

SAFETY DATA SHEET

Classified as hazardous in accordance with the criteria of EPA New Zealand

Section 1 - Identification

Product Identifier

Product Name Propyl acetate

CAS No 109-60-4

Synonyms 1-Propyl Acetate.; Acetic Acid N-Propyl Ester

Molecular FormulaC5 H10 O2Molecular Weight102.13

Recommended Use Laboratory chemicals.
Uses advised against No Information available

Product Code L15355

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Section 2 - Hazard(s) Identification

Classification under Work Safe New Zealand

Classified as hazardous in accordance with the criteria of EPA New Zealand

HSNO Approval Number HSR001217

GHS Classification

Physical hazards

Flammable liquids Category 2

Health hazards

Serious Eye Damage/Eye Irritation Category 2
Specific target organ toxicity - (single exposure) Category 3

Environmental hazards

Chronic aquatic toxicity Category 4

Label Elements

ALFAAL15355 Version 2 16-Mar-2023 Page 1/10



Signal Word

Danger

Hazard Statements

H225 - Highly flammable liquid and vapor

H336 - May cause drowsiness or dizziness

H319 - Causes serious eve irritation

H413 - May cause long lasting harmful effects to aquatic life

Precautionary Statements

Prevention

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking

P233 - Keep container tightly closed

P240 - Ground and bond container and receiving equipment

P241 - Use explosion-proof electrical/ ventilating/ lighting equipment

P242 - Use non-sparking tools

P243 - Take action to prevent static discharges

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear protective gloves/protective clothing/eye protection/face protection

P271 - Use only outdoors or in a well-ventilated area

Response

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower

P304 + P340 - IF INHALED: Remove person to fresh air and keep 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

P312 - Call a POISON CENTER or doctor if you feel unwell

P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish

Storage

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Disposal

P501 - Dispose of contents/ container to an approved waste disposal plant

Other hazards which do not result in classification

Repeated exposure may cause skin dryness or cracking

Section 3 - Composition and Information on Ingredients

Component	CAS No	Weight %		
n-Propyl acetate	109-60-4	>95		

Section 4 - First Aid Measures

Description of first aid measures

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Inhalation Remove to fresh air. If breathing is difficult, give oxygen. Get medical attention if symptoms

ALFAAL15355 Version 2 16-Mar-2023 Page 2/10

Eye ContactRinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get

medical attention.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Get medical attention if

symptoms occur.

Ingestion Do NOT induce vomiting. Get medical attention.

occur.

Self-Protection of the First Aider Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

First Aid Facilities Eyewash, safety shower and washroom.

Most important symptoms and

effects

Difficulty in breathing. Inhalation of high vapor concentrations may cause symptoms like

headache, dizziness, tiredness, nausea and vomiting

Notes to Physician Treat symptomatically.

Section 5 - Fire Fighting Measures

Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam. Water mist may be used to cool closed containers.

Extinguishing media which must not be used for safety reasons

Water may be ineffective.

Specific Hazards Arising from the Chemical

Flammable. Risk of ignition. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back. Containers may explode when heated. Thermal decomposition can lead to release of irritating gases and vapors. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Carbon monoxide (CO), Carbon dioxide (CO2).

Special protective equipment and precautions for fire fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6 - Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures

Emergency procedures

Use personal protective equipment as required. Remove all sources of ignition. Take precautionary measures against static discharges. Ensure adequate ventilation. Avoid contact with skin, eyes or clothing.

Environmental Precautions

Avoid release to the environment. See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up

Remove all sources of ignition. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Use spark-proof tools and explosion-proof equipment.

Precautions to prevent secondary hazards

Clean contaminated objects and areas thoroughly observing environmental regulations

Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

ALFAAL15355 Version 2 16-Mar-2023 Page 3 / 10

Section 7 - Handling and Storage

Precautions for Safe Handling

Advice on safe handling

Wear personal protective equipment/face protection. Ensure adequate ventilation. Use spark-proof tools and explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing and gloves, including the inside, before re-use. Wash hands before breaks and after work.

Conditions for Safe Storage, Including any Incompatibilities

Storage Conditions

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks and flame. Flammables area.

Incompatible Materials

Acids. Bases. Strong oxidizing agents.

AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals

Section 8 - Exposure Controls and Personal Protection

Control parameters

Exposure limits

NZ - Workplace Exposure Standards and Biological Exposure Indices (6th edition). New Zealand Department of Labor **ACGIH** - Threshold Limit Values - Ceiling (TLV-C) guidelines by the American Conference of Governmental Industrial Hygienists (ACGIH) for controlling worker exposure to airborne chemical concentrations in the workplace.

UK - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020.

