

SAFETY DATA SHEET

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

Section 1 - Identification

Product Name Kinyouins Carbol Fuchsin

Product Code HH0008, HH0009

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

Serious Eye Damage/Eye Irritation

Germ Cell Mutagenicity

Specific target organ toxicity - (single exposure)

Specific target organ toxicity - (repeated exposure)

Specific target organ toxicity - (repeated exposure)

Category 2

Category 2

Category 2

Environmental hazards

No hazards identified

Label Elements

AUS-000863 Version 3 12-Mar-2025 Page 1/11





Signal Word

Danger

Hazard Statements

- H315 Causes skin irritation
- H319 Causes serious eye irritation
- H341 Suspected of causing genetic defects if inhaled
- H370 Causes damage to organs
- H373 May cause damage to organs through prolonged or repeated exposure

Precautionary Statements

- P201 Obtain special instructions before use
- P202 Do not handle until all safety precautions have been read and understood
- P260 Do not breathe dust/fume/gas/mist/vapors/spray
- P264 Wash face, hands and any exposed skin thoroughly after handling
- P270 Do not eat, drink or smoke when using this product
- P280 Wear 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
- P308 + P311 IF exposed or concerned: 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 %
Non Hazardous Media	NA	97.9
Phenol	108-95-2	<10
Ethyl alcohol	64-17-5	<10
Carbol Fuchsin	4197-24-4	3.4

Section 4 - First Aid Measures

Inhalation Remove to fresh air. Get medical attention. If not breathing, give artificial respiration.

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. Get medical attention.

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

AUS-000863 Version 3 12-Mar-2025 Page 2 / 11

medical attention.

General Advice If symptoms persist, call 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 Evewash, safety shower and washroom.

Most important symptoms and

effects

None reasonably foreseeable. Causes burns by all exposure routes. Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation

Notes to Physician Treat symptomatically.

Section 5 - Fire Fighting Measures

Suitable Extinguishing Media

Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Extinguishing media which must not be used for safety reasons

No information available.

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 as required.

Environmental Precautions

Should not be released into the environment. See Section 12 for additional Ecological Information. Do not flush into surface water or sanitary sewer system.

Methods for Containment and Clean Up

Clean-up methods - small spillage

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

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

Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation.

AUS-000863 Version 3 12-Mar-2025 Page 3 / 11

Conditions for Safe Storage, Including any Incompatibilities

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

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.

DE - MAK and BAT values of Hazardous Chemical Compounds in the Work Area. Published by German Research Foundation on July 1, 2011

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
Phenol	TWA: 1 ppm	TWA: 1 ppm	TWA: 5 ppm	STEL: 4 ppm 15 min	TWA: 2 ppm (8
	TWA: 4 mg/m ³	TWA: 3.8 mg/m ³	Skin	STEL: 16 mg/m ³ 15 min	Stunden). AGW -
	-	STEL: 2 ppm		TWA: 2 ppm 8 hr	exposure factor 2
		STEL: 7.7 mg/m ³		TWA: 7.8 mg/m ³ 8 hr	TWA: 8 mg/m³ (8
		Skin		Skin	Stunden). AGW -
					exposure factor 2
					Haut
Ethyl alcohol	TWA: 1000 ppm	TWA: 200 ppm	STEL: 1000 ppm	TWA: 1000 ppm TWA;	200 ppm TWA MAK;
	TWA: 1880 mg/m ³	TWA: 380 mg/m ³		1920 mg/m ³ TWA	380 mg/m ³ TWA MAK
	_	STEL: 800 ppm		WEL - STEL: 3000 ppm	-
		STEL: 1520 mg/m ³		STEL; 5760 mg/m ³	
				STEL	

Biological limit values

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

Component	Australia	New Zealand	European Union	United Kingdom	Germany
Phenol		100 mg/L (urine) end of			Phenol (after
		shift (Phenol)			hydrolysis): 120 mg/g
					Creatinine urine (end of
					shift)

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

Glove material	Breakthrough time	Glove thickness	AUS/NZ Standard	Glove comments
Disposable gloves	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)

AUS-000863 Version 3 12-Mar-2025 Page 4/11

SAFETY DATA SHEET

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 (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.

