

Section 1 - Identification

Product Name A7 Agar w/Phenol Red

Product Code	R20211
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 contains one or more substance(s) on the Illicit Drug Precursors/Reagents list. Verify requirements related to using, handling and storing these substances. This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction. This product contains one or more 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

Label Elements None required

Other information

This product does not contain any known or suspected endocrine disruptors

Section 3 - Composition and Information on Ingredients

Component	CAS No	Weight %
Water	7732-18-5	78.16
Calcium chloride, dihydrate	10035-04-8	Trace
Agar	9002-18-0	1.25
Yeast, ext.	8013-01-2	0.22
HORSE SERUM	RR-36477-2	17.88
Urea	57-13-6	Trace
Penicillin G potassium	113-98-4	Trace
Glucose	50-99-7	Trace
Amphotericin B	1397-89-3	Trace
Vitamin B12	68-19-9	Trace
L-Glutamine	32640-56-5	Trace
Adenine (6-Aminopurine)	73-24-5	Trace
6H-Purin-6-one, 2-amino-1,7-dihydro-, monohydrochloride	635-39-2	Trace
p-Aminobenzoic acid	150-13-0	Trace
Thiazolium, 3-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-4-methyl-5-(4,6,6-trihydroxy-3,5-dioxo-4,6-diphosphahex-1-yl)-, chloride, P,P'-dioxide	154-87-0	Trace
Iron(III) nitrate nonahydrate	7782-61-8	Trace
Thiazolium, 3-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-5-(2-hydroxyethyl)-4-methyl- chloride, monohydrochloride	67-03-8	Trace
Adenosine 5'-(trihydrogen diphosphate), P'.fwdarw.5'-ester with 3-(aminocarbonyl)-1-.beta.-D-ribofuranosylpyridinium, inner salt	53-84-9	Trace
Hydrogen chloride	7647-01-0	Trace
Manganese sulfate monohydrate	10034-96-5	Trace
Cysteine hydrochloride, L-(+)-, monohydrate	7048-04-6	Trace
Tryptic Soy Broth	NA	2.19
Phenol, 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bis-, S,S-dioxide, monosodium salt	34487-61-1	Trace

Section 4 - First Aid Measures

Inhalation	Remove to fresh air. Get medical attention immediately if symptoms occur.
Ingestion	Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.
Skin Contact	Wash off immediately with plenty of water for at least 15 minutes. Get medical attention immediately if symptoms occur.
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	None reasonably foreseeable.
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. Avoid dust formation.

Environmental Precautions

Should not be released into the environment. See Section 12 for additional Ecological Information.

Methods for Containment and Clean Up**Clean-up methods - small spillage**

Sweep up and shovel into suitable containers for disposal. Avoid dust formation.

Clean-up methods - large spillage

Typically only supplied in small quantities 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. Avoid contact with skin, eyes or clothing. Avoid ingestion and inhalation. Avoid dust formation.

Conditions for Safe Storage, Including any Incompatibilities

Keep containers tightly closed in a dry, cool 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.

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
Vitamin B12				STEL: 0.3 mg/m ³ 15 min TWA: 0.1 mg/m ³ 8 hr Resp. Sens. STEL: 15 mg/m ³ 15 min TWA: 5 mg/m ³ 8 hr Skin	TWA: 2 mg/m ³ (8 Stunden). MAK Höhepunkt: 2 mg/m ³ Haut
Iron(III) nitrate nonahydrate	TWA: 1 mg/m ³		TWA: 1 mg/m ³	STEL: 2 mg/m ³ 15 min TWA: 1 mg/m ³ 8 hr	
Hydrogen chloride		Ceiling: 5 ppm Ceiling: 7.5 mg/m ³	Ceiling: 2 ppm	STEL: 5 ppm 15 min STEL: 8 mg/m ³ 15 min TWA: 1 ppm 8 hr TWA: 2 mg/m ³ 8 hr	TWA: 2 ppm (8 Stunden). AGW - exposure factor 2 TWA: 3 mg/m ³ (8 Stunden). AGW - exposure factor 2 TWA: 2 ppm (8 Stunden). MAK TWA: 3.0 mg/m ³ (8 Stunden). MAK Höhepunkt: 4 ppm Höhepunkt: 6 mg/m ³
Manganese sulfate monohydrate	TWA: 1 mg/m ³		TWA: 0.02 mg/m ³ TWA: 0.1 mg/m ³	STEL: 0.6 mg/m ³ 15 min STEL: 0.15 mg/m ³ 15 min TWA: 0.2 mg/m ³ 8 hr TWA: 0.05 mg/m ³ 8 hr	TWA: 0.2 mg/m ³ (8 Stunden). AGW - exposure factor 8 TWA: 0.02 mg/m ³ (8 Stunden). AGW - exposure factor 8 TWA: 0.2 mg/m ³ (8 Stunden). MAK TWA: 0.02 mg/m ³ (8 Stunden). MAK Höhepunkt: 1.6 mg/m ³ Höhepunkt: 0.16 mg/m ³