AUS - Exposure Standards for Atmospheric Contaminants in the Occupational Environment - Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:3008(1995)] Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)] updated in August, 2005. Safe Work Australia

Component	New Zealand WEL	Australia	ACGIH TLV	The United Kingdom
n-Propyl acetate	TWA: 200 ppm	STEL: 250 ppm	TWA: 100 ppm	STEL: 250 ppm 15 min
	TWA: 835 mg/m ³	STEL: 1040 mg/m ³	STEL: 150 ppm	STEL: 1060 mg/m ³ 15 min
	STEL: 250 ppm	TWA: 200 ppm		TWA: 200 ppm 8 hr
	STEL: 1040 mg/m ³	TWA: 835 mg/m ³		TWA: 849 mg/m ³ 8 hr

Biological limit values

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering Measures

Ensure adequate ventilation, especially in confined areas. Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Individual protection measures, such as personal protective equipment

Eye Protection Goggles (Australian/New Zealand Standard AS/NZS 1337 - Eye protectors for Industrial applications)

ALFAAL15355 Version 2 16-Mar-2023 Page 4/10

Hand Protection	n Protective gloves				
Glove material	Breakthrough time	Glove thickness	AUS/NZ Standard	Glove comments	
Disposable gloves.	See manufacturers	-	AS/NZS 2161	(minimum requirement)	

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

(Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

recommendations

Skin and body protection Wear appropriate protective gloves and clothing to prevent skin exposure

Repiratory Protection Use an AS/NZS 1716 approved respirator if exposure limits are exceeded or if irritation or

other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained in line with AS/NZS 1715 on the use

and maintenance of repiratory protective devices (or AUS/NZ equivalent)

When RPE is used a face piece Fit Test should be conducted

Hygiene Measures Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls No information available.

Section 9 - Physical and Chemical Properties

Information on basic physical and chemical properties

Physical State Liquid

Appearance Colorless
Odor sweet

Odor Threshold
pH
No information available
No information available
Melting Point/Range
No data available
No information available
-95 °C / -139 °F

Softening Point No data available

Boiling Point/Range102 °C / 215.6 °F@ 760 mmHgFlammability (liquid)Highly flammableOn basis of test data

Flammability (solid,gas)

No information available

Explosion Limits

No information available

Lower 1.8 Vol%

Upper 8 Vol%

Flash Point 10 °C / 50 °F Method - No information available

Autoignition Temperature

Decomposition Temperature

Viscosity

Water Solubility

Solubility in other solvents

450 °C / 842 °F

No data available

0.58 mPa s at 20 °C

2g/100ml (20°C)

No information available

Partition Coefficient (n-octanol/water)

Component log Pow n-Propyl acetate 1.4

Vapor Pressure 33 mbar @ 20 °C

Density / Specific Gravity 0.880

Bulk Density No data available

Vapor Density3.5 (Air = 1.0) (Air = 1.0)

Particle characteristics Not applicable (liquid)

Other information

Molecular FormulaC5 H10 O2Molecular Weight102.13

ALFAAL15355 Version 2 16-Mar-2023 Page 5 / 10

Section 10 - Stability and Reactivity

Reactivity None known, based on information available

Stability Stable under normal conditions.

Sensitivity to Mechanical Impact No information available

Sensitivity to Static Discharge No information available

Hazardous Polymerization Hazardous polymerization does not occur.

Hazardous ReactionsNo information available.

Conditions to Avoid Keep away from open flames, hot surfaces and sources of ignition, Incompatible products,

Excess heat.

Incompatible Materials Acids, Bases, Strong oxidizing agents.

Hazardous Decomposition Products Carbon monoxide (CO). Carbon dioxide (CO2).

Section 11 - Toxicological Information

Acute Effects

Information on likely routes of exposure

Product Information

InhalationNot an expected route of exposure.EyesAvoid contact with eyes. Irritating to eyes.SkinAvoid contact with skin. May cause irritation.

Ingestion May be harmful if swallowed.

Numerical measures of toxicity

(a) acute toxicity;

Oral No data available
Dermal No data available
Inhalation No data available

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
n-Propyl acetate	LD50 = 8700 mg/kg (Rat)	LD50 > 17756 mg/kg (Rabbit)	LC50 = 32 mg/L (Rat) 4 h

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

RespiratoryNo data available **Skin**No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

ALFAAL15355 Version 2 16-Mar-2023 Page 6/10

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

Results / Target organs Central nervous system (CNS)

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; No data available

Other Adverse Effects The toxicological properties have not been fully investigated. See actual entry in RTECS for

complete information

Symptoms / effects,both acute and delayed

Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

Section 12 - Ecological Information

Ecotoxicity

Aquatic ecotoxicity

This product contains the following substance(s) which are hazardous for the environment.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
n-Propyl acetate	LC50: 56 - 64 mg/L, 96h static (Pimephales promelas) LC50: 56 - 64 mg/L, 96h flow-through (Pimephales promelas)			

Terrestrial ecotoxicity There is no data for this product

Persistence and Degradability No information available

Bioaccumulative Potential No information available

Component	log Pow	Bioconcentration factor (BCF)
n-Propyl acetate	1.4	No data available

Mobility No information available.

