

Recombinant Human R-spondin 1

Issue date: 06/Oct/2023

Safety Data Sheet

Section 1. Identification of the substance/mixture and of the company/undertaking 1.1 Product identifier: Product name: Recombinant Human R-spondin 1 SDS NO: J2_004_E-1 Product code:J2-004 1.2 Relevant identified uses of the substance or mixture and uses advised against Relevant identified uses of the product: Research and Development 1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier: Medical & Biological Laboratories (MBL) Co., Ltd. Address: 1018-1 Terasawaoka, Ina-shi, Nagano-ken 396-0002, Japan **Division: SDS Support** Telephone number: +81-265-76-1777 e-mail address: sds-support@mbl.co.jp 1.4 Emergency telephone number: +81-265-76-1777 (Monday to Friday, 9 AM to 5 PM JST) Section 2. Hazards identification GHS classification and label elements of the product 2.1 Classification of the substance or mixture Classification according to Hazard Communication Standard - 2012 (29 CFR 1910.1200) Not classified/Classification not possible 2.2 Label elements Labelling according to Hazard Communication Standard - 2012 (29 CFR 1910.1200) No GHS label element No Signal word 2.3 Other hazards The product does not contain any ingredient designated as PBT and/or vPvB. The product does not contain any ingredients designated as Endocrine disrupting properties. Section 3. Composition/information on ingredients

Mixture/Substance selection:

3.2 Mixture

Ingredient name	Content (%)	CAS No.	ECNO	Classification according to REGULATION (EC) No.1272/2008 [CLP]
Recombinant Human R-spondin 1	2.15	-	-	-
Sodium chloride	86.02	7647-14-5	231-598-3	-
potassium chloride	2.15	7447-40-7	231-211-8	-
sodium hydrogen phosphate	7.53	7558-79-4	231-448-7	-
potassium Phosphate Monobasic	2.15	7778-77-0	231-913-4	_

Section 4. First-aid measures

4.1 Descriptions of first-aid measures

General measures

P314-Get medical advice/attention if you feel unwell.

 IF INHALED P304 + P312-Call a POISON CENTER/doctor/physician if you feel unwell. IF ON SKIN (or hair) P302 + P352-Wash with plenty of soap and water. IF IN EYES P305 + P351 + P338-Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF SWALLOWED P301 + P312-Call a POISON CENTER/doctor/physician if you feel unwell. 4.2 Most important symptoms and effects, both acute and delayed Specific information on symptom and effect are unknown. 4.3 Indication of any immediate medical attention and special treatment needed Treat symptomatically.
 Section 5. Fire-fighting measures 5.1 Extinguishing media Suitable extinguishing media Use appropriate extinguishing media suitable for surrounding facilities. 5.2 Specific hazards arising from the substance or mixture Specific hazards arising from the substance or mixture is not available. 5.3 Advice for firefighters Specific fire-fighting measures Evacuate non-essential personnel to safe area. Special protective equipment and precautions for fire-fighters P280A-Wear protective gloves/protective clothing/eye protection/face protection.
 Section 6. Accidental release measures 6.1 Personnel precautions, protective equipment and emergency procedures Stop leak if safe to do so. 6.2 Environmental precautions Prevent spills from entering sewers, watercourses or low areas. 6.3 Methods and materials for containment and cleaning up Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container. Preventive measures for secondary accident P376-Stop leak if safe to do so. Stop leak if you can do it without risk. Prevent entry into waterways, sewers, basements or confined areas.
 Section 7. Handling and storage 7.1 Precautions for safe handling Preventive measures (Exposure Control for handling personnel) P260-Do not breathe dust/fume/gas/mist/vapors/spray. Safety Measures P280A-Wear protective gloves/protective clothing/eye protection/face protection. Advice on general occupational hygiene P264-Wash contaminated parts thoroughly after handling. P270-Do not eat, drink or smoke when using this product. 7.2 Storage Conditions for safe storage P233-Keep container tightly closed.

P235 + P410-Keep cool. Protect from sunlight.

7.3 Specific end use(s)

For the relevant identified use(s)listed in Section 1 the advice mentioned in this section 7 is to be observed.

Section 8. Exposure controls/personal protection

8.1 Control parameters

Adopted value

Adopted value in ACGIH is not available.

OSHA-PEL value is not available.

NIOSH-REL value is not available.

8.2 Exposure controls

Individual protection measures

Hand protection

Wear protective gloves.

Eye protection

Wear eye/face protection.

Skin and body protection

Wear protective clothing.

