

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

Product Identifier

Perihalan Produk:

Product Description:

Cat No. :

M4RT Transport Medium

M4RT Transport Medium

EB1348B, EB1348I, EB1367, R12505, R12506, R12552, R12565, R12566, R12567, R12575, R12576, R12578, R12587, R12588, R12591, R12592, R12611, R12617, R12618, R12619, R12620, R12621, R12622, R12625, R12626, R12629, R12630, R12631, R12632, R12687, R12688, R12699, R12708, R12593, R12596, R12700, R12701, R12705, R12709, R12720, R12722, R12725, R12900, R12901, R12950, R12951, R12952, SK01360, SK01361, 444079

Relevant identified uses of the substance or mixture and uses advised against

Recommended Use

Laboratory chemicals.

Uses advised against

No Information available

Details of the supplier of the safety data sheet

Company

Thermo Scientific Microbiology Sdn Bhd
No.6, Jalan TTC 6, Taman Teknologi Cheng,
Cheng, 75250 Melaka, Malaysia
+606 334 0975 .

Supplier

Remel
12076 Santa Fe Drive Lenexa,
KS 66215 United States
Telephone: 1-800-255-6730
Fax:1-800-621-8251

E-mail address

mbd-sds@thermofisher.com

Emergency Telephone Number

(603) 5122 8888
CHEMTREC Malaysia **1-800-815-308** (Malay)
CHEMTREC Malaysia (Kuala Lumpur) **+(60)-327884561** (Malay)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the substance or mixture

Label Elements

Hazard Statements

Precautionary Statements

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Other Hazards

This product does not contain any known or suspected endocrine disruptors

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No	Weight %
Water	7732-18-5	92.14
Gelatin	9000-70-8	0.37
Albumins, blood serum	9048-46-8	0.46
Magnesium sulfate	7487-88-9	Trace
Phenol, 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bis-, S,S-dioxide, monosodium salt	34487-61-1	Trace
Sucrose	57-50-1	6.32
N-[2-Hydroxyethyl]piperazine-N-[2-ethanesulfonic hemisodium salt	103404-87-1	0.55
Potassium chloride	7447-40-7	Trace
L-Glutamic acid, hydrochloride	138-15-8	Trace
Calcium chloride	10043-52-4	Trace
Amphotericin B	1397-89-3	Trace
Gentamicin, sulfate (salt)	1405-41-0	Trace

SECTION 4: FIRST AID MEASURES

Description of first aid measures

Eye Contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Ingestion

Clean mouth with water and drink afterwards plenty of water.

Inhalation

Remove to fresh air.

Self-Protection of the First Aider

No special precautions required.

Most important symptoms and effects, both acute and delayed

No information available.

Indication of any immediate medical attention and special treatment needed

Notes to Physician

Treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

Extinguishing media

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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Special hazards arising from the substance or mixture

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

Hazardous Combustion Products

None under normal use conditions.

Advice 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

Personal Precautions, Protective Equipment and Emergency Procedures

Ensure adequate ventilation.

Environmental precautions

See Section 12 for additional Ecological Information.

Methods and Material for Containment and Cleaning Up

Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

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.

Specific End Uses

Use in laboratories.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Component	Malaysia	ACGIH TLV	OSHA PEL
Sucrose		TWA: 10 mg/m ³	(Vacated) TWA: 15 mg/m ³ (Vacated) TWA: 5 mg/m ³ TWA: 15 mg/m ³ TWA: 5 mg/m ³

Component	European Union	The United Kingdom	Germany
Sucrose		STEL: 20 mg/m ³ 15 min TWA: 10 mg/m ³ 8 hr	

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Exposure Controls

Engineering Measures

None under normal use conditions.

Personal protective equipment

Eye Protection

Wear safety glasses with side shields (or goggles)

Hand Protection

Protective gloves

Skin and body protection

Long sleeved clothing

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.

Respiratory Protection

No protective equipment is needed under normal use conditions

Recommended Filter type:

Particle filter

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

Liquid

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)

Not applicable

Liquid

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

Not applicable

Liquid

Water Solubility

No information available

Solubility in other solvents

No information available

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Partition Coefficient (n-octanol/water)

Component	log Pow
Sucrose	-3.67

Autoignition Temperature	No data available
Decomposition Temperature	No data available
Viscosity	No data available
Explosive Properties	No information available
Oxidizing Properties	No information available

SECTION 10: STABILITY AND REACTIVITY

Reactivity

None known, based on information available.

