

Revision date 08-Dec-2023

SAFETY DATA SHEET

Version 2

Section 1: Identification		
Product identifier		
Product name	L-rhamnose	
Product No	B9030	
Other means of identification		
Synonyms	None	
Recommended use of the chemical and restrictions on use		
Recommended use	This product is for research and development only	
Uses advised against	No information available	
Details of the supplier of the safety data sheet		
<u>Supplier</u> New England BioLabs (Australia) Pty Ltd 22/270 Ferntree Gully Road Notting Hill, VIC 3168		
E-mail address	info.au@neb.com	
Emergency telephone number		
Company Phone Number	978-927-5054, 800-632-5227 (toll free)	
National Poisons Centre	0800 764 766 (toll free)	
24 Hour Emergency Phone Number	Chemtrec +65 3163 8374	

Section 2: Hazard identification

GHS Classification

Not classified

Label elements

Hazard statements Not classified

Other hazards which do not result in classification No information available.

Section 3: Composition/information on ingredients

The product contains no substances which at their given concentration, are considered to be hazardous to health

Chemical name	CAS No.	Weight-%
Non-hazardous ingredients	Proprietary	Balance

Section 4: First-aid measures

Description of first aid measures

Inhalation	Remove to fresh air.	
Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.	
Skin contact	Wash skin with soap and water.	
Ingestion	Rinse mouth.	
Most important symptoms and effects, both acute and delayed Symptoms No information available.		
Indication of any immediate medical attention and special treatment needed		
Note to physicians	Treat symptomatically.	
Section 5: Fire-fighting measures		

Suitable extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the

surrounding environment.

Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.

Special exposure hazards in a fire

Specific hazards arising from the No information available. chemical

Protective equipment and precautions for firefighters

Special protective equipment and Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. **precautions for fire-fighters**

Section 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures		
Personal precautions	Ensure adequate ventilation.	
For emergency responders	Use personal protection recommended in Section 8.	
Environmental precautions		
Environmental precautions	See Section 12 for additional Ecological Information.	
Methods and material for containment and cleaning up		
Methods for containment	Prevent further leakage or spillage if safe to do so.	
Methods for cleaning up	Pick up and transfer to properly labeled containers.	
Precautions to prevent secondary hazards		
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.	

Section 7: Handling and storage

Precautions for safe handling		
Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice.	
Conditions for safe storage, including any incompatibilities		
Storage Conditions	Keep containers tightly closed in a dry, cool and well-ventilated place.	
Incompatible materials	None known based on information supplied.	

Section 8: Exposure controls/personal protection

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational

	exposure limits established by the region specific regulatory bodies.	
Biological occupational exposure limits	This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.	
Appropriate engineering controls		
Engineering controls	Showers Eyewash stations Ventilation systems.	
Individual protection measures, such as personal protective equipment		
Eye/face protection	No special protective equipment required.	
Hand protection	No special protective equipment required.	
Skin and body protection	No special protective equipment required.	
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.	
Environmental exposure controls	No information available.	

Section 9: Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Colorless
Color	No information available
Odor	Mild.
Odor threshold	No information available

Drenerty	Values	Remarks • Method
Property		
pH	No data available	None known
Melting point / freezing point	No data available	None known
Initial boiling point and boiling rang		None known
Flash point	No data available	None known
Evaporation rate	No data available	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive	No data available	
limits		
Lower flammability or explosive	No data available	
limits		
Vapor pressure	No data available	None known
Vapor density	No data available	None known
Relative density	No data available	None known
Water solubility	No data available	None known
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Autoignition temperature	No data available	None known
Decomposition temperature		None known
Kinematic viscosity	No data available	None known
Dynamic viscosity	No data available	None known
Explosive properties	No information available.	
Oxidizing properties	No information available.	

Other information	
Softening point	No information available
Molecular weight	No information available
VOC content	No information available
Liquid Density	No information available
Bulk density	No information available
Particle characteristics	No information available

Section 10: Stability and reactivity

Reactivity	
Reactivity	No information available.
Chemical stability	
Stability	Stable under normal conditions.
Explosion data	
Sensitivity to mechanical impact	None.
Sensitivity to static discharge	None.
Possibility of hazardous reactions	
Possibility of hazardous reactions	None under normal processing.
Conditions to avoid	
Conditions to avoid	None known based on information supplied.
Incompatible materials	
Incompatible materials	None known based on information supplied.
Hazardous decomposition products	<u>.</u>

Hazardous decomposition products None known based on information supplied.