Other adverse effects

Persistent Organic Pollutant
Ozone Depletion Potential

This product does not contain any known or suspected endocrine disruptors
This product does not contain any known or suspected substance
This product does not contain any known or suspected substance

Section 13 - Disposal Considerations

ALFAAL15355 Version 2 16-Mar-2023 Page 7/10

Waste treatment methods

Waste from Residues/Unused

Products

Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure

conformity with all applicable regulations.

Contaminated Packaging Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use

empty containers.

Other Information Disposal agencies or waste contractors must comply with the New Zealand Hazardous

Substances (Disposal) Regulations .

Section 14 - Transport Information

Component	Hazchem Code
n-Propyl acetate	2YE
109-60-4 (>95)	

NZS 5433:2020

UN-No UN1276

Proper Shipping Name n-PROPYL ACETATE

Hazard Class 3
Packing Group II

<u>IATA</u>

UN-No UN1276

Proper Shipping Name n-PROPYL ACETATE

Hazard Class 3
Packing Group

IMDG/IMO

UN-No UN1276

Proper Shipping Name PROPYL ACETATE

Hazard Class 3
Packing Group ||

Environmental hazards No hazards identified

Transport in bulk according to Annex II of MARPOL 73/78 and the

IBC Code

Not applicable, packaged goods

Special PrecautionsNo special precautions required. Please refer to the applicable dangerous goods

regulations for additional information.

Additional information None known

Section 15 - Regulatory Information

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

HSNO Approval Number	HSR001217
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National Regulations

There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances

ALFAAL15355 Version 2 16-Mar-2023 Page 8 / 10

Certified handlers, tracking and controlled substance license requirements

Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information. Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information.

Prohibition or notification/licensing requirements

Shown below are details of specific prohibition/notifications or licencing requirements when they apply.

International Regulations

Ozone Depletion Potential This product does not contain any known or suspected substance

Persistent Organic Pollutant This product does not contain any known or suspected substance

Rotterdam Convention (PIC) Not applicable

Authorisation/Restrictions according to EU REACH

Component		REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	
n-Propyl acetate	-	Use restricted. See item 75.	-
		(see link for restriction details)	

https://echa.europa.eu/substances-restricted-under-reach

International Inventories

New Zealand (NZIoC), Australia (AICS), Europe (EINECS/ELINCS/NLP), Korea (KECL), China (IECSC), Taiwan (TCSI), Japan (ISHL), Canada (DSL/NDSL), Philippines (PICCS). US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

Component	CAS No	NZIoC	AICS	EINECS	ELINCS	NLP	KECL	IECSC	TCSI
n-Propyl acetate	109-60-4	X	X	203-686-1	1	-	KE-29778	X	Х
Component	CAS No	TSCA	TSCA Inventory notification - Active-Inactive		DSL	NDSL	PICCS	ISHL	ENCS
			Active-	inactive					
n-Propyl acetate	109-60-4	X	AC1	ΓΙVΕ	X	-	X	X	X

Legend: X - Listed '-' - Not Listed KECL - NIER number or KE number (http://ncis.nier.go.kr/en/main.do)

Section 16 - Other Information

This safety data sheet complies with the requirements of the EPA Hazardous Substances (Hazard Classification) Notice 2020 and WorkSafe New Zealand Regulations

Legend

NZIoC - New Zealand Inventory of Chemicals

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

IECSC - Chinese Inventory of Existing Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

TWA - Time Weighted Average

AICS - Australian Inventory of Chemical Substances

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

ENCS - Japanese Existing and New Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

CAS - Chemical Abstracts Service

ACGIH - American Conference of Governmental Industrial Hygienists

ALFAAL15355 Version 2 16-Mar-2023 Page 9/10

SAFETY DATA SHEET

IARC - International Agency for Research on Cancer

NZS 5433:2020 - Transport of Dangerous Goods on Land

ICAO/IATA - International Civil Aviation Organization/International Air **Transport Association**

MARPOL - International Convention for the Prevention of Pollution from Shins

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50% WEL - Workplace Exposure Limit **DNEL** - Derived No Effect Level

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

VOC - (Volatile Organic Compound)

PNEC - Predicted No Effect Concentration

OECD - Organisation for Economic Co-operation and Development IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

ADG - Australian Code for the Transport of Dangerous Goods by Road and Rail

LC50 - Lethal Concentration 50% ATE - Acute Toxicity Estimate

RPE - Respiratory Protective Equipment NOEC - No Observed Effect Concentration

BCF - Bioconcentration factor

PBT - Persistent, Bioaccumulative, Toxic

Key literature references and sources for data

HSNO classifications provided in the New Zealand Chemical Classification Information Database (CCID).

https://echa.europa.eu/information-on-chemicals

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

EPA Guide to classifying hazardous substances in New Zealand

EPA - Assigning a product to an existing HSNO approval guide

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

16-Mar-2023 **Revision Date Revision Summary** Not applicable

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text

End of Safety Data Sheet

ALFAAL15355 Version 2 16-Mar-2023 Page 10/10