



MATERIAL SAFETY DATA SHEET

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Issue Date:

1- Chemical Product Information and Company Identification.

Product Name: : n-Propyl acetate GC reference standard, AnStan[®]
Synonym: : Acetic Acid Propyl Ester.
Product code: : BS13925.
CAS Number: : 109-60-4.
Company Name: : Briti Scientific.
Company Address: : Plot No:78/B/13, SY-79,Phase-VI, Jeedimetla,Hyderabad-500 055.
Telangana, India.

Section 2- Composition / Information on Ingredients.

CAS No.	Chemical Name	Mol. Formula
109-60-4	n-Propyl acetate	C ₅ H ₁₀ O ₂ .

Section 3- Hazards Identification.

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids	Category 2
Serious Eye Damage/Eye Irritation	Category 2
Specific target organ toxicity (single exposure)	Category 3
Target Organs - Central nervous system (CNS).	

Label Elements

Pictogram



Signal word - Danger

Hazard Statements

Highly flammable liquid and vapour.
Causes serious eye irritation.
May cause drowsiness or dizziness.





Precautionary Statements

Prevention

- Wash face, hands and any exposed skin thoroughly after handling.
- Avoid breathing dust/fume/gas/mist/vapours/spray.
- Use only outdoors or in a well-ventilated area.
- Keep away from heat/sparks/open flames/hot surfaces. - No smoking
- Keep container tightly closed.
- Ground/bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting equipment.
- Use only non-sparking tools.
- Take precautionary measures against static discharge.
- Wear protective gloves/protective clothing/eye protection/face protection.

Inhalation

- If Inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing
- Call a POISON CENTER or doctor/physician if you feel unwell.

Skin

- If on Skin or hair:** Take off immediately all contaminated clothing. Rinse skin with water/shower.

Eyes

- If in Eyes:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

- If eye irritation persists:** Get medical advice/attention.

- Fire In case of fire:** Use CO₂, dry chemical, or foam for extinction.

Storage Store in a well-ventilated place.

Keep container tightly closed.

Store locked up.

- Disposal:** Dispose of contents/container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC)

Repeated exposure may cause skin dryness or cracking.

Section 4- First Aid Measures.

Eye Contact

Rinse 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.

Inhalation

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





Ingestion

Do not induce vomiting. Get medical attention.

Most important symptoms and effects

Difficulty in breathing. Inhalation of high vapour 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 maybe used to cool closed containers.

Unsuitable Extinguishing Media: No information available.

Flash Point: 10 °C / 50 °F

Method: No information available.

Auto ignition Temperature: 450 °C / 842 °F

Explosion Limits:

Upper 8.0 vol %

Lower 1.8 vol

Sensitivity to Mechanical Impact: No information available

Sensitivity to Static Discharge: No information available

Specific Hazards Arising from the Chemical

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

Hazardous Combustion Products

Carbon monoxide (CO). Carbon dioxide (CO₂)

Protective Equipment and Precautions for Firefighters

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

NFPA

Health	2
Flammability	3
Instability	0
Physical hazards	N/A





Section 6- Accidental Release Measures.

Personal Precautions

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.

Section 7- Handling and Storage.

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.

Storage

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.

Section 8- Exposure Control/Personal Protection.

Exposure Guidelines

Legend

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH	Mexico OEL (TWA)
n-Propyl acetate	TWA:100ppm STEL:150ppm	(Vacated)TWA:200ppm (Vacated) TWA: 840 mg/m ³ (Vacated) STEL: 250 ppm (Vacated) STEL: 1050 mg/m ³ TWA: 200 ppm TWA: 840 mg/m ³	IDLH: 1700 ppm TWA: 200 ppm TWA: 840 mg/m ³ STEL: 250 ppm STEL: 1050 mg/m ³	TWA: 200 ppm STEL: 250 ppm

ACGIH - American Conference of Governmental Industrial Hygienists.

OSHA - Occupational Safety and Health Administration.

NIOSH IDLH: NIOSH - National Institute for Occupational Safety and Health.

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.





Personal Protective Equipment

Eye/face Protection Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN 166.

Skin and body protection

Wear appropriate protective gloves and clothing to prevent skin exposure.

Respiratory Protection Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

Section 9- Physical and Chemical Properties.

Physical State	Liquid
Appearance	Colorless
Odor	Sweet
Odor Threshold	No information available
PH	No information available
Melting Point/Range	-95 °C / -139 °F
Boiling Point/Range	101 °C.
Flash Point	10 °C / 50 °F
Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Flammability or explosive limits	
Upper	8.0 vol %
Lower	1.8 vol %
Vapour Pressure	33 mbar @ 20 °C
Vapour Density	3.5 (Air = 1.0)
Specific Gravity	0.89 g/cm ³ .
Solubility	No information available
Partition coefficient	No data available
Auto ignition Temperature	450 °C / 842 °F
Decomposition Temperature	No information available
Viscosity	0.58 mPa s at 20 °C
Molecular Formula	C ₅ H ₁₀ O ₂
Molecular Weight	102.13 g/mol.





Section 10- Stability and Reactivity.

Reactive Hazard: None known, based on information available

Stability: Stable under normal conditions.

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)

Hazardous Polymerization: Hazardous polymerization does not occur.

Hazardous Reactions: None under normal processing.

Section 11- Toxicological Information.

Acute Toxicity

Product Information

Component Information

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

Toxicologically Synergistic Products: No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Irritation: Irritating to eyes

Sensitization: No information available

Carcinogenicity: The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	CAS No	IARC	NTP	ACGIH	OSHA	Mexico
n-Propyl acetate	109-60-4	Not listed	Not listed	Not listed	Not listed	Not listed

Mutagenic Effects

No information available.

Reproductive Effects

No information available.

Developmental Effects

No information available.

Teratogenicity

No information available.

STOT - single exposure

Central nervous system (CNS)

STOT - repeated exposure

None known.

Aspiration hazard

No information available.

Symptoms / effects, both acute and delayed

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





Endocrine Disruptor Information

No information available.

Other Adverse Effects

The toxicological properties have

not been fully

investigated. See actual entry in RTECS for complete information

Section 12- Ecological Information.

Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
n-Propyl acetate	Not listed	LC50: 56 - 64 mg/L, 96h static (Pimephales promelas) LC50: 56 - 64 mg/L, 96h flow-through (Pimephales promelas)	Not listed	Not listed

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

Persistence and Degradability: No information available.

Bioaccumulation/ Accumulation: No information available.

Mobility: No information available.

Section 13- Disposal Considerations.

Waste Disposal Methods

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Section 14- Transport Information.

DOT

UN-No	UN1276
Proper Shipping Name	n-Propyl acetate
Hazard Class	3
Packing Group	II

TDG

UN-No	UN1276
Proper Shipping Name	n-Propyl acetate
Hazard Class	3
Packing Group	II





IATA

UN-No UN1276
 Proper Shipping Name n-Propyl acetate
 Hazard Class 3
 Packing Group II

IMDG/IMO

UN-No UN1276
 Proper Shipping Name n-Propyl acetate
 Hazard Class 3
 Packing Group II

Section 15- Regulatory Information.

OSHA Hazards

Flammable liquid, Irritant

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold

(De Minimis) reporting levels established by SARA Title III, Section 313

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard.

U.S. Federal Regulations

SARA 313	Not applicable
SARA 311/312 Hazard Categories	See section 2 for more information
CWA (Clean Water Act)	Not applicable
Clean Air Act	Not applicable
OSHA - Occupational Safety and Health Administration	Not applicable
CERCLA	Not applicable

Section 16- Other Information.

Briti Scientific provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

