

# SAFETY DATA SHEET

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

# Section 1 - Identification

Product Name Decon 90 liquid concentrate

Product Code DEC90/5

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 hazardous according to criteria of Safe Work Australia

# Physical hazards

No hazards identified

# **Health hazards**

Skin Corrosion/Irritation Category 2
Serious Eye Damage/Eye Irritation Category 1

## **Environmental hazards**

No hazards identified

# Label Elements



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Signal Word Danger

#### **Hazard Statements**

H315 - Causes skin irritation

H318 - Causes serious eye damage

## **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

P310 - Immediately call a POISON CENTER or doctor

P362 + P364 - Take off contaminated clothing and wash it before reuse

P403 - Store in a well-ventilated place

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

#### Other information

This product does not contain any known or suspected endocrine disruptors

# Section 3 - Composition and Information on Ingredients

Component	CAS No	Weight %
Potassium hydroxide	1310-58-3	<3

# Section 4 - First Aid Measures

**Inhalation** Remove to fresh air.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

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

clothes and shoes.

**Eye Contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids.

Consult a physician.

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

Causes eye burns. Causes severe eye damage.

Notes to Physician Treat symptomatically.

# Section 5 - Fire Fighting Measures

### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

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

No information available.

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## **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

Clean-up methods - small spillage

#### 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**

Ensure adequate ventilation.

# Conditions for Safe Storage, Including any Incompatibilities

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

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

**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.

NZ - Workplace Exposure Standards and Biological Exposure Indices (6th edition). New Zealand Department of Labor

Component	Australia	New Zealand WEL	ACGIH TLV	The United Kingdom	Germany
Potassium hydroxide	Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>	Ceiling: 2 mg/m <sup>3</sup>	WEL - 2 mg/m <sup>3</sup> STEL	

# **Biological limit values**

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

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**Exposure Controls** 

# **Engineering Measures**

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

Personal protective equipment

Eye 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
	Neoprene	See manufacturers	-	AS/NZS 2161	(minimum requirement)
		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: Inorganic gases and vapours filter Type B Grey Ammonia and organic ammonia derivatives

filter Type K Green 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)

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

Appearance Milky white Physical State Liquid

Odor No information available
Odor Threshold No data available

pH No data available >13
Melting Point/Range -3.8 °C / 25.2 °F
Softening Point No data available
Boiling Point/Range 100.5 °C / 212.9 °F

Flash Point Not applicable Method - No information available

Evaporation Rate No data available

Flammability (solid,gas) Not applicable Liquid

Explosion Limits No data available

Vapor PressureNo data availableVapor DensityNo data available

Vapor DensityNo data available(Air = 1.0)Specific Gravity / DensityNo data available

Bulk Density Not applicable Liquid

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Water Solubility

Solubility in other solvents

No information available
No information available

Partition Coefficient (n-octanol/water)

Componentlog PowPotassium hydroxide0.83

Autoignition TemperatureNo data availableDecomposition TemperatureNo data availableViscosityNo data availableExplosive PropertiesNo information availableOxidizing PropertiesNo information available

Other information

# Section 10 - Stability and Reactivity

Reactivity None known, based on information available

**Stability** Stable under normal conditions.

Conditions to Avoid Heat, flames and sparks.

Incompatible Materials None known.

Hazardous Decomposition Products None under normal use conditions.

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

DermalNo data availableInhalationNo data available

### Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Potassium hydroxide	LD50 = 333-384 mg/kg (Rat)		
	<u> </u>		

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

RespiratoryNo data availableSkinNo data available

Compo	nent	Test method	Test species	Study result
Potassium 1310-58-	,	OECD Test Guideline 406	guinea pig	non-sensitising

(e) germ cell mutagenicity; No data available

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(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; No data available

Symptoms / effects,both acute and No information available

delayed

# Section 12 - Ecological Information

**Ecotoxicity effects** 

Persistence and Degradability Bioaccumulative Potential

No information available No information available

Component	log Pow	Bioconcentration factor (BCF)			
Potassium hydroxide	0.83 No data available				
Mobility Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential	No information available.  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.

**Contaminated Packaging** 

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

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 empty into drains. Do not flush to sewer.

# Section 14 - Transport Information

IMDG/IMO Not regulated

ADG Not regulated

Component	Hazchem Code
Potassium hydroxide	2W
1310-58-3 ( <3 )	2R

IATA Not regulated

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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

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons.

Component	Standard for the Uniform Scheduling of Medicines and Poisons
Potassium hydroxide - 1310-58-3	Schedule 5 listed - except its salts and derivatives;in preparations being: solid preparations the pH of
	which in a 10 g/L aqueous solution is >11.5; liquid or semi-solid preparations the pH of which is >11.5
	except in food additive preparations for domestic use
	Schedule 6 listed - except its salts and derivatives; except: [a] when included in Schedule 5 or
	Schedule 10, [b] in preparations containing <=5% of Potassium hydroxide being: [i] solid preparations,
	the pH of which in a 10 g/L aqueous solution is <=11.5, or [ii] liquid or semi-solid preparations, the pH
	of which is <=11.5
	Schedule 10 listed

### **Australian Industrial Chemicals Introduction Scheme (AICIS)**

Component	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Potassium hydroxide - 1310-58-3	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	ENCS	ISHL	IECSC	KECL
Potassium hydroxide	X	X	215-181-3	-	Х	Х	-	Х	Х	Х	Х	KE-29139

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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

Take note that wastes may be subject to export, import, or transit controls pursuant to the Basel convention and/or local regulations implementing the Basel convention.

Component	Basel Convention (Hazardous Waste)	Australian Hazardous Waste Act - Categories
		of Wastes to Be Controlled
Potassium hydroxide - 1310-58-3	Annex I - Y35	Y35 solid or solution

Component	CAS No	OECD HPV	Restriction of Hazardous Substances (RoHS)	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification	Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements
Potassium hydroxide	1310-58-3	Listed	Not applicable	Not applicable	Not applicable

## Authorisation/Restrictions according to EU REACH

Component	. ,	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	
Potassium hydroxide	-	Use restricted. See entry 75. (see link for restriction details)	-

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

# 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

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

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

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

**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

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POW - Partition coefficient Octanol:Water BCF - Bioconcentration factor

vPvB - very Persistent, very Bioaccumulative PBT - Persistent, Bioaccumulative, Toxic

VOC - (Volatile Organic Compound)

# Key literature references and sources for data

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

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 hazards

Health Hazards

Environmental hazards

On basis of test data
Calculation method
Calculation 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.

Chemical incident response training.

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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