

1. IDENTIFICATION	
Product Name ➤	Oligonucleotides, oligodeoxynucleic acids, oligoribonucleic acids, unmodified, modified, non-radioactive.
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 ➤	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 ➤	Custom Synthetic Oligonucleotides
Common Name and Synonyms ➤	None
Chemical Abstracts Service (CAS#) ➤	None   SARA 313 ➤   None
Formula ➤	100% <u>Oligonucleotides</u> .

4. FIRST AID MEASURES	
Oral Exposure ➤	If swallowed, wash out mouth with water provided person is conscious. Call a physician.
Inhalation Exposure ➤	If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.
Dermal Exposure ➤	In case of contact, immediately wash skin with soap and copious amounts of water. Call a physician.
Eye Exposure ➤	In case of contact with eyes, flush with copious amounts of water for at least fifteen (15) minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.
Description of the Most Important Symptoms or Effects, and Any Symptoms that Are Acute or Delayed ➤	May cause skin, mouth or eye irritation.
Recommendations for Immediate Medical Care and Special Treatment Needed, When Necessary ➤	Call a physician.

5. FIRE FIGHTING MEASURES	
Flash Point >	N/A
Auto Ignition Temp >	N/A
Flammability >	N/A
Suitable Extinguishing Equipment >	Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.
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 >	Evacuate area.
Procedure(s) of Personal Precaution(s) >	Wear chemical safety goggles and personal protection as needed.
Methods for Cleaning Up >	Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

7. HANDLING AND STORAGE	
Precautions for Safe Handling >	Avoid inhalation of fumes, gases, mists and sprays. Avoid contact with eyes skin and clothing.
Safe Storage Requirements >	Keep tightly closed. Store at -20°C.

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 >	Safety shower and eye bath. Use process enclosures, local exhaust ventilation or other engineering controls to control airborne levels below exposure limits.
Eye Protection >	Safety glasses, as needed.
Face Protection >	Face protection, as needed.
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. Avoid strong acids, strong bases.
Conditions to Avoid ➤	No data available.
Incompatible Materials ➤	Activated carbon.
Hazardous Decomposition Products ➤	Carbon dioxide and carbon monoxide.

11. TOXICOLOGICAL INFORMATION	
<b>Ingredients</b> ➤	100% <u>Oligonucleotides</u>
<b>Skin Contact</b> ➤	May cause skin irritation.
<b>Skin Absorption</b> ➤	May be harmful.
<b>Eye Contact</b> ➤	May cause eye irritation.
<b>Inhalation</b> ➤	May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.
<b>Ingestion</b> ➤	May be harmful if swallowed.
<b>Additional Toxicological Information</b> ➤	The product is not subject to classification according to the calculation method of the General EU Classification Guidelines.
<b>Target Organs</b> ➤	Not Applicable.
<b>International Agency for Research On Cancer (IARC)</b> ➤	None of the ingredients are listed.
<b>National Toxicology Program (NTP)</b> ➤	None of the ingredients are listed.
<b>OSHA</b> ➤	None of the ingredients are listed.

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

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

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

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

**16. OTHER INFORMATION**

	<b>Disclaimer</b> >	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 guarantee of the properties of the product. Bio-Synthesis, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.
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**DOCUMENT HISTORY**

REV. 00 09/15/16. Converted Material Safety Data Sheet (MSDS) into new Global Harmonization System (GHS) format for Safety Data Sheets (SDSs) in Modular Documentation System.
REV. 01 07/10/18. Corrected typographical errors.
REV. 02 11/07/24. Revised Supplier Address in Section 1. Revised Section 9 as shown with double underlines.