Prevent product from entering drains. Do not allow material to contaminate ground water **Environmental exposure controls**

system. Local authorities should be advised if significant spillages cannot be contained.

(Air = 1.0)

Liquid

Method - No information available

Section 9 - Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance Red **Physical State** Liquid

No information available Odor **Odor Threshold** No data available рΗ Not applicable

Melting Point/Range 0 °C / 32 °F **Softening Point** No data available **Boiling Point/Range** 100 °C / 212 °F Flash Point Not applicable

Evaporation Rate No data available Liquid

Flammability (solid,gas) Not applicable No data available **Explosion Limits**

Vapor Pressure No data available

Vapor Density No data available Specific Gravity / Density No data available Not applicable

Bulk Density Water Solubility Soluble in water

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Component log Pow Phenol 1.5 Ethyl alcohol -0.32

No data available **Autoignition Temperature** No data available **Decomposition Temperature** No data available Viscosity

Explosive Properties No information available No information available **Oxidizing Properties**

Other information

Section 10 - Stability and Reactivity

None known, based on information available Reactivity

Stability Stable under normal conditions.

AUS-000863 Version 3 12-Mar-2025 Page 5/11

Conditions to Avoid Incompatible products, Excess heat.

Incompatible Materials None known.

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 Category 4

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

Inhalation Category 3

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Phenol	LD50 = 340 mg/kg (Rat)	LD50 = 630 mg/kg (Rabbit)	LC50 = 316 mg/m ³ (Rat) 4 h
Ethyl alcohol	LD50 = 7060 mg/kg (Rat)		20000 ppm/10H (Rat)

(b) skin corrosion/irritation; Category 1 B

(c) serious eye damage/irritation; Category 1

(d) respiratory or skin sensitization;

Respiratory No data available Skin No data available

(e) germ cell mutagenicity; Category 2

(f) carcinogenicity; Category 2

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

Component	Australia	New Zealand		Western	IARC	EU	UK	Germany
			Wales	Australia				
Phenol								Cat. 3B

(g) reproductive toxicity; No data available

(h) STOT-single exposure; Category 2

(i) STOT-repeated exposure; Category 2

Target OrgansNo information available.

(j) aspiration hazard; No data available

Symptoms / effects,both acute and Ingestion causes severe swelling, severe damage to the delicate tissue and danger of

delayed perforation

AUS-000863 Version 3 12-Mar-2025 Page 6/11

Section 12 - Ecological Information

Ecotoxicity effects

Contains a substance which is:. Toxic to aquatic organisms. The product contains following substances which are hazardous for the environment. Very toxic to aquatic organisms.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Phenol	4-7 mg/L LC50 96 h	EC50: 10.2 - 15.5 mg/L,	EC50: 187 - 279 mg/L,	EC50 21 - 36 mg/L 30
	32 mg/L LC50 96 h	48h (Daphnia magna)	72h static	min
		EC50: 4.24 - 10.7 mg/L,	(Desmodesmus	EC50 = 23.28 mg/L 5
		48h Static (Daphnia	subspicatus)	min
		magna)	EC50: 0.0188 - 0.1044	EC50 = 25.61 mg/L 15
			mg/L, 96h static	min
				EC50 = 28.8 mg/L 5 min
			subcapitata)	EC50 = 31.6 mg/L 15
			EC50: = 46.42 mg/L,	min
			96h	
			(Pseudokirchneriella	
			subcapitata)	
Ethyl alcohol	Fathead minnow	EC50 = 9268 mg/L/48h	EC50 (72h) = 275 mg/l	Photobacterium
		EC50 = 10800 mg/L/24h	(Chlorella vulgaris)	phosphoreum:EC50 =
	LC50 = 14200 mg/l/96h			34634 mg/L/30 min
				Photobacterium
				phosphoreum:EC50 =
				35470 mg/L/5 min

Persistence and Degradability

Persistence

Degradation in sewage treatment plant Bioaccumulative Potential

Soluble in water, Persistence is unlikely, based on information available.

