



MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION:

PRODUCT CODE	A0177
PRODUCT NAME	ETHYL PROPIONATE
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:

Physical State and Appearance

Liquid

Emergency Overview

WARNING!

FLAMMABLE LIQUID AND VAPOR

VAPOR MAY CAUSE FLASH FIRE

CAUSES RESPIRATORY TRACT, EYE AND SKIN IRRITATION

CONTAINS MATERIAL WHICH CAUSES DAMAGE TO THE

FOLLOWING ORGANS: SKIN

Routes of Entry

Inhalation, Ingestion

Potential Acute Health Effects

Eyes

Hazardous in case of eye contact (irritant)

Inflammation of the eye is characterized by redness, watering, and itching

Skin

Hazardous in case of skin contact (irritant)

Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering

Inhalation

Hazardous in case of inhalation (lung irritant)

Ingestion

Non-hazardous in the case of ingestion

Potential Chronic Health Effects

Carcinogenic Effects

This material is not known to cause cancer in animals or human

Additional information See Toxicological Information (section 11)

Medical Conditions Aggravated by Overexposure

Repeated or prolonged exposure is not known to aggravate medical condition

3. COMPOSITION AND INFORMATION ON INGREDIENTS:

SYNONYM	PROPIONIC ACID ETHYL ESTER
Formula	C5 H10 O2
CAS No	EC No
105-37-3	203-291-4

4. FIRST-AID GUIDE:

Eye Contact

Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately

Skin Contact

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Cold water may be used. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately

Inhalation

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately

Ingestion

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention if symptoms appear

5. FIRE-FIGHTING GUIDE:

Flammability of the Product

Product will burn

Auto-ignition Temperature

439.9°C (823.8°F)

Flash Points

Closed cup: 11.9°C (53.4°F)

Flammable Limits Products of Combustion

LOWER: 1.9% UPPER: 11%

These products are carbon oxides (CO, CO₂)

Fire Hazards in Presence of Various Substances

Highly flammable in presence of open flames, sparks and static discharge, of heat, of oxidizing materials

Explosion Hazards in Presence of Various Substances

Risks of explosion of the product in presence of static discharge:

Highly flammable in presence of open flames, sparks and static discharge

Highly explosive in presence of open flames, sparks and static discharge

Risks of explosion of the product in presence of mechanical impact:

No

Fire Fighting Media and Instructions

SMALL FIRE

Use DRY chemical powder

LARGE FIRE

Use alcohol foam, water spray or fog. Cool containing vessels with water jet in order to prevent pressure build-up, auto ignition or explosion

Protective Clothing (Fire)

Be sure to use an approved/certified respirator or equivalent

Special Remarks on Fire Hazards

Not available

Special Remarks on Explosion Hazards

Not available

6. ACCIDENTAL RELEASE GUIDE:

Small Spill and Leak

Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container

Large Spill and Leak

Keep away from heat. Keep away from sources of ignition. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed

Spill Kit Information

The following EMD Chemicals Inc. SpillSolv® absorbent is recommended for this product: SX1330 Solvent Treatment Kit

7. HANDLING AND STORAGE:

Handling

Keep away from heat, sparks and flame. Keep container closed. Do not get in eyes, on skin, or on clothing. Do not ingest. Avoid breathing vapors or spray mists

Storage

Keep container in a cool, well-ventilated area

8. EXPOSURE AND PERSONAL PROTECTION:

Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective occupational exposure limits. Ensure that eyewash stations and safety showers are proximal to the work-station location

Personal Protection

Eyes Splash goggles

Body Lab coat

Respiratory Vapor respirator, be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Hands Gloves

Feet Not applicable

Protective Clothing

Personal Protection in Case of a Large Spill

Splash goggles, Full suit, Vapor respirator, Boots, Gloves, A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product

Exposure Limits

No data available

9. PHYSICAL AND CHEMICAL PROPERTIES:

Odor	Pineapple
Color	Colorless
Physical State and Appearance	Liquid
Molecular Weight	102.15 g/mole
Molecular Formula	C5 H10 O2
pH	Not available
Boiling/Condensation Point	98.9°C (210°F)
Melting/Freezing Point	-72.7°C (-98.9°F)
Specific Gravity	0.9 (Water = 1)
Vapor Pressure	Not available
Vapor Density	3.5 (Air = 1)
Odor Threshold	Not available
Evaporation Rate	Not available
LogKow	Not available
Solubility	Partially soluble in water