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
Disposable gloves	See manufacturers recommendations	-	AS/NZS 2161	(minimum requirement)

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 compatibility, 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

Respiratory 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

Recommended Filter type:

must be the correct fit and be used and maintained in line with AS/NZS 1715 on the use and maintenance of respiratory protective devices
Particle filter (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**

Solid Gel Consistency

Odor

No information available

Odor Threshold

No data available

pH

No information available

Melting Point/Range

No data available

Softening Point

No data available

Boiling Point/Range

No information available

Flash Point

No information available

Method - No information available

Evaporation Rate

No data available

Flammability (solid,gas)

No information available

Explosion Limits

No data available

Vapor Pressure

No data available

Vapor Density

No data available

(Air = 1.0)

Specific Gravity / Density

No data available

Bulk Density

No data available

Water Solubility

No information available

Solubility in other solvents

No information available

Partition Coefficient (n-octanol/water)**Component****log Pow**

Calcium chloride, dihydrate

0.05

Urea

-1.73

Penicillin G potassium

1.83

Vitamin B12

3.57

Adenine (6-Aminopurine)

-0.1

Thiazolium,

-3.04

3-[(4-amino-2-methyl-5-pyrimidinyl)met
hyl]-5-(2-hydroxyethyl)-4-methyl-

chloride, monohydrochloride

Adenosine 5'-(trihydrogen

-4

diphosphate), P'.fwdarw.5'-ester with

3-(aminocarbonyl)-1-.beta.-D-ribofuran

osylpyridinium, inner salt

Autoignition Temperature

No data available

Decomposition Temperature

No data available

Viscosity

No data available

Explosive Properties

No information available

Oxidizing Properties

No information available

Other information**VOC Content(%)**

0.08

Section 10 - Stability and Reactivity

Reactivity	None known, based on information available
Stability	Stable under normal conditions.
Conditions to Avoid	Incompatible products, Excess heat, Avoid dust formation.
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

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

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	-	-
Agar	LD50 = 11 g/kg (Rat)		
Urea	LD50 = 8471 mg/kg (Rat)		
Penicillin G potassium	LD50 = 8900 mg/kg (Rat)		
Glucose	25.8 g/kg (Rat)		
Amphotericin B	LD50 > 5 g/kg (Rat)		
Adenine (6-Aminopurine)	LD50 = 227 mg/kg (Rat)		
p-Aminobenzoic acid	>6 g/kg (Rat)		
Iron(III) nitrate nonahydrate	LD50 = 3250 mg/kg (Rat)		
Thiazolium, 3-[(4-amino-2-methyl-5-pyrimidinyl)methyl]- 5-(2-hydroxyethyl)-4-methyl- chloride, monohydrochloride	LD50 = 3710 mg/kg (Rat)		
Hydrogen chloride	LD50 238 - 277 mg/kg (Rat)	LD50 > 5010 mg/kg (Rabbit)	LC50 = 1.68 mg/L (Rat) 1 h

(b) skin corrosion/irritation; No data available

(c) serious eye damage/irritation; No data available

(d) respiratory or skin sensitization;

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;	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 delayed	No information available

