

## Section 1 - Product and Company Information

Product Name LS-TETRASACCHARIDE B  
 Product Number A4689  
 Brand SIGMA  
 Company Sigma-Aldrich Canada, Ltd  
 Address 2149 Winston Park Drive  
 Oakville ON L6H 6J8 CA  
 Technical Phone: 9058299500  
 Fax: 9058299292  
 Emergency Phone: 800-424-9300

## Section 2 - Composition/Information on Ingredient

Substance Name CAS # SARA 313  
 LS-TETRASACCHARIDE B 64003-54-9 No  
 Formula C37H62N2O29  
 Chemical Family Human source material.  
 Synonyms n-acetylneuramin-lacto-n-tetraose b sodium \*  
 LS-Tetrasaccharide a

## Section 3 - Hazards Identification

EMERGENCY OVERVIEW  
 Biohazard.  
 Handle as if capable of transmitting infectious agents.

HMS RATING  
 HEALTH: 0  
 FLAMMABILITY: 0  
 REACTIVITY: 0  
 SPECIAL HAZARD(S): Human Source

NFPA RATING  
 HEALTH: 0  
 FLAMMABILITY: 0  
 REACTIVITY: 0  
 SPECIAL HAZARD(S): Human Source

For additional information on toxicity, please refer to Section 11.

## Section 4 - First Aid Measures

ORAL EXPOSURE  
 If swallowed, wash out mouth with water provided person is conscious. Call a physician immediately.

INHALATION EXPOSURE  
 If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

DERMAL EXPOSURE  
 In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

EYE EXPOSURE  
 In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

## Section 5 - Fire Fighting Measures

FLASH POINT  
 N/A

AUTOIGNITION TEMP  
 N/A

FLAMMABILITY  
 N/A

EXTINGUISHING MEDIA  
 Suitable: Use extinguishing media appropriate to surrounding fire conditions.

FIREFIGHTING  
 Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Specific Hazard(s): Emits toxic fumes under fire conditions.

## Section 6 - Accidental Release Measures

PROCEDURE(S) OF PERSONAL PRECAUTION(S)  
 Wear self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP  
 Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Wash spill site with 10% bleach and ventilate area after material pickup is complete.

## Section 7 - Handling and Storage

HANDLING  
 User Exposure: Avoid inhalation. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

STORAGE  
 Suitable: Keep tightly closed.  
 Store at -20°C

## Section 8 - Exposure Controls / PPE

ENGINEERING CONTROLS  
 Safety shower and eye bath. Mechanical exhaust required.

PERSONAL PROTECTIVE EQUIPMENT  
 Respiratory: Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.

SIGMA - A4689 www.sigma-aldrich.com Page 2

Hand: Compatible chemical-resistant gloves.  
 Eye: Chemical safety goggles.

GENERAL HYGIENE MEASURES  
 Wash thoroughly after handling.

## Section 9 - Physical/Chemical Properties

Appearance Physical State: Solid  
 Property Value At Temperature or Pressure

Molecular Weight 998.9 AMU

pH N/A

BP/BP Range N/A

MP/MP Range N/A

Freezing Point N/A

Vapor Pressure N/A

Vapor Density N/A

Saturated Vapor Conc. N/A

Bulk Density N/A

Odor Threshold N/A

Volatile% N/A

VOC Content N/A

Water Content N/A

Solvent Content N/A

Evaporation Rate N/A

Viscosity N/A

Surface Tension N/A

Partition Coefficient N/A

Decomposition Temp. N/A

Flash Point N/A

Explosion Limits N/A

Flammability N/A

Autoignition Temp N/A

Refractive Index N/A

Optical Rotation N/A

Miscellaneous Data N/A

Solubility N/A

N/A - not available

## Section 10 - Stability and Reactivity

STABILITY  
 Stable: Stable.  
 Materials to Avoid: Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS  
 Hazardous Decomposition Products: Nature of decomposition products not known.

HAZARDOUS POLYMERIZATION  
 Hazardous Polymerization: Will not occur

## Section 11 - Toxicological Information

ROUTE OF EXPOSURE  
 Skin Contact: May cause skin irritation.  
 Skin Absorption: May be harmful if absorbed through the skin.  
 Eye Contact: May cause eye irritation.  
 Inhalation: Material may be irritating to mucous membranes and

SIGMA - A4689 www.sigma-aldrich.com Page 3

upper respiratory tract. May be harmful if inhaled.  
 Ingestion: May be harmful if swallowed.

SIGNS AND SYMPTOMS OF EXPOSURE  
 Potentially biohazardous material.

## Section 12 - Ecological Information

No data available.

## Section 13 - Disposal Considerations

APPROPRIATE METHOD OF DISPOSAL OF SUBSTANCE OR PREPARATION  
 Contact a licensed professional waste disposal service to dispose of this material. Disposal should be made in accordance with existing disposal practices employed for infectious waste at your institution. Observe all federal, state, and local environmental regulations.

## Section 14 - Transport Information

DOT  
 Proper Shipping Name: None  
 Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA  
 Non-Hazardous for Air Transport: Non-hazardous for air transport.

## Section 15 - Regulatory Information

EU ADDITIONAL CLASSIFICATION  
 Symbol of Danger: B  
 Indication of Danger: Biohazard.

US CLASSIFICATION AND LABEL TEXT  
 Indication of Danger: Biohazard.  
 US Statements: Handle as if capable of transmitting infectious agents.

UNITED STATES REGULATORY INFORMATION  
 SARA LISTED: No

CANADA REGULATORY INFORMATION  
 WHMIS Classification: This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.

DSL: No  
 NDSL: No

## Section 16 - Other Information

DISCLAIMER  
 For R&D use only. Not for drug, household or other uses.

WARRANTY  
 The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any

SIGMA - A4689 www.sigma-aldrich.com Page 4

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