



Be Right™

SAFETY DATA SHEET

Issue Date 26-Oct-2018

Revision Date 27-Dec-2018

Version 1.2

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

Product identifier

Product Code(s) 19726

Safety data sheet number M00768

Product Name Lauryl Tryptose Broth Dehydrated

Contains .beta.-D-Lactose, Hydrolyzed protein, Sodium chloride, Dipotassium phosphate

Recommended use of the chemical and restrictions on use

Recommended Use Microbiological testing.

Uses advised against Consumer use

Details of the supplier of the safety data sheet

Manufacturer Address Hach Company P.O. Box 389 Loveland, CO 80539 USA +1(970) 669-3050

Supplier Address Arachem (M) Sdn Bhd 11, Persiaran Industri Taman Periindustrian Sri, Damansara 52200 Kuala Lumpur, Malaysia Tel: 603-62762323

Emergency telephone number

+1 (303) 623-5716 - 24 Hour Service +1 (515)232-2533 - 8am - 4pm CST
Chemtrec 1-800-424-9300

E-mail address seasia@hach.com

Section 2: HAZARDS IDENTIFICATION

GHS Classification

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Hazard statements

Not a hazardous substance or mixture according to the Globally Harmonized System (GHS)

Other Hazards Known

No information available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Family Mixture

Substance

Not applicable

Mixture

Chemical nature

Mixture of organic compounds. Mixture of inorganic salts.

Chemical name	Formula	EC No.	CAS No.	Percent Range	Malaysia ICOP GHS Classification
Sodium chloride	NaCl	231-598-3	7647-14-5	7 - 13%	Not Listed
Dipotassium phosphate	K ₂ HPO ₄	231-834-5	7758-11-4	1 - 5%	Not Listed
Phosphoric acid, potassium salt (1:1)	KH ₂ PO ₄	231-913-4	7778-77-0	1 - 5%	Not Listed

Section 4: FIRST AID MEASURES

Description of necessary first aid measures

General advice

No hazards which require special first aid measures. Use first aid treatment according to the nature of the injury.

Inhalation

Remove to fresh air.

Skin contact

Wash skin with soap and water. In the case of skin irritation or allergic reactions see a physician.

Eye contact

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

Ingestion

Clean mouth with water and drink afterwards plenty of water.

For emergency responders

Most important symptoms/effects, acute and delayed

Symptoms

No information available.

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

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.

Unsuitable Extinguishing Media

No information available

Specific hazards arising from the chemical

Specific hazards arising from the chemical

No information available.

Flammable properties

During a fire, this product decomposes to form toxic gases. Substance does not burn Not classified as flammable according to

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GHS criteria

Explosive properties

Not classified according to GHS criteria.

Hazardous combustion products This material will not burn.

Specific/special fire-fighting measures

Specific/special fire-fighting measures No information available.

Special protective equipment and precautions for fire-fighters

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

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation.

For emergency responders Use personal protective equipment as required.

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.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

Reference to other sections See section 8 for more information.
See section 13 for more information.

Section 7: HANDLING AND STORAGE

Preventive measures for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice.

Precautions for safe handling

General Hygiene Considerations 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 Strong oxidizing agents, strong acids, and strong bases.

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.

Legend See section 16 for terms and abbreviations

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Appropriate engineering controls

Engineering Controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

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.

Hand Protection Wear suitable gloves.

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and body protection No special protective equipment required.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Local authorities should be advised if significant spillages cannot be contained. Do not allow into any sewer, on the ground or into any body of water.

