

SAFETY DATA SHEET

SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

PRODUCT

Product Name: Propyl acetate
Synonyms: Acetic acid-n-propyl ester
Chemical Formula: C₅H₁₀O₂
Recommended Use: Used as raw materials for edible perfume, nitro cellulose solvent, paint, plastic and other organic materials.

COMPANY IDENTIFICATION

Supplier: UNION PETROCHEMICAL PUBLIC COMPANY LIMITED
728 Union House Building, Baromratchonnani Rd.,
Bangbumru, Bangplad, Bangkok 10700
Supplier General Contact: +662 881 8288

This (M)SDS is a generic document with no country specific information included.

SECTION 2 HAZARDS IDENTIFICATION

This material is hazardous according to UN GHS Criteria. Classification includes all GHS hazard classes. For hazard categories with two cut-off/concentration limits, classification was based on the higher limit.

GHS CLASSIFICATION:

Flammable liquid: Category 3.

GHS LABEL ELEMENTS:

Pictogram:



Signal Word: Danger

Preventive Instructions:

Preventive Measures: Keep away from heat sources, sparks, flames and oxidizer. No smoking.

Incident Response: Evacuate personnel from the contaminated zone rapidly to safe area; Isolation and restrictions on access; Cut off the sources of fire and leaking in case of the leakage to the drain.

Waste Disposal: Incineration according to the related law.

Physical and Chemical Hazards:

Flammable liquid and vapor.

Health Hazards:

Irritating to Upper respiratory tract mucosa and eyes. Inhalation would cause sick, choking, fatigue and unconscious.

Environmental Hazards:

Harmful to the environment. Special attention to water pollution.



NOTE: This material should not be used for any other purpose than the intended use in Section 1 without expert advice. Health studies have shown that chemical exposure may cause potential human health risks which may vary from person to person.

SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS

This material is defined as a substance.

Hazardous Substance(s) or Complex Substance(s) required for disclosure

Name	CAS#	Concentration*	GHS Classification
PROPYL ACETATE	109-60-4	≥ 99.5	Class 3

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

SECTION 4 FIRST AID MEASURES

INHALATION

Remove to place with fresh air. Keep airways clear. Give artificial respiration if breathing is difficult or not breathing.

SKIN CONTACT

Take off the contaminated clothes and wash skin with soap and clean water.

EYE CONTACT

Flush eyes with plenty of water or normal saline. Then get immediate medical attention.

INGESTION

Rinse the mouth; Drink plenty of water; Do not induce vomiting; Get medical attention.

SECTION 5 FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA

Fire Extinguishing Media: foam, dry chemical, carbon dioxide and sand. Water is invalid, but it can cool the containers.

SPECIAL INFORMATION

Flammable, explosion risk if contacted with spark, flame, static discharge, heat or oxidizer. Vapor is heavier than air and may travel to far places and flashback from ignition sources; The sealed container may rupture when heated; Risk of static accumulation in pipeline.

FLAMMABILITY PROPERTIES

Flash Point : 14.4°C

Flammable Limits (Approximate volume % in air): LEL: 1.77 UEL: 8.0

Autoignition Temperature: N/A

SECTION 6 ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS

Evacuate personnel from the contaminated zone rapidly to safe area; Isolation and restrictions on access; Wear self-contained breathing apparatus pressure-demand, and full protective; Gear and anti-static overalls. Electric power cut

ENVIRONMENTAL PRECAUTIONS

Cut off the source of leakage. Prevent the leakage to the drains.



CONTROL AND CLEAN UP

Small leakage: Soak up with sand, dry lime or soda ash; Scrubbed with non-flammable emulsion of dispersant, diluted into the wastewater. Large leakage: Construct a barrier pit. Cover with foam to reduce the steam for personnel protection. Remove the waste by explosion-proof pumps to exclusive collector for recycle or waste disposal.

SECTION 7

HANDLING AND STORAGE

HANDLING

Operation must be in a well-ventilated place; Keep adequate ventilation. Professional training and working procedure is needed for staff. The staff should wear respirator, protective glass, anti-static cloths and rubber gloves. Keep away from fire and heat resource; No Smoking. Explosion-proof ventilation system and equipment should be used. Be caution of the leakage of steam in the working place; avoid the contact with oxidizer, acid and alkali. The flow velocity in pipeline should be controlled for the danger of static. Be caution of transfer; Transfer with fire-fighting equipment; Handling with safety watcher.

STORAGE

Stored in cool and well-ventilated areas. Keep away from fire and heat sources. Temperature in storage area should be lower than 30°C. The containers should be sealed and separated from air, oxidizer, acid and alkali. Explosion-proof lights and ventilation equipment should be applied and the tools that can easily cause sparks should be prohibited. The containers for leakage are needed. The packing plate and sealer of containers should be made by PTFE. Filling speed < 3 m/s (pipeline).

SECTION 8

EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters/Exposure limits:

Exposure limits/standards (Note: Exposure limits are not additive)

Substance Name	Form	Limit/Standard			Note	Source
PROPYL ACETATE		TWA	200 mg/m ³			OEL (CN)
PROPYL ACETATE		STEL	300 mg/m ³			OEL (CN)
PROPYL ACETATE		TWA	200 ppm			ACGIH TLV
PROPYL ACETATE		STEL	250 ppm			ACGIH TLV

TEST METHOD

Gas chromatography and spectrophotometry

ENGINEERING CONTROL

Strictly sealed and ventilated during the production. Safe shower and eye cleaning equipment should be applied.

