

## SAFETY DATA SHEET

Australian statement of hazardous nature : Classified as not hazardous according to criteria of NOHSC

### Section 1 - Identification

Product Name	<u>Glycerol</u>
Product Code	AJA242, AJA243, AJA918, ACR33203, ACR15892, ACR41098, ACR18469, AMYRM283, BDH101186M, USP1295607, BAK2142-01, PIE17904, FSBBP2291, FNNJJ020,FNNJJ0201, FNNJJ020P, MER10118, MER28454.6F, BDH24388.320, EPHG0400000, FSBG/0600, FSBG/0650, FSBG/P450, FSBBP229, BSPGL885
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	auinfo@thermofisher.com
Recommended Use	Laboratory chemicals.

### Section 2 - Hazard(s) Identification

Classification under the National Occupational Health and Safety Commission (NOHSC), Australia

Classified as not hazardous according to criteria of NOHSC

Physical hazards No hazards identified

Health hazards

Environmental hazards No hazards identified

Label Elements

#### **Precautionary Statements**

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

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

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

- P332 + P313 If skin irritation occurs: Get medical advice/ attention
- P337 + P313 If eye irritation persists: Get medical advice/ attention
- P362 Take off contaminated clothing and wash before reuse
- P403 Store in a well-ventilated place

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

Other information

### Section 3 - Composition and Information on Ingredients

Component	CAS-No	Weight %
Glycerin	56-81-5	95

### Section 4 - First Aid Measures

Inhalation	Move to fresh air. If breathing is difficult, give oxygen. Obtain medical attention.		
Ingestion	Clean mouth with water and drink afterwards plenty of water.		
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Obtain medical attention.		
Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain medical attention.		
General Advice	If symptoms persist, call a physician.		
Protection of First-aiders	No special precautions required.		
First Aid Facilities	Eyewash, safety shower and washroom.		
Most important symptoms/effects	None reasonably foreseeable. Breathing difficulties Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting		
Notes to Physician	Treat symptomatically. Symptoms may be delayed.		

### Section 5 - Fire Fighting Measures

#### Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

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

Do not use a solid water stream as it may scatter and spread fire.

#### **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. Use personal protective equipment. Remove all sources of ignition. Take precautionary measures against static discharges.

#### **Environmental Precautions**

Should not be released into the environment.

#### Methods for Containment and Clean Up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal. Remove all sources of ignition. Take precautionary measures against static discharges.

#### **Reference to Other Sections**

Refer to protective measures listed in Sections 8 and 13.

### Section 7 - Handling and Storage

#### Precautions for Safe Handling

Wear personal protective equipment. Ensure adequate ventilation. Avoid ingestion and inhalation. Do not get in eyes, on skin, or on clothing. Keep away from open flames, hot surfaces and sources of ignition. Use only non-sparking tools. Use explosion-proof equipment. Take precautionary measures against static discharges.

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

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

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

### Section 8 - Exposure Controls and Personal Protection

#### Exposure limits

**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 **UK** - EH40/2005 Containing the workplace exposure limits (WELs) for use with the Control of Substances Hazardous to Health Regulations (COSHH) 2002 (as amended). Updated by September 2006 official press release and October 2007 Supplement. **DE** - MAK and BAT values of Hazardous Chemical Compounds in the Work Area. Published by German Research Foundation on July 1, 2011

Component	Australia	New Zealand WEL	ACGIH TLV	The United Kingdom	Germany
Glycerin	TWA: 10 mg/m <sup>3</sup>	TWA: 10 mg/m <sup>3</sup>		STEL: 30 mg/m <sup>3</sup> 15 min TWA: 10 mg/m <sup>3</sup> 8 hr	TWA: 50 mg/m³ (8 Stunden). MAK Höhepunkt: 100 mg/m³

#### **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. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal protective equipment	
Eye Protection	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 2161.1	(minimum requirement)
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 protection	Long sleeved clothing
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
Recommended Filter type:	Particle filter Organic gases and vapours filter Type A Brown conforming to EN14387 (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 Physical State	Clear viscous liquid Liquid	
Odor Odor Threshold pH Melting Point/Range Softening Point Boiling Point/Range Flash Point Evaporation Rate Flammability (solid,gas) Explosion Limits	No information available No data available 5 18 °C / 64.4 °F No data available 290 °C / 554 °F 160 °C / 320 °F No data available Not applicable No data available	<b>Method -</b> No information available Liquid
Vapor Pressure Vapor Density Specific Gravity / Density Bulk Density Water Solubility Solubility in other solvents Partition Coefficient (n-octanol/wa	No data available No data available No data available Not applicable >33g/100ml No information available	(Air = 1.0) Liquid
Component Glycerin Autoignition Temperature Decomposition Temperature Viscosity Explosive Properties Oxidizing Properties	log Pow -1.76 No data available No data available No data available No information available No information available	
<u>Other information</u> Molecular Formula Molecular Weight	C3H8O3 92.09	

### Section 10 - Stability and Reactivity

Reactivity	None known, based on information available
Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products, Excess heat, Keep away from open flames, hot surfaces and sources of ignition.