Chemical Stability

Stable under normal conditions.

Possibility of Hazardous Reactions

Hazardous Polymerization	Hazardous polymerization does not occur.
Hazardous Reactions	None under normal processing.

Conditions to Avoid

None known.

Incompatible Materials

None known.

Hazardous Decomposition Products

None under normal use conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects

Acute Toxicity

Toxicology data for the components

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Water	-	-	-
Sucrose	LD50 = 29700 mg/kg (Rat)		

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Potassium chloride	LD50 = 2600 mg/kg (Rat)		
Calcium chloride	2301 mg/kg (Rat)	LD50 > 5000 mg/kg (Rabbit)	
Amphotericin B	LD50 > 5 g/kg (Rat)		
Gentamicin, sulfate (salt)	>5 g/kg (Rat)		

Chronic Toxicity

Carcinogenicity

There are no known carcinogenic chemicals in this product

Legend:

X - Listed 'I' - 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))

Sensitization

No information available

Mutagenic Effects

No information available

Reproductive Effects

No information available

Developmental Effects

No information available

Target Organs

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
Magnesium sulfate	LC50: 2610 - 3080 mg/L, 96h static (Pimephales promelas)	EC50: 266.4 - 417.3 mg/L, 48h Static (Daphnia magna)	EC50: = 2700 mg/L, 72h (Desmodesmus subspicatus)	= 84000 mg/L EC50 Photobacterium phosphoreum 30 min
Potassium chloride	Lepomis macrochirus: LC50: 1060 mg/L /96h Pimephales promelas: LC50: 750 - 1020 mg/L /96h	EC50: 825 mg/L/48h	EC50: 2500 mg/L/72h	
Calcium chloride	Lepomis macrochirus: LC50: 10650 mg/L/96h	EC50: 52 mg/L/48h		

Persistence and degradability

No information available

Bioaccumulative potential

No information available

Component	log Pow	Bioconcentration factor (BCF)
Sucrose	-3.67	No data available

Mobility in soil

No information available. .

Other adverse effects

No information available

SECTION 13: DISPOSAL CONSIDERATIONS

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Waste treatment methods

Waste from Residues/Unused Products

Dispose of in accordance with local regulations

Contaminated Packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

Not regulated

Road and Rail Transport

Not regulated

IATA

Not regulated

Special Precautions for User

No special precautions required

SECTION 15: REGULATORY INFORMATION

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

International Inventories

X = listed

Component	EINECS	TSCA	DSL	PICCS	ENCS	ISHL	IECSC	AICS	KECL
Water	231-791-2	X	X	X	X		X	X	KE-35400
Gelatin	-	X	X	X	X	X	X	X	KE-17574
Albumins, blood serum	-	X	X	X	-		X	X	KE-05-0011
Magnesium sulfate	-	X	X	X	X	X	X	X	KE-22752
Phenol, 4,4'-(3H-2,1-benzoxathiol-3-ylidene)bis-, S,S-dioxide, monosodium salt	252-057-8	X	X	X	-		X	-	KE-02749
Sucrose	-	X	X	X	-	X	X	X	KE-17258
N-[2-Hydroxyethyl]piperazine-N-[2-ethanesulfonic hemisodium salt	-	-	-	-	-		X	-	-
Potassium chloride	-	X	X	X	X	X	X	X	KE-29086
L-Glutamic acid, hydrochloride	205-315-9	X	X	X	-		X	X	KE-17775
Calcium chloride	233-140-8	X	X	X	X	X	X	X	KE-04496
Amphotericin B	215-742-2	-	-	X	X		X	X	-
Gentamicin, sulfate (salt)	215-778-9	-	-	X	X	X	X	-	KE-17593

National Regulations

Persistent Organic Pollutant
Ozone Depletion Potential

This product does not contain any known or suspected substance
This product does not contain any known or suspected substance

SECTION 16: OTHER INFORMATION

Legend

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CAS - Chemical Abstracts Service

EINECS/ELINCS - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

ENCS - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

RPE - Respiratory Protective Equipment

LC50 - Lethal Concentration 50%

POW - Partition coefficient Octanol:Water

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

ADR - European Agreement Concerning the International Carriage of Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate

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

Revision Date

29-Mar-2023

Revision Summary

Update to CLP Format.

In accordance with local and national regulations: Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

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