

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT CODE A0263
PRODUCT NAME PROPIONIC ACID
SUPPLIER Shanghai M & U International Trade Co., Ltd.
Rm 1717, No 598 North NuJiang Road
200333 Shanghai, China
+86-21-32515501 32515502
sales@mu-intel.com

FOR EMERGENCIES CALL CHEMTREC: 800-424-9300 (24-HOURS)

2. HAZARD IDENTIFICATION:

Classification of the substance or mixture



GHS02 Flame

Flam. Liq. 3 H226 Flammable liquid and vapor.



GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Label elements

GHS label elements

Pictograms on label shall be in the shape of a square set at a point and shall include a black hazard symbol on a white background with a red frame sufficiently wide to be clearly visible. The substance is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms



GHS02 GHS05

Signal word

Danger

Hazard-determining components of labeling:

Propionic acid

Hazard statements

H226 Flammable liquid and vapor.
H314 Causes severe skin burns and eye damage.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310 Immediately call a poison center/doctor.
P405 Store locked up.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Classification system:

NFPA ratings (scale 0 - 4)



Health = 3
Fire = 2
Reactivity = 0

HMIS-ratings (scale 0 - 4)



Health = 3
Fire = 2
Reactivity = 0

Other hazards

Results of PBT and vPvB assessment

PBT:

Not applicable.

vPvB:

Not applicable.

3. COMPOSITION AND INFORMATION ON INGREDIENTS:

Chemical characterization: Substances

CAS No. Description

79-09-4 propionic acid

Identification number(s)

EC number:

201-176-3

Index number:

607-089-00-0

4. FIRST-AID GUIDE:

Description of first aid measures

General information:

Immediately remove any clothing soiled by the product.

After inhalation:

In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

After eye contact:

Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

Information for doctor:

Most important symptoms and effects, both acute and delayed

No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5. FIRE-FIGHTING GUIDE:

Extinguishing media

Suitable extinguishing agents:

CO₂ or extinguishing powder. Fight larger fires with alcohol resistant foam.

Special hazards arising from the substance or mixture

No further relevant information available.

Advice for firefighters

Protective equipment:

No special measures required.

Additional information

Cool endangered receptacles with water spray.

Collect contaminated firefighting water separately. It must not enter the sewage system.

6. ACCIDENTAL RELEASE GUIDE:

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7. HANDLING AND STORAGE:

Handling:

Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

Information about protection against explosions and fires:

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

Conditions for safe storage, including any incompatibilities

Storage:

Requirements to be met by storerooms and receptacles:

No special requirements.

Information about storage in one common storage facility:

Not required.

Further information about storage conditions:

Keep receptacle tightly sealed.

Specific end use(s)

No further relevant information available.

8. EXPOSURE AND PERSONAL PROTECTION:

Additional information about design of technical systems:

No further data; see item 7.

Control parameters

Components with limit values that require monitoring at the workplace:	
79-09-4 propionic acid	
REL	Short-term value: 45 mg/m ³ , 15 ppm Long-term value: 30 mg/m ³ , 10 ppm
TLV	Long-term value: 30 mg/m ³ , 10 ppm

Additional information:

The lists that were valid during the creation were used as a basis.

Exposure controls

Personal protective equipment:

General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material should be based on consideration of the penetration times, rates of diffusion and the degradation

Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Penetration time of glove material

The exact break through time has to be determined by the manufacturer of the protective gloves and has to be observed.

Eye protection:

Tightly sealed goggles

9. PHYSICAL AND CHEMICAL PROPERTIES:**Information on basic physical and chemical properties**

General Information	
Appearance:	
Form:	Liquid
Color:	Colorless to pale yellow
Odor:	Pungent
Odour threshold:	Not determined.
pH-value:	Not determined.
Change in condition	
Melting point/Melting range:	-19.7 °C (-3 °F)
Boiling point/Boiling range:	141.5 °C (287 °F)
Flash point:	52 °C (126 °F)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	485 °C (905 °F)
Decomposition temperature:	Not determined.
Auto igniting:	Not determined.
Danger of explosion:	Product is not explosive. However, formation of explosive air/ vapor mixtures are possible.
Explosion limits:	
Lower:	2.1 Vol %
Upper:	12 Vol %
Vapor pressure at 20 °C (68 °F):	4 hPa (3 mm Hg)
Density at 20 °C (68 °F):	0.9916 g/cm ³ (8.275 lbs/gal)
Relative density	Not determined.
Vapour density	Not determined.
Evaporation rate	Not determined.
Solubility in / Miscibility with	
Water:	Fully miscible.
Partition coefficient (n-octanol/water):	Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Organic solvents:	0.0 %
Other information	No further relevant information available.

10. STABILITY AND REACTIVITY:**Reactivity****Chemical stability****Thermal decomposition / conditions to be avoided:**

No decomposition if used according to specifications.

Possibility of hazardous reactions

No dangerous reactions known.

