

SAFETY DATA SHEET

New Zealand

Section 1. Identification

Product name

RPMI-1640, Autoclavable, without L-Glutamine or Sodium Bicarbonate

Catalogue Number SH30328.02

Powder

Not available. Other means of identification

Identified uses

Product type

Supplier

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Emergency telephone number

111

Section 2. Hazards identification

HSNO Classification 6.1 - ACUTE TOXICITY (oral) - Category E

6.3 - SKIN IRRITATION - Category B

6.4 - EYE IRRITATION - Category A (Irritant)

9.3 - TERRESTRIAL VERTEBRATE ECOTOXICITY - Category C

Percentage of the mixture consisting of ingredient(s) of unknown acute oral toxicity: 1.1% Percentage of the mixture consisting of ingredient(s) of unknown acute dermal toxicity: 22.9% Percentage of the mixture consisting of ingredient(s) of unknown acute inhalation toxicity: 22.9%

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic

environment: 22 9%

This material is classified as hazardous according to criteria in the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001 and has been classified according to the Hazardous Substances (Classifications) Regulations 2001.

GHS label elements

Signal word Warning

May be harmful if swallowed. Hazard statements Causes mild skin irritation.

Causes serious eye irritation Harmful to terrestrial vertebrates.

Precautionary statements

Article Number 29181793 Page: 1/8 Prevention Wear eye or face protection. Avoid release to the environment. Wash thoroughly after handling.

If skin irritation occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for Response

several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Call a POISON CENTER or doctor/physician if you

feel unwell.

Storage Not applicable.

Disposal Dispose of contents and container in accordance with all local, regional, national and international

regulations.

Symbol



Other hazards which do not result in classification

May form explosible dust-air mixture if dispersed

Section 3. Composition/information on ingredients

Substance/mixture Mixture Other means of identification Not available

CAS number/other identifiers

CAS number Not applicable. EC number Mixture. Product code SH30328.02

Ingredient name	%	CAS number
sodium chloride	<59	7647-14-5
disodium hydrogenorthophosphate	<7.9	7558-79-4
potassium chloride	<4	7447-40-7
Nitric acid, calcium salt, tetrahydrate	<1.1	13477-34-4

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing,

> if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under

medical surveillance for 48 hours.

Ingestion Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest

in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention

immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue

to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe.

Wash clothing before reuse. Clean shoes thoroughly before reuse.

Eye contact Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check

for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical

attention.

Most important symptoms/effects, acute and delayed

Potential acute health effects

Inhalation Exposure to airborne concentrations above statutory or recommended exposure limits may cause

irritation of the nose, throat and lungs.

Ingestion May be harmful if swallowed. Skin contact Causes mild skin irritation. Eye contact Causes serious eye irritation.

Over-exposure signs/symptoms

Article Number 29181793 Page: 2/8 Inhalation Adverse symptoms may include the following:

respiratory tract irritation

coughing

Ingestion No specific data.

Skin Adverse symptoms may include the following:

irritation redness

Adverse symptoms may include the following: Eves

pain or irritation watering redness

Indication of immediate medical attention and special treatment needed, if necessary

Not available. Specific treatments

Notes to physician In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed

person may need to be kept under medical surveillance for 48 hours

Protection of first-aiders No action shall be taken involving any personal risk or without suitable training. It may be

dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media

Suitable Use dry chemical powder. Not suitable Do not use water jet.

Specific hazards arising from the May form explosible dust-air mixture if dispersed.

chemical

Decomposition products may include the following materials:

Hazardous thermal decomposition products

carbon dioxide carbon monoxide nitrogen oxides phosphorus oxides halogenated compounds metal oxide/oxides

Hazchem code

Special precautions for fire-

fiahters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for

fire-fighters

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus

(SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency

procedures

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).

Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and material for containment and cleaning up

Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled Small spill

waste container. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Avoid dust generation. Using a vacuum with HEPA filter will reduce

dust dispersal. Place spilled material in a designated, labeled waste container.

Large spill Move containers from spill area. Approach the release from upwind. Prevent entry into sewers,

water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Avoid creating dusty conditions and prevent wind dispersal. Use spark-proof tools and explosion-proof equipment. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a

HEPA filter and place in a closed, labeled waste container.

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Section 7. Handling and storage

Precautions for safe handling

Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Empty containers retain product residue and can be hazardous. Do not reuse container.

Conditions for safe storage, including any incompatibilities

Store between the following temperatures: 2 to 8°C (35.6 to 46.4°F). Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

None

Appropriate engineering controls

Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Respiratory protection

Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Eye protection

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles. If operating conditions cause high dust concentrations to be produced, use dust goggles.

Skin protection

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Section 9. Physical and chemical properties

Appearance

Physical state Solid. [Powder.]
Colour Not available.
Odour Not available.
Odour threshold Not available.
pH Not available.
Melting point Not available.
Boiling point Not available.

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Flash point Not available. **Burning rate** Not available Not available. **Burning time Evaporation rate** Not available. Flammability (solid, gas) Not available. Lower and upper explosive Not available.

(flammable) limits

Not available. Vapour pressure Vapour density Not available. Relative density Not available. Solubility Not available. Solubility in water Not available. Not available. Partition coefficient: n-octanol/

water

Auto-ignition temperature Not available. **Decomposition temperature** Not available. SADT Not available. Viscosity Not available. Flow time (ISO 2431) Not available

Aerosol product

Type of aerosol Not applicable. Heat of combustion Not available. Ignition distance Not applicable. **Enclosed space ignition - Time** Not applicable. equivalent

Enclosed space ignition -

Deflagration density

Not applicable.

