

1. IDENTIFICATION	
Product Name ➤	Dendrimer
Supplier Name ➤	Bio-Synthesis, Inc.
Supplier Address ➤	800 Mario Court, Lewisville, TX 75057
Phone Number ➤	1-972-420-8505
Fax Number ➤	1-972-420-0442
Email Address ➤	biosyn@biosyn.com
Web Site ➤	www.biosyn.com
Emergency Telephone Number ➤	1-800-227-0627
Relevant Identified Uses ➤	For research use only, not for human or veterinary use.
Restrictions ➤	For research use only, not for human or veterinary use.

2. HAZARD(S) IDENTIFICATION	
Classification of the Substance or Mixture ➤	The product is not classified according to the Globally Harmonized System (GHS).
Signal Word ➤	None
Pictograms ➤	None

3. COMPOSITION / INFORMATION ON INGREDIENTS			
Chemical Name ➤	Azide-functionalized PAMAM dendrimer		
Common Name and Synonyms ➤	Dendrimer		
Chemical Abstracts Service (CAS#) ➤	None	SARA 313 ➤	None
Formula ➤	Dendrimer		

4. FIRST AID MEASURES	
Oral Exposure ➤	Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.
Inhalation Exposure ➤	Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.
Dermal Exposure ➤	Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.
Eye Exposure ➤	Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.
Description of the Most Important Symptoms or Effects, and Any Symptoms that Are Acute or Delayed ➤	May be harmful by inhalation, ingestion, or skin absorption. May cause eye, skin, or respiratory system irritation. May be irritating to the mucous membrane and upper respiratory tract.
Recommendations for Immediate Medical Care and Special Treatment Needed, When Necessary ➤	Call a physician; seek medical attention.

5. FIRE FIGHTING MEASURES	
Flash Point ➤	No data available.
Auto Ignition Temp ➤	No data available.
Flammability ➤	No data available.
Suitable Extinguishing Equipment ➤	Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray. Use water spray to cool fire-exposed containers.
Not Suitable Extinguishing Equipment ➤	A solid water stream may be inefficient.
Firefighting Protective Equipment ➤	Wear protective clothing to prevent contact with skin and eyes.
Specific Hazard(s) Advice ➤	May emit toxic fumes under fire conditions.

6. ACCIDENTAL RELEASE MEASURES	
Procedure in Case of Leak or Spill ➤	Avoid breathing vapors and provide adequate ventilation.
Procedure(s) of Personal Precaution(s) ➤	As conditions warrant, wear NIOSH approved self-containing breathing apparatus, or respirator, and appropriate personal protections (rubber boots, safety goggles, and heavy rubber gloves).
Methods for Cleaning Up ➤	Contain spill and collect, as appropriate.

7. HANDLING AND STORAGE	
Precautions for Safe Handling ➤	Avoid inhalation of fumes, gases, mists and sprays. Avoid prolonged and repeated exposure.
Safe Storage Requirements ➤	Keep tightly closed. Store in accordance with information listed on the product insert.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION	
Permissible Exposure Limits (PELs) ➤	Not Available
ACGIHs Threshold Limit Values (TLV) ➤	Not Available
Other Exposure Limit(s) ➤	N/A
Engineering Controls ➤	Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below exposure limits.
Eye Protection ➤	Safety glasses.
Face Protection ➤	NIOSH approved respirator, as conditions warrant.
Skin Protection ➤	Wash thoroughly after handling.
Respiratory Protection ➤	NIOSH approved respirator, as conditions warrant.
Hand Protection ➤	Compatible chemical resistant gloves.
Protective Clothing ➤	Laboratory coat.