10. STABILITY AND REACTIVITY:

Stability and Reactivity

The product is stable

Conditions of Instability

Not available

Incompatibility with Various Substances

Reactive with oxidizing agents

Rem/Incompatibility

Not available

Hazardous Decomposition Products

Carbon oxides (CO, CO2)

Hazardous Polymerization

Will not occur

11. TOXICOLOGICAL INFORMATION:

RTECS Number

Ethyl Propionate, For Synthesis

Toxicity

Acute oral toxicity (LD50): 8732 mg/kg [Rat]

Chronic Effects on Humans

Not available

Acute Effects on Humans

Hazardous in case of eye contact (irritant), Inflammation of the eye is characterized by redness, watering, and itching. Hazardous in case of skin contact (irritant), Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. Hazardous in case of inhalation (lung irritant), Non-hazardous in the case of ingestion

Synergetic Products (Toxicologically)

Not available

Irritancy

Draize Test (Rabbit):

Skin: 500mg/24h. Reaction: Moderate

Eye: 100 mg mod, time not available

Sensitization

Not available.

Carcinogenic Effects

This material is not known to cause cancer in animals or humans

Toxicity to Reproductive System

Not available

Teratogenic Effects

Not available

Mutagenic Effects

Not available

12. ECOLOGICAL INFORMATION:

Ecotoxicity

Not available

BOD5 and COD

Not available

Toxicity of the Products of Biodegradation

The product itself and its products of degradation are not toxic

13. DISPOSAL RECOMMENDATIONS:

EPA Waste

D001

Number Treatment

Incineration, fuels blending or recycle. Contact your local permitted waste disposal site (TSD) for permissible treatment sites. Always contact a permitted waste disposal (TSD) to assure

compliance with all current local, state, and Federal Regulations

14. TRANSPORTATION INFORMATION:

DOT (US)

UN number: 1195 Class: 3 Packing group: II

Proper shipping name: Ethyl propionate

Reportable Quantity (RQ):

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN number: 1195 Class: 3 Packing group: II EMS-No: F-E, S-D

Proper shipping name: ETHYL PROPIONATE

Marine pollutant: No

IATA

UN number: 1195 Class: 3 Packing group: II

Proper shipping name: Ethyl propionate

15. REGULATORY INFORMATION:

U.S. Federal Regulations

TSCA 8(b) inventory: ETHYL PROPIONATE SARA 302/304/311/312 extremely

hazardous substances: No products were found

SARA 302/304 emergency planning and notification: No products were found

SARA 302/304/311/312 hazardous chemicals: ETHYL PROPIONATE

SARA 311/312 MSDS distribution – chemical inventory – hazard identification: ETHYL PROPIONATE: Fire Hazard, Immediate (Acute)

Health Hazard

SARA 313 toxic chemical notification and release reporting: No products were found

Clean Water Act (CWA) 307: No products were found

Clean Water Act (CWA) 311: No products were found

Clean air act (CAA) 112 accidental release prevention: No products were found

Clean air act (CAA) 112 regulated flammable substances: No products were found

Clean air act (CAA) 112 regulated toxic substances: No products were found

WHMIS (Canada)

CLASS B-2: Flammable liquid with a flash point lower than 37.8°C (100°F)

Class D-2B: Material causing other toxic effects (TOXIC)

CEPA DSL: ETHYL PROPIONATE

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

International Regulations

EINECS

ETHYL PROPIONATE 203-291-4

DSCL (EEC)

R11- Highly flammable

International

Australia (NICNAS): ETHYL PROPIONATE

Lists

Japan (MITI): ETHYL PROPIONATE

Japan (MOL): ETHYL PROPIONATE

Korea (TCCL): ETHYL PROPIONATE

Philippines (RA6969): ETHYL PROPIONATE China: No products were found

State Regulations

Pennsylvania RTK: ETHYL PROPIONATE: (generic environmental hazard)

Massachusetts RTK: ETHYL PROPIONATE

New Jersey: ETHYL PROPIONATE

California prop. 65: No products were found

16. OTHER INFORMATION:

The information in this MSDS 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 MSDS. 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 MSDS. The user should review these regulations to ensure full compliance