Flame height Not applicable. Flame duration Not applicable.

Section 10. Stability and reactivity

Chemical stability The product is stable.

Possibility of hazardous

reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame).

Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate

static electricity during transfer by earthing and bonding containers and equipment before

transferring material. Prevent dust accumulation. Reactive or incompatible with the following materials: Incompatible materials

oxidizing materials

Hazardous decomposition

products

Under normal conditions of storage and use, hazardous decomposition products should not be

produced.

Section 11. Toxicological information

Information on likely routes of exposure

Inhalation Exposure to airborne concentrations above statutory or recommended exposure limits may cause

irritation of the nose, throat and lungs.

Ingestion May be harmful if swallowed Skin contact Causes mild skin irritation. Eye contact Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation Adverse symptoms may include the following:

respiratory tract irritation

coughing

Ingestion No specific data.

Skin contact Adverse symptoms may include the following:

irritation redness

Article Number 29181793 Page: 5/8 **Eye contact** Adverse symptoms may include the following:

pain or irritation watering redness

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
disodium hydrogenorthophosphate	LD50 Oral	Rat	17000 mg/kg	-
potassium chloride	LD50 Oral	Rat - Male	2600 mg/kg	-
Nitric acid, calcium salt, tetrahydrate	LD50 Oral	Rat	3900 mg/kg	-

Irritation/Corrosion

Not available.

Sensitisation

Not available.

Potential chronic health effects

General No known significant effects or critical hazards.

Inhalation Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Ingestion No known significant effects or critical hazards. Skin contact No known significant effects or critical hazards. Eye contact No known significant effects or critical hazards. Carcinogenicity No known significant effects or critical hazards. Mutagenicity No known significant effects or critical hazards. Teratogenicity No known significant effects or critical hazards. **Developmental effects** No known significant effects or critical hazards. Fertility effects No known significant effects or critical hazards.

Chronic toxicity

Not available.

Carcinogenicity

Not available.

Mutagenicity

Not available.

Teratogenicity

Not available.

Reproductive toxicity

Not available.

Specific target organ toxicity

Not available.

Aspiration hazard

Not available.

Numerical measures of toxicity

Acute toxicity estimates

RouteOral

ATE value
3764.23 mg/kg

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Section 12. Ecological information

Ecotoxicity

No known significant effects or critical hazards.

Aquatic and terrestrial toxicity

Product/ingredient name	Result	Species	Exposure
sodium chloride	Acute EC50 2430000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
	Acute EC50 519.6 mg/l Fresh water	Crustaceans - Cypris subglobosa	48 hours
	Acute EC50 402.6 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute IC50 6.87 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Acute LC50 1000000 μg/l Fresh water	Fish - Morone saxatilis - Larvae	96 hours
	Chronic LC10 781 mg/l Fresh water	Crustaceans - Hyalella azteca - Juvenile (Fledgling, Hatchling, Weanling)	3 weeks
	Chronic NOEC 6 g/L Fresh water	Aquatic plants - Lemna minor	96 hours
	Chronic NOEC 0.314 g/L Fresh water	Daphnia - Daphnia pulex	21 days
	Chronic NOEC 100 mg/l Fresh water	Fish - Gambusia holbrooki - Adult	8 weeks
disodium	Acute LC50 3580000 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
hydrogenorthophosphate	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1	
potassium chloride	Acute EC50 1337000 µg/l Fresh water	Algae - Navicula seminulum	96 hours
·	Acute EC50 9.24 g/L Fresh water	Algae - Desmodesmus subspicatus	72 hours
	Acute EC50 141.46 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 9.68 mg/l Fresh water	Crustaceans - Pseudosida ramosa - Neonate	48 hours
	Acute LC50 880 mg/l Fresh water	Fish - Pimephales promelas	96 hours
Nitric acid, calcium salt, tetrahydrate	LC50 >98.9 mg/l	Fish	96 hours

Persistence/degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
disodium hydrogenorthophosphate	-5.8	-	low

Mobility in soil

Soil/water partition coefficient (Koc) Not available.

Other adverse effects No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Regulatory information	UN number	Proper shipping I	name	Classes	PG*
New Zealand Class	Not available.	Not available.		Not available.	-
			No.		
IATA Class	Not available.	Not available.		Not available.	-
			-		
			No.		
IMDG Class	Not available.	Not available.		Not available.	-
			No.		

PG*: Packing group

Special precautions for user

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of Marpol and the IBC Code Not available.

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Section 15. Regulatory information

HSNO Approval Number Not available.
HSNO Group Standard Not available.

HSNO Classification 6.1 - ACUTE TOXICITY (oral) - Category E

6.3 - SKIN IRRITATION - Category B 6.4 - EYE IRRITATION - Category A (Irritant)

9.3 - TERRESTRIAL VERTEBRATE ECOTOXICITY - Category C

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

Inventory list

New Zealand All components are listed or exempted.

Australia Not determined.

Europe All components are listed or exempted.

United States Not determined.

Canada inventory Not determined.

China Not determined.

Japan inventory (ENCS): Not determined.

Japan inventory (ISHL): Not determined.

Malaysia Not determined

Section 16. Other information

History

Date of printing15 April 2020Date of issue/ Date of revision24 July 2019Date of previous issue12/28/2015

Version 1

Key to abbreviations ADG = Australian Dangerous Goods

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by

Road

ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified

by the Protocol of 1978. ("Marpol" = marine pollution)

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

UN = United Nations

References Not available.

Indicates information that has changed from previously issued version.

Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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