Thermal hazards None under normal processing.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid
Appearance	powder
Color	Tan
Odor	Odorless
Odor threshold	Not applicable

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Molecular weight	Not applicable	
pH	6.8	4% Solution
Melting point/freezing point	No data available	
Boiling point / boiling range	No data available	
Evaporation rate	Not applicable	
Vapor pressure	Not applicable	
Vapor density (air = 1)	Not applicable	
Specific gravity (water = 1 / air = 1)	No data available	
Partition Coefficient (n-octanol/water)	No data available	
Soil Organic Carbon-Water Partition Coefficient	No data available	
Autoignition temperature	No data available	
Decomposition temperature	No data available	
Dynamic viscosity	Not applicable	
Kinematic viscosity	Not applicable	

Solubility(ies)

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Water solubility

<u>Water solubility classification</u>	<u>Water solubility</u>	<u>Water Solubility Temperature</u>
Soluble	> 1000 mg/L	25 °C / 77 °F

Solubility in other solvents

None reported	No information available	No data available	No information available
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Other Information

Metal Corrosivity

Steel Corrosion Rate Not applicable
Aluminum Corrosion Rate Not applicable

Volatile Organic Compounds (VOC) Content

Not applicable

Chemical name	CAS No.	Volatile organic compounds (VOC) content	CAA (Clean Air Act)
Sodium chloride	7647-14-5	No data available	-
Dipotassium phosphate	7758-11-4	No data available	-
Phosphoric acid, potassium salt (1:1)	7778-77-0	No data available	-

Explosive properties

Upper explosion limit Not applicable
Lower explosion limit Not applicable

Flammable properties

Flash point Not applicable

Flammability Limit in Air

Upper flammability limit No data available
Lower flammability limit No data available

Oxidizing properties

No data available.

Bulk density

No data available

Section 10: STABILITY AND REACTIVITY

Reactivity

Not applicable.

Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to Mechanical Impact None
Sensitivity to Static Discharge None.

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Possibility of Hazardous Reactions

Possibility of Hazardous Reactions None under normal processing.

Hazardous polymerization

Hazardous polymerization does not occur.

Conditions to avoid

Conditions to avoid None known based on information supplied.

Incompatible materials

Incompatible materials Strong oxidizing agents, strong acids, and strong bases.

Hazardous Decomposition Products

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

Section 11: TOXICOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Product Information

Inhalation No known effect based on information supplied.

Eye contact No known effect based on information supplied.

Skin contact No known effect based on information supplied.

Ingestion No known effect based on information supplied.

Symptoms No information available.

Acute toxicity

Product Acute Toxicity Data

No data available.

Ingredient Acute Toxicity Data

Test data reported below.

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Sodium chloride (7 - 13%) CAS#: 7647-14-5	Rat LD ₅₀	3000 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)
Dipotassium phosphate (1 - 5%) CAS#: 7758-11-4	Rat LD ₅₀	> 2000 mg/kg	None reported	None reported	ECHA (The European Chemicals Agency)
Phosphoric acid, potassium salt (1:1) (1 - 5%) CAS#: 7778-77-0	Mouse LD ₅₀	1700 mg/kg	None reported	None reported	IUCLID (The International Uniform Chemical Information Database)

Unknown Acute Toxicity

0.0001 % of the mixture consists of ingredient(s) of unknown toxicity.

0.0001 % of the mixture consists of ingredient(s) of unknown acute oral toxicity

0.0001 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity

0.0001 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)

0.0001 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)

0.0001 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)

Acute Toxicity Estimations (ATE)

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	13,081.00
ATEmix (dermal)	No information available
ATEmix (inhalation-dust/mist)	No information available
ATEmix (inhalation-vapor)	No information available
ATEmix (inhalation-gas)	No information available

Skin corrosion/irritation

Based on available data, the classification criteria are not met.

Product Skin Corrosion/Irritation Data

No data available.

Ingredient Skin Corrosion/Irritation Data

No data available.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium chloride (7 - 13%) CAS#: 7647-14-5	Standard Draize Test	Rabbit	500 mg	24 hours	Mild skin irritant	RTECS (Registry of Toxic Effects of Chemical Substances)
Dipotassium phosphate (1 - 5%) CAS#: 7758-11-4	Standard Draize Test	Rabbit	300 mg/kg	24 hours	Not corrosive or irritating to skin	ECHA (The European Chemicals Agency)

Serious eye damage/irritation

Based on available data, the classification criteria are not met.