Contains substances known to be hazardous to the environment or not degradable in waste

water treatment plants.

Bioaccumulation is unlikely

Component	log Pow	Bioconcentration factor (BCF)
Phenol	henol 1.5 17.5 dimensionless	
	647 dimensionles	
Ethyl alcohol	-0.32	No data available

Mobility

The product is water soluble, and may spread in water systems. Will likely be mobile in the

environment due to its water solubility Highly mobile in soils

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.

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. Large amounts will affect pH and harm aquatic organisms.

Section 14 - Transport Information

IMDG/IMO

UN-No UN2821

Proper Shipping Name
Technical Shipping Name
PHENOL SOLUTION
Carbol Fuchsin

Hazard Class

AUS-000863 Version 3 12-Mar-2025 Page 7/11

Packing Group III

<u>ADG</u>

UN-No UN2821

Proper Shipping Name PHENOL SOLUTION Carbol Fuchsin

Hazard Class 6.1
Packing Group

Component	Hazchem Code
Phenol	3X
108-95-2 (<10)	2X
Ethyl alcohol	2YE
64-17-5 (<10)	2Y

IATA

UN-No UN2821

Proper Shipping Name PHENOL SOLUTION Carbol Fuchsin

Hazard Class 6.1 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

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
Phenol - 108-95-2	Schedule 2 listed
	Schedule 4 listed - in preparations for injection
	Schedule 5 listed - including Cresols and Xylenols and any other homologue of phenol boiling below
	220°C;when in animal feed additives;except in preparations containing <=1% of Phenol and in
	preparations containing <=3% of Cresols and Xylenols and any other homologues of Phenols
	Schedule 6 listed - including Cresols and Xylenols and any other homologue of phenol boiling below
	220°C;except when separately specified in these Schedules, or in preparations containing <=1% of
	Phenols, and in preparations containing <=3% of Cresols and Xylenols and other homologues of
	Phenol

Australian Industrial Chemicals Introduction Scheme (AICIS)

	Component	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
	Phenol - 108-95-2	Present	÷
ſ	Ethyl alcohol - 64-17-5	Present	-

AUS-000863 Version 3 12-Mar-2025 Page 8 / 11

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 Subject to reporting requirements

Component	National pollutant inventory
Phenol - 108-95-2	10 tonne/yr. Threshold category 1
Ethyl alcohol - 64-17-5	10 tonne/yr. Threshold category 1

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
Phenol	X	X	203-632-7	-	X	Х	-	Х	Х	Х	Х	X
Ethyl alcohol	X	X	200-578-6	-	X	Х	-	Х	Х	Χ	X	KE-13217
Carbol Fuchsin	-	Х	224-086-6	-	i	-	-	Х	-		-	i

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
Phenol - 108-95-2	Annex I - Y39	Y39
Ethyl alcohol - 64-17-5	Annex I - Y42	Y42 except Halogenated solvents

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
Non Hazardous Media	NA	Not applicable	Not applicable	Not applicable	Not applicable
Phenol	108-95-2	Listed	Not applicable	Not applicable	Not applicable
Ethyl alcohol	64-17-5	Listed	Not applicable	Not applicable	Not applicable

AUS-000863 Version 3 12-Mar-2025 Page 9/11

SAFETY DATA SHEET

ı	Carbol Fuchsin	4197-24-4	Not applicable	Not applicable	Not applicable	Not applicable

Authorisation/Restrictions according to EU REACH

Comp	onent	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	
Phe	nol	-	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 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

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

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Physical hazards
Health Hazards
Calculation method
Environmental hazards
Cn basis of test data
Calculation method

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

AUS-000863 Version 3 12-Mar-2025 Page 10 / 11

materials or in any process, unless specified in the text

End of Safety Data Sheet

AUS-000863 Version 3 12-Mar-2025 Page 11 / 11