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
Calcium chloride, dihydrate	Lepomis macrochirus: LC50: 10650 mg/L/96h	EC50: 3005 mg/L/48h	-	-
Urea	LC50: 16200 - 18300 mg/L, 96h (Poecilia reticulata)	EC50: = 3910 mg/L, 48h Static (Daphnia magna)		= 23914 mg/L EC50 Photobacterium phosphoreum 5 min
Penicillin G potassium	LC50: > 500 mg/L, 96h static (Leuciscus idus melanotus)	EC50: > 1000 mg/L, 48h (Daphnia magna)		
p-Aminobenzoic acid				= 27.4 mg/L EC50 Photobacterium phosphoreum 30 min 15 °C
Thiazolium, 3-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-5-(2-hydroxyethyl)-4-methyl- chloride, monohydrochloride	LC50 >100 mg/L/96h	EC50 >100 mg/L/48h		

Persistence and Degradability No information available
Bioaccumulative Potential No information available

Component	log Pow	Bioconcentration factor (BCF)
Calcium chloride, dihydrate	0.05	No data available
Urea	-1.73	<10 dimensionless
Penicillin G potassium	1.83	No data available
Vitamin B12	3.57	No data available
Adenine (6-Aminopurine)	-0.1	No data available
Thiazolium, 3-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-5-(2-hydroxyethyl)-4-methyl- chloride, monohydrochloride	-3.04	No data available
Adenosine 5'-(trihydrogen diphosphate), P'.fwdarw.5'-ester with 3-(aminocarbonyl)-1-.beta.-D-ribofuranosyl pyridinium, inner salt	-4	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

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

ADG

Not regulated

Component	Hazchem Code
Iron(III) nitrate nonahydrate 7782-61-8 (Trace)	2X
Hydrogen chloride 7647-01-0 (Trace)	2RE 2R

IATA

Not regulated

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
Amphotericin B - 1397-89-3	Schedule 4 listed - present
Iron(III) nitrate nonahydrate - 7782-61-8	<p>Schedule 2 listed</p> <p>Schedule 4 listed - in injectable preparations for human use</p> <p>Schedule 5 listed - for the treatment of animals except up to 1% of Iron oxides when present as an excipient; in preparations for injection except in preparations containing $\leq 0.1\%$ of Iron</p> <p>Schedule 5 listed - for the treatment of animals except up to 1% of Iron oxides when present as an excipient; in other preparations except in liquid or gel preparations containing $\leq 0.1\%$ of Iron, or in animal feeds or feed premixes</p> <p>Schedule 5 listed - for use as agricultural chemicals except in preparations containing $\leq 4\%$ of Iron</p> <p>Schedule 6 listed - except up to 1% of Iron oxides when present as an excipient. For the treatment of animals except: when included in Schedule 5, in liquid or gel preparations containing $\leq 0.1\%$ of Iron, or in animal feeds or feed premixes</p>

Hydrogen chloride - 7647-01-0	Schedule 5 listed - except its salts and derivatives; in preparations except: in preparations containing $\leq 0.5\%$ of Hydrochloric acid, or for therapeutic use Schedule 6 listed - except its salts and derivatives; except: when included in Schedule 5, in preparations for therapeutic use, or in preparations containing $\leq 0.5\%$ of Hydrochloric acid
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Australian Industrial Chemicals Introduction Scheme (AICIS)

Component	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Water - 7732-18-5	Present	-
Calcium chloride, dihydrate - 10035-04-8	Present	-
Agar - 9002-18-0	Present	-
Yeast, ext. - 8013-01-2	Present	-
Urea - 57-13-6	Present	-
Glucose - 50-99-7	Present	-
Amphotericin B - 1397-89-3	Present	-
Vitamin B12 - 68-19-9	Present	-
Adenine (6-Aminopurine) - 73-24-5	Present	-
6H-Purin-6-one, 2-amino-1,7-dihydro-, monohydrochloride - 635-39-2	Present	-
p-Aminobenzoic acid - 150-13-0	Present	-
Thiazolium, 3-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-4-methyl-5-(4,6,6-trihydroxy-3,5-dioxo-4,6-diphosphahex-1-yl)-, chloride, P,P'-dioxide - 154-87-0	Present	-
Iron(III) nitrate nonahydrate - 7782-61-8	Present	-
Thiazolium, 3-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-5-(2-hydroxyethyl)-4-methyl- chloride, monohydrochloride - 67-03-8	Present	-
Adenosine 5'-(trihydrogen diphosphate), P'.fwdarw.5'-ester with 3-(aminocarbonyl)-1-.beta.-D-ribofuranosyl pyridinium, inner salt - 53-84-9	Present	-
Hydrogen chloride - 7647-01-0	Present	-
Manganese sulfate monohydrate - 10034-96-5	Present	-
Cysteine hydrochloride, L-(+)-, monohydrate - 7048-04-6	Present	-

