

SAFETY DATA SHEET

SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product name: Eastman(TM) Propionic Acid

Product No.: EAN 900396. E0027601

Synonyms, Trade Names: 00276-00

Additional identification

Chemical name: propionic acid
CAS-No.: 79-09-4

Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Industrial chemical.

Uses advised against: None known.

Details of the supplier of the safety data sheet

Manufacturer / Supplier

Eastman Chemical Company
200 South Wilcox Drive
Kingsport, TN 37660-5280 US
+14232292000

Visit our website at www.EASTMAN.com or email emnmsds@eastman.com

Emergency telephone number:

For emergency health, safety, and environmental information, call 1-423-229-4511 or 1-423-229-2000.

For emergency transportation information, in the United States: call CHEMTREC at 800-424-9300 or call 423-229-2000.

SECTION 2: Hazards identification

Hazard classification:

Physical hazards

|| **Flammable liquids** Category 3

Health hazards

|| **Skin corrosion/irritation** Category 1B
|| **Serious eye damage/eye irritation** Category 1

OSHA Specified Hazards: not applicable

Warning label items including precautionary statement:

Pictogram:



Signal words: DANGER!

Hazard Statement(s): H226: Flammable liquid and vapor.
H314: Causes severe skin burns and eye damage.

Precautionary statement:

Prevention: 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.
P280: Wear protective gloves/protective clothing/eye protection/face protection.
P264: Wash hands thoroughly after handling.
P260: Do not breathe dust/fume/gas/mist/vapors/spray.
P271: Use only outdoors or in a well-ventilated area.

Response: P370+P378: In case of fire; Use water spray, carbon dioxide, dry chemical or alcohol foam for extinction.
P303+P361+P353: IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P310: Immediately call a POISON CENTER or doctor/physician.
P361: Remove/Take off immediately all contaminated clothing.
P363: Wash contaminated clothing before reuse.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P304+P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage: P403+P233: Store in a well-ventilated place. Keep container tightly closed.
P235: Keep cool.
P405: Store locked up.

Disposal: P501: 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.

Hazard(s) not otherwise classified (HNOC):

None known.

SECTION 3: Composition/information on ingredients

Substances / Mixtures

General information:

Chemical name	Concentration	Additional identification	Notes
propionic acid	100%	CAS-No.: 79-09-4	#

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

This substance has workplace exposure limit(s).

SECTION 4: First aid measures**Description of first aid measures**

- Inhalation:** Move to fresh air. If breathing stops, provide artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.
- Eye contact:** Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately. In case of irritation from airborne exposure, move to fresh air. Get medical attention if symptoms persist.
- Skin contact:** Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician or poison control center immediately. Wash contaminated clothing before reuse. Destroy or thoroughly clean contaminated shoes.
- Ingestion:** Call a physician or poison control center immediately. Do NOT induce vomiting. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head lower than the hips to help prevent aspiration.

Most important symptoms and effects, both acute and delayed: May irritate and cause redness and pain.

Indication of any immediate medical attention and special treatment needed

- Hazards:** None known.
- Treatment:** Treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards: Flammable liquid and vapor.

Extinguishing media

- Suitable extinguishing media:** Water spray. Dry chemical. Carbon Dioxide. Alcohol foam.
- Unsuitable extinguishing media:** None known.

Special hazards arising from the substance or mixture: Vapors may cause a flash fire or ignite explosively. Vapors may travel considerable distance to a source of ignition and flash back. Prevent buildup of vapors or gases to explosive concentrations.

Advice for firefighters

Special fire fighting procedures:

Water may be ineffective in fighting the fire. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: Accidental release measures**Personal precautions, protective equipment and emergency procedures:**

Wear appropriate personal protective equipment.

Environmental precautions:

Avoid release to the environment.

Methods and material for containment and cleaning up:

Eliminate sources of ignition. Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Large Spillages: Prevent runoff from entering drains, sewers, or streams. Dike for later disposal.

Notification Procedures:

In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.

SECTION 7: Handling and storage:**Precautions for safe handling:**

Avoid breathing mists or vapors. Do not get in eyes, on skin, on clothing. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling.