Conditions to avoid

No further relevant information available.

Incompatible materials:

No further relevant information available.

Hazardous decomposition products:

No dangerous decomposition products known.

11. TOXICOLOGICAL INFORMATION:

Acute toxicity

Oral LD50 - Rat - male and female - 3,455.1 mg/kg (OECD Test Guideline 401)

Inhalation LC50 - Rat - male and female - 4 h - > 20 mg/l (OECD Test Guideline 403)

Dermal LD50 - Rat - female - 3,235 mg/kg (OECD Test Guideline 402)

Other information on acute toxicity

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 component 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 component 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 component 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 component 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

Teratogenicity

No data available

Specific target organ toxicity - single exposure (Globally Harmonized System)

No data available

Specific target organ toxicity - repeated exposure (Globally Harmonized System)

No data available

Aspiration hazard

No data available

Potential health effects

Inhalation

May be harmful if inhaled. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Ingestion

May be harmful if swallowed.

Skin

May be harmful if absorbed through skin. Causes skin burns.

Eyes

Causes eye burns.

Signs and Symptoms of Exposure

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

Synergistic effects

No data available

Additional Information

RTECS: UE5950000.

12. ECOLOGICAL INFORMATION:

Toxicity

Aquatic toxicity:

No further relevant information available.

Persistence and degradability

No further relevant information available.

Behavior in environmental systems:

Bioaccumulative potential

No further relevant information available.

Mobility in soil

No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 1 (Assessment by list): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach bodies of water or drainage ditch undiluted or un-neutralized.

Results of PBT and vPvB assessment

PBT:

Not applicable.

vPvB:

Not applicable.

Other adverse effects

No further relevant information available.

13. DISPOSAL RECOMMENDATIONS:

Waste treatment methods

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packaging:




Recommendation:


Disposal must be made according to official regulations.

Recommended cleansing agent:

Water, if necessary with cleansing agents.

14. TRANSPORTATION INFORMATION:

UN-Number DOT, ADR, IMDG, IATA	UN3463
UN proper shipping name DOT ADR IMDG, IATA	Propionic acid 3463 Propionic acid PROPIONIC ACID
Transport hazard class(es) DOT  Class Label	8 Corrosive substances 8, 3
ADR  Class Label	8 (CF1) Corrosive substances 8+3
IMDG  Class Label	

	8 Corrosive substances 8/3
IATA  Class Label	8 Corrosive substances 8 (3)
Packing group DOT, ADR, IMDG, IATA	II
Environmental hazards: Marine pollutant:	No
Special precautions for user Danger code (Kemler): EMS Number: Segregation groups	Warning: Corrosive substances 83 F-E,S-C Acids
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
Transport/Additional information: DOT Quantity limitations	On passenger aircraft/rail: 1 L On cargo aircraft only: 30 L
ADR Excepted quantities (EQ)	Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
IMDG Limited quantities (LQ) Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
UN "Model Regulation":	UN3463, Propionic acid, 8 (3), II

15. REGULATORY INFORMATION:

Safety, health and environmental regulations/legislation specific for the substance or mixture Sara Section 355 (extremely hazardous substances):

Substance is not listed.

Section 313 (Specific toxic chemical listings):

Substance is not listed.

TSCA (Toxic Substances Control Act):

Substance is listed.

Proposition 65**Chemicals known to cause cancer:**

Substance is not listed.

Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

Chemicals known to cause reproductive toxicity for males:

Substance is not listed.

Chemicals known to cause developmental toxicity:

Substance is not listed.

Carcinogenic categories**EPA (Environmental Protection Agency)**

Substance is not listed.

TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

NIOSH-Ca (National Institute for Occupational Safety and Health)

Substance is not listed.

GHS label elements

The substance is classified and labeled according to the Globally Harmonized System (GHS).

Hazard pictograms

Pictograms on label shall be in the shape of a square set at a point and shall include a black hazard symbol on a white background with a red frame sufficiently wide to be clearly visible.



GHS02 GHS05

Signal word

Danger

Hazard-determining components of labeling:

Propionic acid

Hazard statements

H226 Flammable liquid and vapor.

H314 Causes severe skin burns and eye damage.

Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P303+P361
+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing.
Rinse skin with water/shower.

P305+P351
+P338 If in eyes: Rinse cautiously with water for several minutes. Remove
contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a poison center/doctor.
P405 Store locked up.
P501 Dispose of contents/container in accordance with
local/regional/national/international regulations.

Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

16. OTHER INFORMATION:

The information in this SDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond M&U's control, it is the responsibility of the user both to determine safe conditions for use of this product and to assume liability for loss, damage, or expense arising out of the products improper use. No warranty expressed or implied regarding the product described herein will be created by or inferred from any statement or omission in the SDS. Various federal, state, or provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in the SDS. The user should review these regulations to ensure full compliance.

Prepared By: M&U International LLC

REVISED: 02/17/2015