9. PHYSICAL AND CHEMICAL PROPERTIES	
Physical States ➤	Solid <u>or liquid</u> .
Color ➤	Colorless or white
Appearance and Odor ➤	<u>Odorless</u> lyophilized powder <u>or liquid</u> .
Odor Threshold ➤	Undetermined
pH ➤	Undetermined
Melting Point ➤	Undetermined
Freezing Point ➤	Not Applicable
Initial Boiling Point ➤	Undetermined
Boiling Range ➤	Undetermined
Flash Point ➤	Not Applicable
Evaporation Rate ➤	Undetermined
Flammability (Solid, Gas) ➤	Not Applicable
Upper Flammability or Explosive Limits ➤	Undetermined
Lower Flammability or Explosive Limits ➤	Undetermined
Vapor Pressure ➤	Undetermined
Vapor Density ➤	Undetermined
Relative Density ➤	Undetermined
Solubility ➤	Fully miscible
Partition coefficient: n-octanol / Water ➤	Undetermined
Auto-ignition Temperature ➤	Not Applicable
Decomposition Temperatures ➤	Not Applicable
Viscosity ➤	Not Applicable
10. STABILITY AND REACTIVITY	
Reactivity ➤	No data available.
Stability ➤	Stable if stored in accordance with information listed on the product insert.
Conditions to Avoid ➤	No data available.
Incompatible Materials ➤	Activated carbon. Peroxides, strong acids, strong bases, strong oxidizing agents.
Hazardous Decomposition Products ➤	carbon dioxide, carbon monoxide

11. TOXICOLOGICAL INFORMATION	
Ingredients ➤	Dendrimer
Skin Contact ➤	May cause skin irritation.
Skin Absorption ➤	May be harmful.
Eye Contact ➤	May cause eye irritation.
Inhalation ➤	May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
Ingestion ➤	May be harmful if swallowed.
Additional Toxicological Information ➤	The product is not subject to classification according to the calculation method of the General EU Classification Guidelines.
Target Organs ➤	Not Applicable.
International Agency for Research On Cancer (IARC) ➤	None of the ingredients are listed.
National Toxicology Program (NTP) ➤	None of the ingredients are listed.
OSHA ➤	None of the ingredients are listed.

12. ECOLOGICAL INFORMATION	
Ecotoxicity ➤	Avoid release into the environment.
Persistence / Degradability ➤	Runoff from fire control or dilution water may cause pollution.
Bioaccumulation / Accumulation ➤	No data available.
Mobility in Environment ➤	No data available.

13. DISPOSAL CONSIDERATIONS	
Disposal Instructions ➤	This material must be disposed of in accordance with all local, state, municipal, provincial and federal regulations.

14. TRANSPORT INFORMATION	
Proper Shipping Name Per DOT ➤	None.
Non-Hazardous for Air Transport Per IATA ➤	This substance is considered to be non-hazardous for transport.

15. REGULATORY INFORMATION	
Per EPA SARA (Superfund Amendments and Reauthorization Act of 1986) Lists	
Components ➤	Dendrimer
S.302 (EHS) ➤	Not Hazardous.
S.204 (RQ) ➤	Not Hazardous.
S.313 (TRI) ➤	Not Hazardous.
Per US EPA or State Lists	
CAA HAP ➤	Not Hazardous.
CWA NPDES ➤	Not Hazardous.
TSCA ➤	Not Hazardous.
CA Prop. 65 ➤	Not Hazardous.
Regulatory Information Statement ➤	This SDS was prepared in accordance with 29 CFR 1910.1200 and Regulation EC No. 1272 /2007.

16. OTHER INFORMATION	
<p>Disclaimer ></p>	<p>This information is believed to be accurate and represents the best information currently available to us, but shall be used only as a guide. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. User should make their own investigations to determine the suitability of the information for their particular purposes.</p>

DOCUMENT HISTORY
<p>REV. 00 07/01/17. Converted Material Safety Data Sheet (MSDS) into new Global Harmonization System (GHS) format for Safety Data Sheets (SDSs) in Modular Documentation System.</p>
<p><u>REV. 01 11/07/24. Revised Supplier Address in Section 1. Revised Section 9 as shown with double underlines. Changed DOC ID from BSI-SDS-LAB-100 to BSI-SDS-PTL-110.</u></p>