Hazardous Decomposition Products None under normal use conditions.

**Hazardous Polymerization** 

Hazardous polymerization does not occur.

### Section 11 - Toxicological Information

#### Information on Toxicological Effects

#### Product Information (a) acute toxicity; Oral Dermal Inhalation

Based on available data, the classification criteria are not met Based on available data, the classification criteria are not met Based on available data, the classification criteria are not met

#### Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Glycerin	LD50 = 12600 mg/kg (Rat)	LD50 > 10 g/kg (Rabbit)	LC50 > 570 mg/m <sup>3</sup> (Rat) 1 h
(b) skin corrosion/irritation;	Category 2		
(c) serious eye damage/irritation; (d) respiratory or skin sensitization;	Category 2		
Respiratory	No data available		
Skin	No data available		
(e) germ cell mutagenicity;	No data available		
(f) carcinogenicity;	No data available		
(g) reproductive toxicity; (h) STOT-single exposure;	There are no known carcinoge No data available No data available	enic chemicals in this product	
(i) STOT-repeated exposure;	No data available		
Target Organs (j) aspiration hazard;	No information available. No data available		

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

### Section 12 - Ecological Information

#### **Ecotoxicity effects**

Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Glycerin	LC50: 51 - 57 mL/L, 96h static (Oncorhynchus mykiss)	EC50: > 500 mg/L, 24h (Daphnia magna)		
Persistence and Degradability Persistence Bioaccumulative Potential	No information available Persistence is unlikely. Bioaccumulation is unlikely			

Component	log Pow	Bioconcentration factor (BCF)	
Glycerin	-1.76 No data available		
Mobility	No information available.		
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 suspected substance		
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### 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

**Other Information** 

Dispose of this container to hazardous or special waste collection point.

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 empty into drains.

### Section 14 - Transport Information

 IMDG/IMO
 Not regulated

 ADG
 Not regulated

IATA Not regulated

Environmental hazardsNo hazards identifiedSpecial PrecautionsNo special precautions requiredAdditional informationNone known

### Section 15 - Regulatory Information

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

Component	AICS	NZIoC	EINECS	ELINCS	TSCA	DSL	NDSL	PICCS	ENCS	IECSC	KECL
Glycerin	Х	Х	200-289-	-	Х	Х	-	Х	Х	Х	Х
			5								
andard for the Uniform		Not Sche	duled								
cheduling of Medicines an bisons	d										
ohibition or notification/lie	-	Shown below are details of specific prohibition/notifications or licencing requirements when they apply.									

### Section 16 - Other Information

Legend

AICS - Australian Inventory of Chemical Substances NZIOC - New Zealand Inventory of Chemicals TSCA - United States Toxic Substances Control Act Section 8(b) EINECS/ELINCS - European Inventory of Existing Commercial Chemical Inventory Substances/EU List of Notified Chemical Substances DSL/NDSL - Canadian Domestic Substances List/Non-Domestic ENCS - Japanese Existing and New Chemical Substances Substances List IECSC - Chinese Inventory of Existing Chemical Substances KECL - Korean Existing and Evaluated Chemical Substances **PICCS** - Philippines Inventory of Chemicals and Chemical Substances **CAS** - Chemical Abstracts Service TWA - Time Weighted Average ACGIH - American Conference of Governmental Industrial Hygienists IARC - International Agency for Research on Cancer **PNEC** - Predicted No Effect Concentration ICAO/IATA - International Civil Aviation Organization/International Air **IMO/IMDG** - International Maritime Organization/International Maritime **Transport Association** Dangerous Goods Code MARPOL - International Convention for the Prevention of Pollution from ADG Australian Code for the Transport of Dangerous Goods by Road Ships and Rail NZS 5433:2012 - Transport of Dangerous Goods on Land OECD - Organisation for Economic Co-operation and Development LD50 - Lethal Dose 50% LC50 - Lethal Concentration 50% EC50 - Effective Concentration 50% ATE - Acute Toxicity Estimate **RPE** - Respiratory Protective Equipment WEL - Workplace Exposure Limit **DNEL** - Derived No Effect Level NOEC - No Observed Effect Concentration POW - Partition coefficient Octanol:Water BCF - Bioconcentration factor vPvB - very Persistent, very Bioaccumulative PBT - Persistent, Bioaccumulative, Toxic VOC - Volatile Organic Compounds

#### Key literature references and sources for data

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

# Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:Physical hazardsOn basis of test dataHealth HazardsCalculation methodEnvironmental hazardsCalculation method

#### 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	09-Nov-2015
Revision Summary	Update to Format.

#### This safety data sheet complies with the requirements of Safe Work Australia WHS Regulation

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**