Australian - Illicit Drug Precursors/Reagents Substance List

This product contains one or more substance(s) on the Illicit Drug Precursors/Reagents list. Verify requirements related to using, handling and storing these substances.

Chemicals of Security Concern

This product contains one or more substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern

Component	Australian - Illicit Drug Precursors/Reagents Substance List	Chemicals of Security Concern
Hydrogen chloride - 7647-01-0	Category 3	Listed in Appendix A

Legend

Category 3 - Chemicals and apparatus that may be used in the illicit production of drugs. Purchases from this list should alert companies or organizations to seek further indicators of any suspicious orders or enquiries. No official reporting is required for items on this list unless considered warranted

Chemicals of Security Concern - for further information see <http://www.chemicalsecurity.gov.au/securityconcerns>

National pollutant inventory Subject to reporting requirements

Component	National pollutant inventory
Hydrogen chloride - 7647-01-0	10 tonne/yr. Threshold category 1

	400 tonne/yr. Threshold category 2a 1 tonne/h. Threshold category 2a 2000 tonne/yr. Threshold category 2b 60000 MWH. Threshold category 2b 20 MW. Threshold category 2b
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Prohibition or notification/licensing requirements

Shown below are details of specific prohibition/notifications or licensing 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
Water	X	X	231-791-2	-	X	X	-	X	X		X	KE-35400
Calcium chloride, dihydrate	X	X	-	-	-	-	-	X	X	X	X	-
Agar	X	X	232-658-1	-	X	X	-	X	-		X	KE-00275
Yeast, ext.	X	X	232-387-9	-	X	X	-	X	-		X	KE-05-1355
Urea	X	X	200-315-5	-	X	X	-	X	X	X	X	KE-35144
Penicillin G potassium	-	X	204-038-0	-	X	X	-	X	X		-	KE-11721
Glucose	X	X	200-075-1	-	X	X	-	X	X	X	X	KE-17727
Amphotericin B	X	X	215-742-2	-	-	-	-	X	X		X	-
Vitamin B12	X	X	200-680-0	-	X	X	-	X	-	X	X	KE-11218
Adenine (6-Aminopurine)	X	X	200-796-1	-	X	X	-	X	X	X	X	KE-29916
6H-Purin-6-one, 2-amino-1,7-dihydro-, monohydrochloride	X	X	211-235-5	-	X	-	X	-	-		X	-
p-Aminobenzoic acid	X	X	205-753-0	-	X	X	-	X	X	X	X	KE-01199
Thiazolium, 3-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-4-methyl-5-(4,6,6-trihydroxy-3,5-dioxo-4,6-diphosphahex-1-yl)-, chloride, P,P'-dioxide	X	X	205-836-1	-	X	-	X	-	-		X	KE-01484
Iron(III) nitrate nonahydrate	X	X	-	-	-	-	-	X	X		X	-
Thiazolium, 3-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-5-(2-hydroxyethyl)-4-methyl- chloride, monohydrochloride	X	X	200-641-8	-	X	X	-	X	X	X	X	KE-01482
Adenosine 5'-(trihydrogen diphosphate), P'.fwdarw.5'-ester with 3-(aminocarbonyl)-1-beta.-D-ribofuranosylpyridinium, inner salt	X	X	200-184-4	-	X	X	-	-	-		X	KE-25879
Hydrogen chloride	X	X	231-595-7	-	X	X	-	X	X	X	X	KE-20189
Manganese sulfate monohydrate	X	X	-	-	-	-	-	X	X	X	X	-
Cysteine hydrochloride, L-(+)-, monohydrate	X	X	-	-	-	-	-	X	X		X	KE-01430
Phenol, 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bis-, S,S-dioxide, monosodium salt	-	X	252-057-8	-	X	X	-	X	-		X	KE-02749

