suitable extinguishing media** : Water, foam, dry powder or carbon dioxide.

**Unsuitable extinguishing media** : For this substance/mixture no limitations of extinguishing agents are given.

**Specific hazards arising from the chemical** : Carbon oxides Combustible.  
Vapors are heavier than air and may spread along floors.  
Forms explosive mixtures with air at elevated temperatures.  
Development of hazardous combustion gases or vapours possible in the event of fire.

**Special protective equipment and precautions for firefighters**

**Special firefighting procedures** : Use water spray to keep fire-exposed containers cool. Water may be ineffective in fighting the fire. Fight fire from a protected location. Move containers from fire area if you can do so without risk.

**Special protective equipment for fire-fighters** : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**6. ACCIDENTAL RELEASE MEASURES:**

**Personal precautions, protective equipment and emergency procedures** : ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).  
Avoid breathing mists or vapors. Keep upwind. Ventilate closed spaces before entering them. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

**Methods and material for containment and cleaning up** : Eliminate all ignition sources if safe to do so. Use only non-sparking tools. Take precautionary measures against static discharges. Stop leak if possible without any risk.  
Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Clean surface thoroughly to remove residual contamination. Dike far ahead of larger spill for later recovery and disposal.

**Notification Procedures** : Prevent entry into waterways, sewer, basements or confined areas. Inform authorities if large amounts are involved.

**Environmental precautions** : Do not contaminate water sources or sewer. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**7. HANDLING AND STORAGE:**

**Precautions for safe handling** : Do not handle until all safety precautions have been read and understood. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. Take precautionary measures against static discharges. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only non-sparking tools. Wear protective gloves/protective clothing/eye protection/ face protection. Avoid contact with eyes, skin, and clothing. Do not breathe mist or vapor. Use only with adequate ventilation. Wash hands thoroughly after handling.

**MATERIAL SAFETY DATA SHEET**

**PRODUCT NAME: PROPIONIC ACID**

CAS Number: 79-09-4

**Conditions for safe storage, including any incompatibilities**

: Keep away from food, drink and animal feeding stuffs Keep container tightly closed in a dry and well-ventilated place. Keep away from heat and sources of ignition.

**Storage class**

: Storage class (TRGS 510): 3: Flammable liquids

**8. EXPOSURE CONTROLS PERSONAL PROTECTION:**

**Control parameters**

**Ingredients with workplace control parameters**

**Derived No Effect Level (DNEL)**

Application Area	Routes of exposure	Health effect	Value
Workers	Inhalation	Acute local effects, Acute systemic effects	62 mg/m3
Workers	Inhalation	Long-term local effects, Long-term systemic effects	31 mg/m3
Workers	Skin contact	Long-term systemic effects	132mg/kg BW/d

**Predicted No Effect Concentration (PNEC)**

Compartment	Value
Soil	0.1258 mg/kg
Sea water	0.05 mg/l
Fresh water	0.5 mg/l
Sea sediment	0.186 mg/kg
Fresh water sediment	1.86 mg/kg
Sewage treatment plant	5 mg/l
Aquatic intermittent release	5 mg/l

**Appropriate engineering**

**controls** : No data available

**Individual protection measures, such as personal protective equipment**

**General information** : Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. An eye wash and safety shower must be available in the immediate work area. Use explosion-proof ventilation equipment.

**Eye/face protection** : Wear safety glasses with side shields (or goggles).

**Hand protection** : Chemical resistant gloves.

**Other** : Wear suitable protective clothing.

## MATERIAL SAFETY DATA SHEET

Version :01

PRODUCT NAME: PROPIONIC ACID

CAS Number: 79-09-4

<b>Respiratory protection</b>	:	In case of inadequate ventilation use suitable respirator. Chemical respirator with organic vapor cartridge. Recommended Filter type: Filter A (acc. to DIN 3181) for vapours of organic compounds
<b>Hygiene measures</b>	:	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Provide eyewash station and safety shower. Avoid contact with eyes, skin, and clothing.

**9. PHYSICAL AND CHEMICAL PROPERTIES:**

<b>Appearance</b>	:	Clear, colorless liquid
<b>Odor</b>	:	Pungent
<b>Solubility</b>	:	Miscible in water.
<b>Formula</b>	:	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>
<b>Molecular Weight</b>	:	74.08 g/mol
<b>Density</b>	:	0.988 - 0.993 g/cm <sup>3</sup> at 25°C
<b>pH</b>	:	2.5 at 100 g/l at 20 °C
<b>% Volatiles by volume @ 21C (70F)</b>	:	No data available
<b>Boiling Point</b>	:	141°C
<b>Melting Point</b>	:	-24 to -23°C
<b>Flash Point</b>	:	54 °C
<b>Vapor Density (Air=1)</b>	:	No data available
<b>Vapor Pressure (mm Hg)</b>	:	No data available
<b>Evaporation Rate (BuAc=1)</b>	:	No data available