Section 9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties Physical state: Powder/granule(Lyophilized product) Color: White Odor: None Melting point/Freezing point data is not available. Boiling point or initial boiling point data is not available. Boiling range data is not available. Flammability (gases, liquids and solids) data is not available. Lower and upper explosion limit/flammability limit data is not available. Flash point data is not available. Auto-ignition temperature data is not available. Decomposition temperature data is not available. Self-Accelerating Decomposition Temperature/SADT data is not available. pH: 7.2 - 7.6 (dissolved state) Kinematic viscosity data is not available. Solubility: Solubility in water: Soluble Solubility in solvent data is not available. Solubility as solvent data is not available. n-Octanol/water partition coefficient data is not available. Vapor pressure data is not available. Vapor density data is not available. Density and/or relative density data is not available. Relative vapor density (Air=1) data is not available. Particle characteristics data is not available.

Section 10. Stability and Reactivity

10.1 Reactivity

Reactivity data is not available.

10.2 Chemical stability

Stable under normal storage/handling conditions.

10.3 Possibility of hazardous reactionsPossibility of hazardous reactions data is not available.10.4 Conditions to avoid

Conditions to avoid data is not available.

10.6 Hazardous decomposition products Hazardous decomposition products data is not available.

Section 11. Toxicological Information 11.1 Information on toxicological effects Acute toxicity data is not available. Irritant properties Skin corrosion/irritation data is not available. Serious eye damage/irritation data is not available. Allergenic and sensitizing effects data is not available. Mutagenic effects data is not available. Carcinogenic effects data is not available. Teratogenic effects data is not available. Reproductive toxicity data is not available. Specific target organ toxicity (STOT) STOT-single exposure data is not available. STOT-repeated exposure data is not available. Aspiration hazard data is not available.

Section 12. Ecological Information 12.1 Toxicity Toxicity data is not available. Water solubility (Potassium chloride) soluble (ICSC, 2003) (Sodium hydrogen phosphate) 7.7 g/100 ml (20°C) (ICSC, 2006) (Potassium dihydrogen phosphate) 22 g/100 ml (ICSC, 2005) 12.2 Persistence and degradability Persistence and degradability data is not available. 12.3 Bioaccumulative potential [Data for components of the product] (Potassium chloride) log Kow=0.15 (PHYSPROP DB, 2005) (Sodium hydrogen phosphate) log Pow=-5.8 (ICSC, 2006) 12.4 Mobility in soil Mobility in soil data is not available. 12.5 Results of PBT and vPvB assessment PBT and/or vPvB assessment data is not available. 12.7 Other adverse effects Ozone depleting chemical data is not available.

Section 13. Disposal considerations Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging 13.1 Waste treatment methods P273-Avoid release to the environment.

P501-Dispose of contents/container in accordance with local/national regulation.

Contaminated packing

Dispose of container after using the contents completely.

Section 14. Transport Information UN No., UN CLASS

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

IMDG Code (International Maritime Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

IATA (Dangerous Goods Regulations)

14.1 UN Number or ID Number : Not regulated

14.2 UN Proper Shipping Name : Not regulated

14.3 Class or division (Transport hazard class) : Not regulated

14.4 Packing group : Not regulated

14.5 Environmental hazards

Marine pollutants (yes/no) : no

14.6 Special precautions for user

Special precautions for user is not applicable.

14.7 Maritime transport in bulk according to IMO instruments

MARPOL Annex II – Noxious Liquid Substances

Non Noxious Liquid Substances ; Cat. OS

potassium chloride

MARPOL Annex V - HME (Harmful to the Marine Environment)

Not applicable to Maritime transport in bulk according to IMO instruments.

Section 15. Regulatory Information

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

U.S. Toxic Substances Control Act (TSCA) Inventory

Chemicals listed in TSCA Inventory

potassium chloride; sodium hydrogen phosphate; Sodium chloride; potassium Phosphate Monobasic

Superfund Amendments and Reauthorizations Act (SARA), Title III

This product contains no chemicals subjected to reporting levels established by SARA Title III, Section 313.

California proposition 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

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No chemical safety assessment has been carried out for this product.

Section 16. Other information

References and sources for data

Globally Harmonized System of classification and labelling of chemicals, UN Recommendations on the TRANSPORT OF DANGEROUS GOODS 22nd edit., 2021 UN

IMDG Code, 2020 Edition (Incorporating Amendment 40-20) IATA Dangerous Goods Regulations (64th Edition) 2023 2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT) 2023 TLVs and BEIs. (ACGIH) JIS Z 7252 : 2019 JIS Z 7253 : 2019 2022 Recommendation on TLVs (JSOH) Notification No. 0111-1 (January 11, 2022), Chemical Hazards Control Division, Industrial Safety and Health Department, Labour Standards Bureau, Ministry of Health, Labour and Welfare Supplier's data/information Chemicals safety data management system "GHS Assistant" Version 4.24 (https://www.asahi-ghs.com/) Revision information First edition **General Disclaimer**

This data sheet was created based on the information we currently have and may be revised according to new information. In addition, the precautions apply only to normal handling, and in the case of special handling, please make adequate countermeasure to maintain your safety.

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the products' properties.

The GHS classification data given here is based on current Japan official data (NITE published in 2021).