

SAFETY DATA SHEET

Australian statement of hazardous nature: Classified as hazardous according to criteria of Safe Work Australia

Section 1 - Identification

Product Name <u>Tri-n-propylsilane</u>

Product Code 390320000; 390320050; 390320250

Address ThermoFisher Scientific Australia Pty Ltd

5 Caribbean Drive, Scoresby VICTORIA 3179, Australia

Emergency Tel. CHEMTREC®

03 9757 4559 or +613 9757 4559

Telephone / Fax NumbersTel: 1300 735 292
Fax: 1800 067 639

ANZinfo@thermofisher.com

Recommended Use Laboratory chemicals.

Uses advised against

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction. This product does not contain any substance(s) listed on the voluntary National

Code of Practice for Chemicals of Security Concern.

Section 2 - Hazard(s) Identification

Classification under Safe Work Australia

Classified as hazardous according to criteria of Safe Work Australia

Physical hazards

E-mail address

Flammable liquids Category 3

Health hazards

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

Environmental hazards

No hazards identified

Label Elements





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Signal Word Warning

Hazard Statements

H226 - Flammable liquid and vapor

H315 - Causes skin irritation

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

Precautionary Statements

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

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

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

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

P363 - Wash contaminated clothing before reuse

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

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

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

Other information

No information available

Section 3 - Composition and Information on Ingredients

Component	CAS No	Weight %		
Silane, tripropyl-	998-29-8	99		

Section 4 - First Aid Measures

Inhalation Remove from exposure, lie down. Remove to fresh air. If not breathing, give artificial

respiration. Get medical attention.

Ingestion Clean mouth with water. Get medical attention.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes. Get medical attention.

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

medical attention.

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. Symptoms of overexposure may be headache, dizziness, tiredness,

nausea and vomiting

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Notes to Physician

Treat symptomatically. Symptoms may be delayed.

Section 5 - Fire Fighting Measures

Suitable Extinguishing Media

Water spray. Carbon dioxide (CO₂). Dry chemical. Chemical foam. Water mist may be used to cool closed containers.

Extinguishing media which must not be used for safety reasons

No information available.

Hazardous Decomposition Products

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

Specific Hazards Arising from the Chemical

Flammable. Containers may explode when heated. Vapors may form explosive mixtures with air. Vapors may travel to source of ignition and flash back.

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

Emergency procedures

Remove all sources of ignition. Take precautionary measures against static discharges.

Environmental Precautions

See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up

Clean-up methods - small spillage

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal. Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment. Do not let this chemical enter the environment.

Clean-up methods - large spillage

Typically only supplied is small quantiites as packaged goods.

If extremely toxic or used in larger quantities ensure a spillage action plan is in place. Evacuate area. Control the source and/or contain the spill if safe and able to do so. Use temporary diking, sand bags, dry sand, earth or proprietary booms/absorbent pads if available. Obtain advice on containment, neutralisation and clean-up from local emergency responders.

Reference to Other Sections

Refer to protective measures listed in Sections 8 and 13.

Section 7 - Handling and Storage

Precautions for Safe Handling

Avoid contact with skin and eyes. Do not breathe mist/vapors/spray. Do not ingest. If swallowed then seek immediate medical assistance. Use spark-proof tools and explosion-proof equipment. Use only non-sparking tools. Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharges.

Conditions for Safe Storage, Including any Incompatibilities

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

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AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals AS 1940-2004 - The storage and handling of flammable and combustible liquids

Section 8 - Exposure Controls and Personal Protection

Exposure limits

The product does not contain any hazardous materials with occupational exposure limits established.

Biological limit values

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

Exposure Controls

Engineering Measures

Use explosion-proof electrical/ventilating/lighting equipment. Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas.

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

Personal protective equipment

Eve Protection

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

applications)

Hand Protection Protective gloves

ſ	Glove material Breakthrough time		Glove thickness	AUS/NZ Standard	Glove comments
١	Nitrile rubber	See manufacturers	-	AS/NZS 2161	(minimum requirement)
1	Viton (R)	recommendations			

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.

Skin and body protectionWear 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)

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

Appearance Clear Physical State Liquid

Odor No information available
Odor Threshold No data available

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@ 760 mmHg

explosive air/vapour mixtures possible

Liquid

pH No information available

Melting Point/Range

Softening Point

No data available

No data available

173 °C / 243 4 °F

Boiling Point/Range 173 °C / 343.4 °F

Flash Point 43 °C / 109.4 °F Method - No information available

Evaporation Rate No data available

Flammability (solid,gas)

Explosion Limits

Not applicable

No data available

Vapor Pressure No data available

Vapor Density No data available (Air = 1.0)

Specific Gravity / Density 0.758

Bulk Density Not applicable Liquid

Water Solubility Insoluble

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Autoignition Temperature
Decomposition Temperature
Viscosity

No data available
No data available
No data available

Explosive Properties

Oxidizing Properties No information available

Other information

Molecular Formula C9 H22 Si Molecular Weight 158.36

Section 10 - Stability and Reactivity

Reactivity None known, based on information available

Stability Stable under normal conditions. Moisture sensitive.