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed and in a well-ventilated place.

Specific end use(s):

Industrial chemical.

SECTION 8: Exposure controls/personal protection**Control parameters****Occupational exposure limits**

Country specific exposure limits have not been established or are not applicable unless listed below.

Chemical name	Type	Exposure Limit values	Source
propionic acid	TWA	10 ppm	US. ACGIH Threshold Limit Values (01 2010)

Exposure controls**Appropriate engineering controls:**

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.

Individual protection measures, such as personal protective equipment

General information:	Eye bath. Washing facilities. Safety shower.
Eyeface protection:	Wear safety glasses with side shields (or goggles) and a face shield. Wear a full-face respirator, if needed.
Skin protection	
Hand protection:	Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.
Other:	No data available.
Respiratory Protection:	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: Air-purifying respirator with an appropriate, government approved (where applicable), air-purifying filter, cartridge or canister. Contact health and safety professional or manufacturer for specific information.
Hygiene measures:	Observe good industrial hygiene practices.
Environmental Controls:	No data available.

SECTION 9: Physical and chemical properties**Information on basic physical and chemical properties****Appearance**

Physical State:	Liquid
Form:	Liquid
Color:	Colorless
Odor:	Rancid
Odor Threshold:	0.16 ppm
pH:	No data available.
Melting Point	-22 °C
Boiling Point:	141 °C
Flash Point:	49 °C (Setaflash Closed Cup)
Evaporation Rate:	Not determined.
Flammability (solid, gas):	No data available.
Flammability Limit - Upper (%)—:	No data available.
Flammability Limit - Lower (%)—:	No data available.
Vapor pressure:	4.706 hPa (25 °C)
Vapor density (air=1):	2.6
Specific Gravity:	1 (20 °C)
Solubility(ies)	
Solubility in Water:	Completely Soluble
Solubility (other):	No data available.

Partition coefficient (n-octanol/water):	Pow: 2.1 log Pow: 0.33
Autoignition Temperature:	No data available.
Decomposition Temperature:	(DTA) No exotherm to 500°C
Dynamic Viscosity:	No data available.
Kinematic viscosity:	1.13 mm ² /s (20 °C)
Explosive properties:	No data available.
Oxidizing properties:	No data available.

Other information

Minimum ignition temperature:	512.8 °C (ASTM D2155)
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SECTION 10: Stability and reactivity

Reactivity:	None known.
Chemical stability:	Stable
Possibility of hazardous reactions:	None known.
Conditions to avoid:	Heat, sparks, flames.
Incompatible materials:	Strong oxidizing agents.
Hazardous decomposition products:	Carbon Dioxide. Carbon Monoxide.

SECTION 11: Toxicological information**Information on likely routes of exposure**

Inhalation:	None known.
Ingestion:	May cause burns of the gastrointestinal tract if swallowed.
Skin contact:	Causes severe skin burns.
Eye contact:	Causes serious eye damage.

Information on toxicological effects**Acute Toxicity****Oral**

Product:	Oral LD-50: (Rat): 3,455.1 mg/kg
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Dermal

Product:	No data available.
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Specified substance(s)

Inhalation

Product:	LC50 (Rat, Male and Female, 1 h): > 19.7 mg/l
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Repeated dose toxicity

Product:	NOAEL (Rat(Male and Female), Dermal Study): 264 mg/kg
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NOAEL (Rat(Male and Female), Oral Study): 620 mg/kg

Skin corrosion/irritation:**Product:** Corrosive.
(Rabbit, 24 h): Severe**Serious eye damage/eye irritation:****Product:** Corrosive.
(Rabbit, 1 min): Severe**Respiratory or skin sensitization:****Product:** Not a skin sensitizer.
OECD 406: Guinea pig sensitization, (Guinea Pig) - Not a skin sensitizer.**Mutagenicity****In vitro****Product:** Salmonella typhimurium assay (Ames test), Bacterial Reverse Mutation Assay :
negative +/- activation**In vivo****Product:** No data available.**Specified substance(s)****Carcinogenicity****Product:** Based on available data, the classification criteria are not met. Not classified as
hazardous.**Reproductive toxicity****Product:** Based on available data, the classification criteria are not met. Not classified as
hazardous. Read-across from a similar material**Specific target organ toxicity - single exposure****Product:** No data available.**Specified substance(s)****Specific target organ toxicity - repeated exposure****Product:** No data available.**Specified substance(s)****Aspiration hazard****Product:** No data available.**Specified substance(s)****Other adverse effects:**

No data available.

