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Version 1

Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

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

Product Identifier

Perihalan Produk: M4RT Transport Medium
Product Description: M4RT Transport Medium

Cat No.: 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 .

SupplierOxoid Ltd.RemelWade Road

Santa Fe Trail Drive, KS 66215: Basingstoke, Hants, UK

1-80-255-6730: 1-800-621-8251. RG24 8PW

Telephone: +44 (0) 1256 841144

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**

C	lassi	ficat	tion	of	the	sub	ostar	nce	or	mixt	ure

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	34487-61-1	Trace
salt		
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**

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

Component	European Union	The United Kingdom	Germany
Sucrose		STEL: 20 mg/m <sup>3</sup> 15 min	
		TWA: 10 mg/m <sup>3</sup> 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

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/RangeNo data availableSoftening PointNo data availableBoiling Point/RangeNo 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

Specific Gravity / Density No data available

Bulk Density Not applicable Liquid

Water Solubility
Solubility
No information available
No information available

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(Air = 1.0)

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Partition Coefficient (n-octanol/water)

Component log Pow Sucrose -3.67

Autoignition Temperature Decomposition Temperature

Viscosity
Explosive Properties
Oxidizing Properties

No data available
No data available
No data available
No information available
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 '-' - 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)

SensitizationNo information availableMutagenic EffectsNo information availableReproductive EffectsNo information availableDevelopmental EffectsNo information availableTarget OrgansNo information available

## **SECTION 12: ECOLOGICAL INFORMATION**

<u>Ecotoxicity effects</u>

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

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	Х	Х	Х	Χ		Х	Х	KE-35400
Gelatin	-	Х	Х	Х	Χ	Χ	Х	Χ	KE-17574
Albumins, blood serum	-	X	Х	X	-		Х	Х	KE-05-0011
Magnesium sulfate	=	Х	Х	Х	Χ	Х	Х	Х	KE-22752
Phenol, 4,4'-(3H-2,1-benzoxathiol-3-yliden e)bis-, S,S-dioxide, monosodium salt	252-057-8	Х	Х	X	1		X	-	KE-02749
Sucrose	=	Х	Х	Х	-	X	Х	Х	KE-17258
N-[2-Hydroxyethyl]piperazine-N-[2- ethanesulfonic hemisodium salt	-	-	-	-	1		Х	-	-
Potassium chloride	-	X	X	X	X	X	Χ	Х	KE-29086
L-Glutamic acid, hydrochloride	205-315-9	Х	Х	Х	-		Х	Х	KE-17775
Calcium chloride	233-140-8	Х	Х	Х	Χ	Χ	Х	Χ	KE-04496
Amphotericin B	215-742-2	-	-	Х	Х		Х	Х	-
Gentamicin, sulfate (salt)	215-778-9	-	-	Х	X	X	Χ	-	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

Inventory

Substances List

**CAS** - Chemical Abstracts Service

WEL - Workplace Exposure Limit

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic 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

TWA - Time Weighted Average

**ACGIH** - American Conference of Governmental Industrial Hygienists IARC - International Agency for Research on Cancer

RPE - Respiratory Protective Equipment LD50 - Lethal Dose 50%

LC50 - Lethal Concentration 50% EC50 - Effective Concentration 50% POW - Partition coefficient Octanol:Water

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

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

**ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

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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** 28-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

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**End of Safety Data Sheet** 

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