

# SAFETY DATA SHEET

# Section 1 - Identification

Product Name <u>Triacetin</u>

**CAS No** 102-76-1

**Synonyms** Glycerol triacetate; 1,2,3-Propanetriol triacetate

Product Code TOKG0086

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 Numbers Tel: 1300 735 292

Fax: 1800 067 639

E-mail address 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 not hazardous according to criteria of Safe Work Australia.

### Physical hazards

No hazards identified

#### **Health hazards**

No hazards identified

### **Environmental hazards**

No hazards identified

<u>Label Elements</u> None required

#### Other information

Toxic to terrestrial vertebrates

This product does not contain any known or suspected endocrine disruptors

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# Section 3 - Composition and Information on Ingredients

Component	CAS No	Weight %
Glycerol triacetate	102-76-1	>95

## Section 4 - First Aid Measures

**Inhalation** Remove from exposure, lie down. Remove to fresh air. 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** No special precautions required.

First Aid Facilities Eyewash, safety shower and washroom.

Most important symptoms and

effects

No information available.

Notes to Physician Treat symptomatically.

# Section 5 - Fire Fighting Measures

### **Suitable Extinguishing Media**

Water spray. Carbon dioxide (CO2). Dry chemical. Chemical foam.

## Extinguishing media which must not be used for safety reasons

No information available.

#### **Hazardous Decomposition Products**

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

#### **Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors.

## 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**

Ensure adequate ventilation.

#### **Environmental Precautions**

See Section 12 for additional Ecological Information.

#### Methods for Containment and Clean Up

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#### 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. Do not let this chemical enter the environment.

#### Clean-up methods - large spillage

Not applicable, packaged goods.

#### 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.

#### Conditions for Safe Storage, Including any Incompatibilities

Keep in a dry, cool and well-ventilated place. Keep container tightly closed.

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

## 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**

None under normal use conditions.

#### Personal protective equipment

Eye Protection Wear safety glasses with side shields (or goggles) (Australian/New Zealand Standard

AS/NZS 1337 - Eye protectors for Industrial applications)

Hand Protection Protective gloves

Glove material	Breakthrough time	Glove thickness	AUS/NZ Standard	Glove comments
Nitrile rubber	See manufacturers	-	AS/NZS 2161	(minimum requirement)
Neoprene	recommendations			
Natural rubber				
PVC				

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 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

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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

50 g/l aq.sol

@ 760 mmHg

Liquid

Liquid

Method - No information available

and maintenance of repiratory protective devices

Recommended Filter type: Particle filter (or AUS/NZ equivalent)

Recommended half mask:- Valve filtering: EN405 or Half mask: EN140 plus filter, EN 141 (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 Colorless
Physical State Liquid

**Odor** fatty odor

Odor Threshold No data available

**pH** 5-6

Melting Point/Range 3 °C / 37.4 °F

Softening Point

No data available

Poiling Point/Pange

258 °C / 496 4 °

Boiling Point/Range 258 °C / 496.4 °F

Flash Point 138 °C / 280.4 °F
Evaporation Rate No data available

Flammability (solid,gas) Not applicable

Explosion Limits Lower 7.73

Vapor Pressure <0.1 mbar @ 20 °C

Vapor Density 7.5 (Air = 1.0)

Specific Gravity / Density 1.155

Bulk Density

Not applicable

Water Solubility

Not applicable
64 q/L (20°C)

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Componentlog PowGlycerol triacetate0.25

Autoignition Temperature

Decomposition Temperature
Viscosity

Explosive Properties

Oxidizing Properties

430 °C / 806 °F

No data available

23 mPas at 20 °C

No information available

No information available

Other information

Molecular Formula C9 H14 O6
Molecular Weight 218.21

# Section 10 - Stability and Reactivity

Reactivity None known, based on information available

Stability No information available.

Conditions to Avoid Incompatible products.

Incompatible Materials Strong oxidizing agents.

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

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Hazardous Polymerization No information available.

# Section 11 - Toxicological Information

#### Information on Toxicological Effects

#### **Product Information**

(a) acute toxicity;

Oral Based on available data, the classification criteria are not met
Dermal Based on available data, the classification criteria are not met
Inhalation Based on available data, the classification criteria are not met

Component	Component LD50 Oral		LC50 Inhalation		
Glycerol triacetate LD50 = 3 g/kg ( Rat )		LD50 > 2000 mg/kg ( Rabbit )	LC50 > 1721 mg/L (Rat) 4 h		

(b) skin corrosion/irritation; Based on available data, the classification criteria are not met

(c) serious eye damage/irritation; Based on available data, the classification criteria are not met

(d) respiratory or skin sensitization;

**Respiratory**Skin
Based on available data, the classification criteria are not met
Based on available data, the classification criteria are not met

(e) germ cell mutagenicity; Based on available data, the classification criteria are not met

(f) carcinogenicity; Based on available data, the classification criteria are not met

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; Based on available data, the classification criteria are not met

(h) STOT-single exposure; Based on available data, the classification criteria are not met

(i) STOT-repeated exposure; Based on available data, the classification criteria are not met

Target Organs None known.

(j) aspiration hazard; Based on available data, the classification criteria are not met

Other Adverse Effects The toxicological properties have not been fully investigated.

Symptoms / effects,both acute and No information available

delayed

## Section 12 - Ecological Information

Ecotoxicity effects	Do not empty into drai	ns		
Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Glycerol triacetate	LC50: > 100 mg/L, 96h semi-static (Oryzias latipes)	EC50: = 380 mg/L, 48h (Daphnia magna)		

Persistence and Degradability

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**Persistence** Soluble in water, Persistence is unlikely, based on information available. **Bioaccumulative Potential** Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)				
Glycerol triacetate	0.25	No data available				
Mobility	The product is water soluble, and may spread	d may spread in water systems. Will likely be mobile in t				
	environment due to its water solubility Highly mobile in soils					
Endocrine Disruptor Information This product does not contain any known or suspected endocrine disruptors						
Persistent Organic Pollutant This product does not contain any known or suspected substance						
Ozone Depletion Potential	This product does not contain any known or s	otain 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.

**Contaminated Packaging** 

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

empty containers.

Other Information

Chemical wastes should be disposed through a licensed commercial waste collection service.

# Section 14 - Transport Information

IMDG/IMO Not regulated

Not regulated ADG

Not regulated **IATA** 

**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 Industrial Chemicals Introduction Scheme (AICIS)** 

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Component Australian Industrial Chemicals Introduction Scheme (AICIS)		Additional information
Glycerol triacetate - 102-76-1	Present	-

### 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.

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	<b>ENCS</b>	ISHL	IECSC	KECL
Glycerol triacetate	X	Х	203-051-9	-	X	Х	-	Х	Х	Х	Х	KE-29332

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)	<b>Qualifying Quantities</b>	<b>Qualifying Quantities</b>
				for Major Accident	for Safety Report
				Notification	Requirements
Glycerol triacetate	102-76-1	Listed	Not applicable	Not applicable	Not applicable

Authorisation/Restrictions according to EU REACH

Not applicable

## **Section 16 - Other Information**

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### 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 Ships

NZS 5433:2020 - 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 **vPvB** - very Persistent, very Bioaccumulative

VOC - (Volatile Organic Compound)

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

**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

Dangerous Goods Code

 $\ensuremath{\mathbf{ADG}}$  - 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

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.

Revision Date 12-Mar-2025

**Revision Summary** Update to GHS format.

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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