

# Material Safety Data Sheet

Vivo-Morpholino Oligomer

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GENE TOOLS, LLC

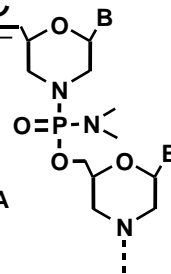
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## Section I: Product Identification

Product Name: Vivo-Morpholino Oligo

Chemical Name: Morpholino Phosphorodiamidate Oligomer Conjugated with *in vivo* Delivery Moiety

Chemical Formula: N/A

CAS #: None assigned

## Section II: Hazardous Ingredients

### Emergency Overview

Caution

The chemical, physical, and toxicological properties of this product have not been thoroughly investigated. Exercise due care.

### HMIS Rating

Health

3

Flammability

0

Reactivity

0

### NFPA Rating

Health

3

Flammability

0

Reactivity

0

## Section III: 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 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 IV: Fire Fighting Measures

Flash Point

Not available

Autoignition Temp

Not available

Flammability

Not available

Extinguishing Media

Suitable

Carbon dioxide, dry chemical powder, or appropriate foam. Water spray

Fire Fighting

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 V: Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill	Evacuate area
Procedure(s) of Personal Precaution(s)	Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves
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.

## Section VI: 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
Storage at or below room temperature	

## Section VII: Exposure Controls/Personal Protection Equipment

Engineering Controls	Mechanical exhaust required
Personal Protective equipment	
Respiratory	Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) respirator.
Other	Wear appropriate government approved respirator, chemical-resistant gloves, safety goggles, other protective clothing.
General Hygiene Measures	Wash thoroughly after handling

## Section VIII: Physical/Chemical Characteristics

Physical State:	Lyophilized solid
Odor:	None
Boiling Point:	Not determined
Vapor Pressure:	Not determined
Vapor Density:	N/A
Solubility:	Soluble in water
Specific Gravity:	Not determined
Evaporation Rate:	Negligible

## Section IX: Stability and Reactivity

Stability	
Stable	stable
Hazardous Decomposition Products	
Hazardous Decomposition Products	Carbon monoxide, carbon dioxide, nitrogen oxides
Hazardous Polymerization	
Hazardous Polymerization	Will not occur

## Section X: Toxicological Information

Route of Exposure	
Skin Contact	May cause skin irritation
Skin Absorption	May be harmful if absorbed through the skin
Inhalation	Material may be irritating to mucous membranes and upper respiratory tract, may be harmful if inhaled.
Ingestion	May be harmful if swallowed
Conditions Aggravated by Exposure	The toxicological properties have not been thoroughly investigated.

## Section XI: Ecological Information

No data available.

## Section XII: Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation	Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.
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## Section XIII: 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 XIV: Regulatory Information

US Classification and Label Text	
US Statements	Caution: The chemical, physical, and toxicological properties of this product have not been thoroughly investigated. Exercise due care.
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 XV: Other Information

The above information is correct to the best of our knowledge. This material is intended for research purposes only and must only be used under the supervision of a person experienced in handling hazardous materials. GENE TOOLS, LLC makes no guarantee of the accuracy or completeness of the information and shall not be held liable for any damage resulting from handling or from contact with the above material.