SECTION 12: Ecological information**Toxicity****Acute toxicity****Fish****Product:** LC-50 (golden orfe, 96 h): > 1,000 mg/l**Aquatic invertebrates****Product:** EC-50 (Water Flea, 48 h): > 500 mg/l

Chronic Toxicity**Fish****Product:** No data available.**Specified substance(s)****Aquatic invertebrates****Product:** No data available.**Specified substance(s)****Toxicity to Aquatic Plants****Product:** EC-50 (*Scenedesmus subspicatus*, 72 h): > 500 mg/l**Persistence and degradability****Biodegradation****Product:** 60 % (2 d)**Biological Oxygen Demand:****Product** No data available.**Specified substance(s)****Chemical Oxygen Demand:****Product** No data available.**Specified substance(s)****BOD/COD ratio****Product** No data available.**Specified substance(s)****Bioaccumulative potential****Product:** No data available.**Specified substance(s)****Mobility in soil:**

No data available.

Known or predicted distribution to environmental compartments**Results of PBT and vPvB
assessment:**

No data available.

Other adverse effects:

No data available.

SECTION 13: Disposal considerations**Waste treatment methods****General information:** No data available.

Disposal methods: Dispose of waste and residues in accordance with local authority requirements. Mix with compatible chemical which is less flammable and incinerate. Since emptied containers retain product residue, follow label warnings even after container is emptied. Residual vapors may explode on ignition; do not cut, drill, grind, or weld on or near this container.

SECTION 14: Transport information

Important Note: Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

DOT

Reportable Quantity: 2,270 kg (propionic acid)
Possible Shipping Description(s):

UN 3463 Propionic acid 8 (3) II

IMDG - International Maritime Dangerous Goods Code

Possible Shipping Description(s):

UN 3463 PROPIONIC ACID 8 (3) II

IATA

Possible Shipping Description(s):

UN 3463 Propionic acid 8 (3) II

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture:

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

WHMIS (Canada) Status: controlled

WHMIS (Canada) Hazard Classification: B/3, E

SARA 311-312 Hazard Classification(s):

immediate (acute) health hazard

fire hazard

US EPCRA (SARA Title III) Section 313 - Toxic Chemical List

NONE

OSHA: hazardous

TSCA (US Toxic Substances Control Act): This product is listed on the TSCA inventory. Any impurities present in this product are exempt from listing.

DSL (Canadian Domestic Substances List) and CEPA (Canadian Environmental Protection Act): This product is listed on the DSL. Any impurities present in this product are exempt from listing.

AICS / NICNAS (Australian Inventory of Chemical Substances and National Industrial Chemicals Notification and Assessment Scheme): This product is listed on AICS or otherwise complies with NICNAS.

MITI (Japanese Handbook of Existing and New Chemical Substances): This product is listed in the Handbook or has been approved in Japan by new substance notification.

ECL (Korean Toxic Substances Control Act): This product is listed on the Korean inventory or otherwise complies with the Korean Toxic Substances Control Act.

Philippines Inventory (PICCS) : This product is listed on the Philippine Inventory or otherwise complies with PICCS.

Inventory of Existing Chemical Substances in China: All components of this product are listed on the Inventory of Existing Chemical Substances in China (IECSC).

SECTION 16: Other information

HMIS® Hazard Ratings: Health - 3, Flammability - 2, Chemical Reactivity - 0

HMIS® rating involves data interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

Revision Information: Not relevant.

Key literature references and sources for data: No data available.

Training information: No data available.

Inventory Status

Korea Existing Chemicals Inventory (KECI): Yes

Issue date: 05/30/2014

SDS No.:

Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.