Product Serious Eye Damage/Eye Irritation Data

No data available.

Ingredient Eye Damage/Eye Irritation Data

No data available.

Chemical name	Test method	Species	Reported dose	Exposure time	Results	Key literature references and sources for data
Sodium chloride (7 - 13%) CAS#: 7647-14-5	Standard Draize Test	Rabbit	100 mg	None reported	Mild eye irritant	RTECS (Registry of Toxic Effects of Chemical Substances)
Dipotassium phosphate (1 - 5%) CAS#: 7758-11-4	Standard Draize Test	Rabbit	0.1 mL	24 hours	Not corrosive or irritating to eyes	ECHA (The European Chemicals Agency)

Respiratory or skin sensitization

Based on available data, the classification criteria are not met.

Product Sensitization Data

No data available.

Ingredient Sensitization Data

No data available.

Chemical name	Test method	Species	Results	Key literature references and
EN / YGHS				

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				sources for data
Dipotassium phosphate (1 - 5%) CAS#: 7758-11-4	Local Lymph Node Assay	Mouse	Not confirmed to be a skin sensitizer	ECHA (The European Chemicals Agency)

STOT - single exposure

Based on available data, the classification criteria are not met.

Product Specific Target Organ Toxicity Single Exposure Data

No data available.

Ingredient Specific Target Organ Toxicity Single Exposure Data

No data available.

STOT - repeated exposure

Based on available data, the classification criteria are not met.

Product Specific Target Organ Toxicity Repeat Dose Data

No data available.

Ingredient Specific Target Organ Toxicity Repeat Exposure Data

No data available.

Carcinogenicity

Based on available data, the classification criteria are not met.

Product Carcinogenicity Data

No data available.

Ingredient Carcinogenicity Data

No data available.

Chemical name	CAS No.	ACGIH	IARC	NTP	OSHA
Sodium chloride	7647-14-5	-	-	-	-
Dipotassium phosphate	7758-11-4	-	-	-	-
Phosphoric acid, potassium salt (1:1)	7778-77-0	-	-	-	-

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)	Does not apply
IARC (International Agency for Research on Cancer)	Does not apply
NTP (National Toxicology Program)	Does not apply
OSHA (Occupational Safety and Health Administration of the US Department of Labor)	Does not apply

Germ cell mutagenicity

Based on available data, the classification criteria are not met.

Product Germ Cell Mutagenicity invitro Data

No data available.

Ingredient Germ Cell Mutagenicity invitro Data

No data available.

Chemical name	Test	Cell Strain	Reported dose	Exposure time	Results	Key literature references and sources for data
Dipotassium phosphate	OECD 471	<i>Salmonella typhimurium</i>	5 mg/plate	None reported	Negative test result for mutagenicity	ECHA (The European

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(1 - 5%) CAS#: 7758-11-4						Chemicals Agency)
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Product Germ Cell Mutagenicity *invivo* Data
 No data available.

Ingredient Germ Cell Mutagenicity *invivo* Data
 No data available.

Reproductive toxicity
 Based on available data, the classification criteria are not met.

Product Reproductive Toxicity Data
 No data available.

Ingredient Reproductive Toxicity Data
 No data available.

Chemical name	Endpoint type	Reported dose	Exposure time	Toxicological effects	Key literature references and sources for data
Dipotassium phosphate (1 - 5%) CAS#: 7758-11-4	Rat NOAEL	1000 mg/kg	Single generation	No reproductive or developmental toxic effects observed	ECHA (The European Chemicals Agency)

Aspiration hazard
 Based on available data, the classification criteria are not met.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Unknown aquatic toxicity 0.0001% of the mixture consists of components(s) of unknown hazards to the aquatic environment.