INDIVIDUAL PROTECTION

Respiratory protection: Respirator should be worn to deal with high concentrations; Use an air-supplied or self-contained breathing apparatus, if necessary.

Eye protection: Goggles

Body protection: Anti-static overall.

Hand protection: Chemical resistant protective gloves.

Other Protection: No Smoking. Personal hygiene should be attended. Take shower after work.

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Note: Physical and chemical properties are provided for safety, health and environmental considerations only and may not fully represent product specifications. Contact the Supplier for additional information.



GENERAL INFORMATION

Physical State: Liquid (20 °C)
Color: Transparent
Odour: Fruity odor
Odour Threshold: N/A

IMPORTANT HEALTH, SAFETY, AND ENVIRONMENTAL INFORMATION

Specific Gravity: 0.89
Density: N/A
Flammability (Solid, Gas): N/A
Flash Point: 14.4°C
Flammable Limits (Approximate volume % in air): LEL: 1.77 UEL: 8.0
Autoignition Temperature: N/A
Boiling Point: 101.6°C
Decomposition Temperature: N/A
Vapour Density (Air = 1): N/A
Saturated Vapour Pressure: 5.33 kPa at 28.8°C
Evaporation Rate (n-butyl acetate = 1): N/A
pH: N/A
Log Pow (n-Octanol/Water Partition Coefficient): N/A
Solubility in Water: Slightly soluble in water (18.9 g/L),
Soluble in ethanol, ketone, chloroform and ether
Viscosity: N/A

OTHER INFORMATION

Freezing Point: N/A
Melting Point: -92.5°C
Molecular Weight: 102.13
%Volatiles by Volume (at 21°C (70 °F)): N/A

SECTION 10 STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Heat, flame, spark, static

INCOMPATIBILITIES: Oxidizers, acids, alkali.

HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon

HAZARDOUS REACTIONS: Flammable, risk for explosion when contacted with fire, heat or oxidizer.

SECTION 11 TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

<u>Route of Exposure</u>	<u>Conclusion/Remarks</u>
Inhalation	
Toxicity (Rat): LC50 8000 ppm/4 h	/
Irritation: Data available	Irritation effect to respiratory system for inhalation, and be fatigue would occur.
Ingestion	
Toxicity (Rat): LD50 9370 mg/kg	/
Skin	
Toxicity (Rabbit): LD50 > 20 mL/kg	/
Irritation: Data available	Slightly irritation when contacted



SECTION 12 ECOLOGICAL INFORMATION

The information given is based on data available for the material, the components of the material, and similar materials.

MOBILITY

Tendency to volatility and diffused in the air. Float on the water and hardly to dissolve. Hardly being absorbed or precipitated by earth.

PERSISTENCE AND DEGRADABILITY

Ease of degradation in saline water and fresh water, degradable even in the anaerobic environment.

BIOACCUMULATIVE POTENTIAL

No accumulation

ECOLOGICAL DATA

Ecotoxicity

Test	Duration	Organism Type	Test Results
Aquatic – Toxicity	96 hour(s)	Sunfish	LC50 > 200 mg

SECTION 13 DISPOSAL CONSIDERATIONS

DISPOSAL PROPERTIES

Hazardous waste

DISPOSAL METHOD

Incineration; Dispose of in accordance with local regulations.

OTHER ISSUES

No waste to the drains

SECTION 14 TRANSPORT INFORMATION

Dangerous Good No.:	32128
UN Number:	1276
Packing Identification:	7
Packing Group:	II
Transportation Matters:	Fire-fighting and leakage-prevention should be equipped in the transportation. The grounding chain should go with the tank wagon in case of the accumulation of static. Keep away from oxidizer, acid, alkali, edible chemicals, sun exposure, rain, high temperature, fire and heat sources during the transportation. The fire-proof equipment should go with the exhaust pipe of vehicle; all the tools may occur spark should be avoided. The vehicle should travel according to the stipulation and avoid stopping in the residential area. Do not be shipped by wooden or cement ships.

SECTION 15 REGULATORY INFORMATION

《化学危险物品安全管理条例》(Published by Congress on 26, January 2002) has made provisions on the safe production, application, storage, transportation and other aspects of chemical dangerous goods.

《化学危险物品安全管理条例实施细则》(GB13690-2009) has classified propyl acetate as Class 2, flammable liquid.



SECTION 16

OTHER INFORMATION

N/A = Not available

All the information offered in the Safety Data Sheet is corrected to the best of our knowledge. It is provided for your guidance only, which is not to be considered as a warranty or quality specification. Our company assumes no obligation or liability for any personal injury, property or other damages of any nature, all such being given and accepted at your risk.

The information and recommendations contained herein are, to the best of Union Petrochemical's knowledge and belief, accurate and reliable as of the date issued. You can contact Union Petrochemical to insure that this document is the most current available from Union Petrochemical. The information and recommendations are offered for the user's consideration and examination. It is the user's responsibility to satisfy itself that the product is suitable for the intended use. If buyer repackages this product, it is the user's responsibility to insure proper health, safety and other necessary information is included with and/or on the container. Appropriate warnings and safe-handling procedures should be provided to handlers and users. Alteration of this document is strictly prohibited. Except to the extent required by law, re-publication or retransmission of this document, in whole or in part, is not permitted.