Legend: X - Listed. '-' - Not Listed. XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the

TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B)). **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 disposal

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
Hydrogen chloride - 7647-01-0	Annex I - Y34	Y34 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
Water	7732-18-5	Listed	Not applicable	Not applicable	Not applicable
Calcium chloride, dihydrate	10035-04-8	Not applicable	Not applicable	Not applicable	Not applicable
Agar	9002-18-0	Not applicable	Not applicable	Not applicable	Not applicable
Yeast, ext.	8013-01-2	Not applicable	Not applicable	Not applicable	Not applicable
HORSE SERUM	RR-36477-2	Not applicable	Not applicable	Not applicable	Not applicable
Urea	57-13-6	Listed	Not applicable	Not applicable	Not applicable
Penicillin G potassium	113-98-4	Listed	Not applicable	Not applicable	Not applicable
Glucose	50-99-7	Listed	Not applicable	Not applicable	Not applicable
Amphotericin B	1397-89-3	Not applicable	Not applicable	Not applicable	Not applicable
Vitamin B12	68-19-9	Not applicable	Not applicable	Not applicable	Not applicable
L-Glutamine	32640-56-5	Not applicable	Not applicable	Not applicable	Not applicable
Adenine (6-Aminopurine)	73-24-5	Not applicable	Not applicable	Not applicable	Not applicable
6H-Purin-6-one, 2-amino-1,7-dihydro-, monohydrochloride	635-39-2	Not applicable	Not applicable	Not applicable	Not applicable
p-Aminobenzoic acid	150-13-0	Not applicable	Not applicable	Not applicable	Not applicable
Thiazolium, 3-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-4-methyl-5-(4,6,6-trihydroxy-3,5-dioxo-4,6-diposphahex-1-yl)-, chloride, P,P'-dioxide	154-87-0	Not applicable	Not applicable	Not applicable	Not applicable
Iron(III) nitrate nonahydrate	7782-61-8	Not applicable	Not applicable	Not applicable	Not applicable
Thiazolium, 3-[(4-amino-2-methyl-5-pyrimidinyl)methyl]-5-(2-hydroxyethyl)-4-methyl- chloride, monohydrochloride	67-03-8	Not applicable	Not applicable	Not applicable	Not applicable
Adenosine 5'-(trihydrogen diphosphate), P'.fwdarw.5'-ester with 3-(aminocarbonyl)-1-.beta.-D-r ibofuranosylpyridinium, inner salt	53-84-9	Not applicable	Not applicable	Not applicable	Not applicable
Hydrogen chloride	7647-01-0	Listed	Not applicable	25 tonne	250 tonne
Manganese sulfate monohydrate	10034-96-5	Not applicable	Not applicable	Not applicable	Not applicable
Cysteine hydrochloride, L-(+)-,	7048-04-6	Not applicable	Not applicable	Not applicable	Not applicable

monohydrate					
Tryptic Soy Broth	NA	Not applicable	Not applicable	Not applicable	Not applicable
Phenol, 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bis-, S,S-dioxide, monosodium salt	34487-61-1	Not applicable	Not applicable	Not applicable	Not applicable

Authorisation/Restrictions according to EU REACH

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Calcium chloride, dihydrate	-	Use restricted. See item 75. (see link for restriction details)	-
p-Aminobenzoic acid	-	Use restricted. See item 75. (see link for restriction details)	-
Hydrogen chloride	-	Use restricted. See item 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/NDL - 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
PNEC - Predicted No Effect Concentration
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	On basis of test data
Health Hazards	Calculation method
Environmental hazards	Calculation method

Training Advice

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

Revision Date 05-Jul-2023
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

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End of Safety Data Sheet