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

Exposure to moist air or water.

Incompatible Materials Strong oxidizing agents, Alkaline, Finely powdered metals.

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

Hazardous PolymerizationNo information available.

Section 11 - Toxicological Information

Information on Toxicological Effects

Product InformationNo acute toxicity information is available for this product

(a) acute toxicity;

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

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;

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Respiratory No data available Skin No data available

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; Category 3

Results / Target organs Respiratory system

(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.

Symptoms / effects,both acute and Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting delayed

Section 12 - Ecological Information

Ecotoxicity effects

Persistence and Degradability

Persistence

Bioaccumulative Potential

Do not empty into drains. .

Insoluble in water, May persist, based on information available.

May have some potential to bioaccumulate

Mobility Spillage unlikely to penetrate soil. The product is insoluble and floats on water. The product

evaporates slowly. Is not likely mobile in the environment due its low water solubility

Spillage unlikely to penetrate soil

Endocrine Disruptor Information 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

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.

conformity with all applicable regulation

Contaminated Packaging Dispose of this container to hazardous or special waste collection point. Empty containers

retain product residue, (liquid and/or vapor), and can be dangerous. Keep product and

empty container away from heat and sources of ignition.

Other Information Chemical wastes should be disposed through a licensed commercial waste collection

service. Waste codes should be assigned by the user based on the application for which the product was used. Do not flush to sewer. Can be landfilled or incinerated, when in

compliance with local regulations.

Section 14 - Transport Information

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IMDG/IMO

UN-No UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Hazard Class 3
Packing Group III

ADG

UN-No UN1993

Proper Shipping Name Flammable liquid, n.o.s.

Hazard Class 3
Packing Group III

<u>IATA</u>

UN-No UN1993

Proper Shipping Name FLAMMABLE LIQUID, N.O.S.*

Hazard Class 3
Packing Group III

Environmental hazards No hazards identified

Special Precautions No special precautions required

Additional information None known

Section 15 - Regulatory Information

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

National Regulations Australia

See section 8 for national exposure control parameters.

Standard for the Uniform Scheduling of Medicines and Poisons

No poison schedule number allocated.

Australian - Illicit Drug Precursors/Reagents Substance List

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

Chemicals of Security Concern

This product does not contain any substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern

National pollutant inventory Not applicable

Prohibition or notification/licensing requirements

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

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This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction.

International Inventories

	Component	AICS	NZIoC	EINECS	ELINCS	TSCA	DSL	NDSL	PICCS	ENCS	ISHL	IECSC	KECL
Ī	Silane, tripropyl-	-	-	213-649-1	-	Х	-	Х	-	-		-	_

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

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

Basel convention on the control of transboundary movements of hazardous wastes and their dispoal Not applicable.

Component	CAS No	OECD HPV	Restriction of	Seveso III Directive	Seveso III Directive
			Hazardous (2012/18/EC) -		(2012/18/EC) -
			Substances (RoHS)	Qualifying Quantities	Qualifying Quantities
				for Major Accident	for Safety Report
				Notification	Requirements
Silane, tripropyl-	998-29-8	Not applicable	Not applicable	Not applicable	Not applicable

Authorisation/Restrictions according to EU REACH

Not applicable

Section 16 - Other Information

Legend

AICS - Australian Inventory of Chemical Substances

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

IARC - International Agency for Research on Cancer

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

MARPOL - International Convention for the Prevention of Pollution from Shins

NZS 5433:2012 - Transport of Dangerous Goods on Land

LD50 - Lethal Dose 50%

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

POW - Partition coefficient Octanol:Water

NZIoC - New Zealand Inventory of Chemicals

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

CAC Charrian Abatrasta Carrias

CAS - Chemical Abstracts Service

ACGIH - American Conference of Governmental Industrial Hygienists Predicted No Effect Concentration (PNEC)

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

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

OECD - Organisation for Economic Co-operation and Development

LC50 - Lethal Concentration 50%

ATE - Acute Toxicity Estimate

RPE - Respiratory Protective Equipment NOEC - No Observed Effect Concentration

BCF - Bioconcentration factor

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vPvB - very Persistent, very Bioaccumulative **VOC** - (Volatile Organic Compound)

PBT - Persistent, Bioaccumulative, Toxic

Key literature references and sources for data

https://echa.europa.eu/information-on-chemicals Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Training Advice

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

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

Fire prevention and fighting, identifying hazards and risks, static electricity, explosive atmospheres posed by vapours and dusts. Chemical incident response training.

Revision Date 17-Nov-2022 Revision Summary Not applicable.

This Safety Data Sheet (SDS) is prepared in accordance to and complies with the requirements of Safe Work Australia - Work Health and Safety Regulations (WHS Regulations).

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

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