Section 11: Toxicological information

Acute toxicity

Information on likely routes of exposure

Product Information

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.
Symptoms	No information available.
Acute toxicity	
Numerical measures of toxicity	

The following values are calculated ATEmix (oral) ATEmix (dermal) ATEmix (inhalation-gas) ATEmix (inhalation-vapor) ATEmix (inhalation-dust/mist)	d based on chapter 3.1 of the GHS document 99,999.00 mg/kg 99,999.00 ppm 99,999.00 mg/l 99,999.00 mg/l
Delayed and immediate effects as v	well as chronic effects from short and long-term exposure
Skin corrosion/irritation	No information available.
Serious eye damage/eye irritation	No information available.
Respiratory or skin sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	No information available.
Reproductive toxicity	No information available.
STOT - single exposure	No information available.
STOT - repeated exposure	No information available.
Aspiration hazard	No information available.
Data used to identify the health effects	Refer to Section 16 for Key literature references and sources for data used to compile the SDS.

Section 12: Ecological information

Ecotoxicity

Aquatic ecotoxicity	
Unknown aquatic toxicity	0 % of the mixture consists of component(s) of unknown hazards to the aquatic environment.
Terrestrial ecotoxicity	There is no data for this product.
Persistence and degradability	No information available.

Bioaccumulative potential	
Bioaccumulation	There is no data for this product.
Mobility in soil	
Mobility	No information available.

Other adverse effects

No information available.

Section 13: Disposal considerations

Waste treatment methods

Waste from residues/unused	Not applicable.
products	Not Hazardous.
Contaminated packaging	Not applicable. Not Hazardous.

Section 14: Transport information

IATA Not regulated

IMDG Not regulated

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information available

Special precautions for user

Please refer to the applicable dangerous goods regulations for additional information

Section 15: Regulatory information

Regulatory information

EPA New Zealand HSNO approval code or group standard	To be determined
National regulations	There are no applicable tolerable exposure limits or environmental exposure limits according to the EPA Controls for Hazardous Substances
Certified handlers, tracking and controlled substance license requirements	Certified handlers are required for some substances. This includes substances requiring a controlled substance license, and most explosives, vertebrates toxic agents, and certain fumigants. Acutely toxic substances which are a Category 1 or 2, such as pesticides also require Certified handlers. Please check the Health and Safety at Work Act 2015 for further information Tracking is required for some highly hazardous substances. These substances need to be under the control of an appropriately trained person or appropriately secured. Please check the Health and Safety at Work Act 2015 for further information Controlled substance licenses are required to possess certain explosives, vertebrate toxic agents and fumigants. See Part 7 of the Health and Safety at Work Regulation 2017 for more information

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories	
NZIoC	Contact supplier for inventory compliance status.
TSCA	Contact supplier for inventory compliance status.
DSL/NDSL	Contact supplier for inventory compliance status.
EINECS/ELINCS	Contact supplier for inventory compliance status.
ENCS	Contact supplier for inventory compliance status.
IECSC	Contact supplier for inventory compliance status.
KECL	Contact supplier for inventory compliance status.
PICCS	Contact supplier for inventory compliance status.
AIIC	Contact supplier for inventory compliance status.

Legend:

NZIOC - New Zealand Inventory of Chemicals

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

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

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

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

Section 16: Other information

Prepared by	Environmental, Health a 978-927-5054	and Safety	
Revision date	08-Dec-2023		
Revision note	SDS is valid 3 years fro	m revision date. Con	tact info@neb.com for latest revision
***Indicates updated data sind	e last publication.		
Key or legend to abbreviation	ons and acronyms used in the s	afety data sheet	
Legend Section 8: EXPOSU	<u>RE CONTROLS/PERSONAL PRO</u>	DTECTION	
· · · · · · · · · · · · · · · · · · ·	e-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling Maximum	limit value	*	Skin designation
C Carcinoge	'n		
Agency for Toxic Substances U.S. Environmental Protection European Food Safety Author EPA (Environmental Protectic Acute Exposure Guideline Lee U.S. Environmental Protection Food Research Journal Hazardous Substance Databa International Uniform Chemica National Institute of Technolog Australia National Industrial C NIOSH (National Institute for National Library of Medicine's National Library of Medicine's National Toxicology Program New Zealand's Chemical Class	n Ágency) vel(s) (AEGL(s)) n Agency Federal Insecticide, Fun n Agency High Production Volume al Information Database (IUCLID) gy and Evaluation (NITE) hemicals Notification and Assess Occupational Safety and Health) ChemID Plus (NLM CIP) PubMed database (NLM PUBME	gicide, and Rodentic Chemicals ment Scheme (NICN D) se (CCID)	IAS)

Organization for Economic Co-operation and Development High Production Volume Chemicals Program Organization for Economic Co-operation and Development Screening Information Data Set World Health Organization

Disclaimer

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End of Safety Data Sheet