**10. STABILITY AND REACTIVITY:**

<b>Reactivity</b>	:	Vapor/air-mixtures are explosive at intense warming.
<b>Chemical stability</b>	:	Material is stable under ambient conditions..
<b>Possibility of hazardous reactions</b>	:	<b>Exothermic reaction with:</b> Oxidizing agents, Reducing agents, alkalines <b>Risk of ignition or formation of inflammable gases or vapours with:</b> Iron, Zinc, magnesium, Lead
<b>Conditions to avoid</b>	:	Heat
<b>Incompatible materials</b>	:	No data available
<b>Hazardous decomposition products</b>	:	In the event of fire: see section 5

## MATERIAL SAFETY DATA SHEET

PRODUCT NAME: PROPIONIC ACID

CAS Number: 79-09-4

**11. TOXICOLOGICAL INFORMATION:**

## Information on toxicological effects

## Acute toxicity (list all possible routes of exposure)

Oral Product	: LD 50 (Rat): 3.455,1 mg/kg
Dermal Product	: LD 50 (Rat): 3.235 mg/kg
Inhalation Product	: LC 50 (Rat): 19,7 mg/l - vapor
Repeated dose toxicity Product	: No data available.
Skin corrosion/irritation Product	: Skin – Rabbit, Result: Corrosive
Serious eye damage/eye irritation Product	: Eyes – Rabbit, Result: Causes serious eye damage
Respiratory or skin sensitization Product	: No data available
Carcinogenicity Product	: No data available
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans	: No data available
US. National Toxicology Program (NTP) Report on Carcinogens	: No data available
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	: No data available
Germ cell mutagenicity	
In vitro Product	: No data available.
Reproductive toxicity Product	: No data available.
Specific target organ toxicity - single exposure Product	: Inhalation - May cause respiratory irritation. - Respiratory Tract
Specific target organ toxicity - repeated exposure Product	: No data available.
Aspiration hazard Product	: No data available.
Other effects	: None known.

## MATERIAL SAFETY DATA SHEET

Version :01

PRODUCT NAME: PROPIONIC ACID

CAS Number: 79-09-4

**12. ECOLOGICAL INFORMATION:****Ecotoxicity****Acute hazards to the aquatic environment****Fish Product**

: LC 50 Leuciscus idus (Golden orfe) 96 h: &gt; 10.000 mg/l

**Toxicity to daphnia and other aquatic invertebrates**

: EC 50 - Daphnia magna (Water flea) - &gt; 500 mg/l - 48 h

**Toxicity to algae**

: EC 50 - Desmodesmus subspicatus (green algae) - &gt; 500 mg/l - 72 h

**Toxicity to bacteria**

: EC 50 - Pseudomonas putida - 60 mg/l - 17 h

**Chronic hazards to the aquatic environment****Fish Product**

: No data available.

**Aquatic invertebrates Product**

: No data available.

**Toxicity to Aquatic Plants Product:**

: No data available.

**Persistence and degradability****Biodegradation Product**

: Readily biodegradable.

**Chemical Oxygen Demand (COD)**

: 1.420 mg/g.

**Theoretical oxygen demand**

: 1.510 mg/g

**Ratio BOD/ThBOD**

: 69 - 78 %

**Bioaccumulative potential****Bioconcentration factor (BCF) Product**

: No data available on bioaccumulation.

**Partition coefficient n-octanol / water (log Kow) Product**

: No data available.

**Mobility in soil**

: No data available.

**Other adverse effects****Additional ecological information****Biological effects:**

: Harmful effect due to pH shift. Discharge into the environment must be avoided.

**13. DISPOSAL CONSIDERATION:****Disposal instructions**

: Discharge, treatment, or disposal may be subject to national, state, or local laws. Disposal recommendations are based on uncontaminated material.

**Contaminated packaging**

: Since emptied containers retain product residue, follow label warnings even after container is emptied.

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: PROPIONIC ACID

CAS Number: 79-09-4

14. TRANSPORT INFORMATION:

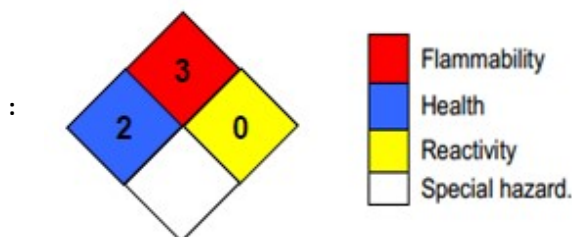
	UN No.	UN proper shipping name	Hazard Class(es)	Packaging group	Marine Pollutant
DOT	UN 3463	Propionic Acid	8 (3)	II	No
IMDG	UN 3463	Propionic Acid	8 (3)	II	No
IATA	UN 3463	Propionic Acid	8 (3)	II	No

15. REGULATORY INFORMATION:

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. Safety, health and environmental regulations/legislation specific for the substance or mixture No Data Available.

16. OTHER INFORMATION:

NFPA Hazard ID



Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue Date : 08/12/2023

Version : 01

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