Product Ecological Data

Aquatic Acute Toxicity
 No data available.

Aquatic Chronic Toxicity
 No data available.

Ingredient Ecological Data

Aquatic Acute Toxicity
 No data available.

Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium chloride (7 - 13%) CAS#: 7647-14-5	96 hours	<i>Lepomis macrochirus</i>	LC ₅₀	5840 mg/L	IUCLID (The International Uniform Chemical Information Database)
Chemical name	Exposure time	Species	Endpoint type	Reported dose	Key literature references and sources for data
Sodium chloride (7 - 13%) CAS#: 7647-14-5	48 Hours	<i>Daphnia magna</i>	EC ₅₀	1661 mg/L	IUCLID (The International Uniform Chemical Information Database)

Aquatic Chronic Toxicity
 No data available.

Persistence and degradability

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Product Biodegradability Data

No data available.

Bioaccumulation

Product Bioaccumulation Data

No data available.

Partition Coefficient (n-octanol/water)

No data available

Mobility

Soil Organic Carbon-Water Partition Coefficient

No data available

Other adverse effects

No information available.

Section 13: DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging

Do not reuse empty containers.

Section 14: TRANSPORT INFORMATION

IMDG

UN/ID no	Not regulated
Hazard Class	Not regulated
Packing Group	Not regulated
Marine pollutant	Not applicable
Special precautions for user	Not applicable

ADR

UN/ID no	Not regulated
Proper shipping name	Not regulated
Hazard Class	Not regulated
Packing Group	Not regulated
Environmental hazard	Not applicable
Special precautions for user	None

IATA

UN/ID no	Not regulated
Hazard Class	Not regulated
Packing Group	Not regulated
Environmental hazard	Not applicable
Special precautions for user	None

Additional information

There is a possibility that this product could be contained in a reagent set or kit composed of various compatible dangerous goods.

If the item is not in a reagent set or kit, the classification given above applies.

If the item is part of a reagent set or kit the classification would change to the following:

UN3316 Chemical Kit, Hazard Class 9, Packing Group II or III.

If the item is not regulated, the Chemical Kit classification does not apply.

Section 15: REGULATORY INFORMATION

Regulatory information

National regulations

Malaysia

GHS-Specification for Classification, Labeling and Formulation of Safety Data Sheet for Chemical Products (MS1804:2008)
Occupational Safety and Health (Classification, Labelling and Safety Data Sheet of Hazardous Chemicals) (CLASS Regulations)
Industry Code of Practice on Chemical and Hazard Communication (ICOP)
Guidance for the Industry on the Notification and Registration Scheme for Environmentally Hazardous Substances in Malaysia (EHSNR Guidance)
See section 8 for national exposure control parameters

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
TCSI	Complies
AICS	Complies
NZIoC	Complies

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

TCSI - Taiwan Chemical Substances Inventory

AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

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

Section 16: OTHER INFORMATION

Key or legend to abbreviations and acronyms used in the safety data sheet

NIOSH IDLH	<i>Immediately Dangerous to Life or Health</i>
ACGIH	ACGIH (American Conference of Governmental Industrial Hygienists)
NDF	<i>no data</i>

Legend - Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

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TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Ceiling Limit Value	MAC	Maximum Allowable Concentration
X	Listed	Vacated	These values have no official status. The only binding levels of contaminants are those listed in the final OSHA PEL. These lists are for reference purposes only. Please note that some reference state regulations of these "liberated" exposure limits in their state regulations.
SKN*	Skin designation	SKN+	Skin sensitization
RSP+	Respiratory sensitization	**	Hazard Designation
C	Carcinogen	R	Reproductive toxicant
M	mutagen		

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Revision Note None

Disclaimer

USER RESPONSIBILITY: Each user should read and understand this information and incorporate it in individual site safety programs in accordance with applicable hazard communication standards and regulations.

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End of Safety Data Sheet