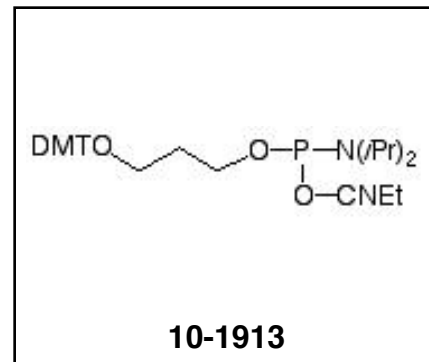


1. Product and Company Identification



Product Code: 10-1913-xx
Product Name: Spacer Phosphoramidite C3
Product Use: For Research Use Only

Manufacturer Information
Company Name: Glen Research LLC
22825 Davis Drive
Sterling, VA 20164 USA
1-703-437-6191
www.glenresearch.com
msds@glenres.com

Phone Number: 1-703-437-6191
Web site address: www.glenresearch.com
Email address: msds@glenres.com
Information in case of emergency
CAS Number: 110894-23-0
Synonyms: 3-(4,4'-Dimethoxytrityloxy)propyl-1-[(2-cyanoethyl)-(N,N-diisopropyl)]-phosphoramidite

2. Hazards Identification

GHS Classification of the substance or mixture
Not a hazardous substance or mixture
Classification according to Regulation (EC) No 1272/2008
GHS Label elements, including precautionary statements
Not a hazardous substance or mixture
Other hazards which do not result in classification
None

3. Composition/Information on Ingredients

Essentially 100% Spacer Phosphoramidite C3

Product Name	CAS #	Concentration	M.W.	Formula
Spacer Phosphoramidite C3	110894-23-0	100 %	578.69	C ₃₃ H ₄₃ N ₂ O ₅ P

Synonyms: 3-(4,4'-Dimethoxytrityloxy)propyl-1-[(2-cyanoethyl)-(N,N-diisopropyl)]-phosphoramidite

The product contains no substance, which at their given concentration, are considered to be hazardous to health.

4. First Aid Measures

Emergency and First Aid Procedures

If inhaled, remove to fresh air.
If not breathing, give artificial respiration.
Get medical attention.

In case of skin contact, immediately wash skin with soap and plenty of water.
Remove contaminated clothing.
Wash clothing before reuse.

Get medical attention if symptoms occur after washing.
If swallowed, rinse mouth with water.
Get medical attention.

If in contact with eyes, rinse cautiously with water for several minutes.
Get medical attention if symptoms occur after washing.
Remove contact lenses if present and continue rinsing.

5. Fire Fighting Measures

Flash Point: No data
Explosive Limits: LEL: No data UEL: No data
Fire Fighting Instructions
A finely divided dust aerosol may be explosive, although the exact conditions of the hazards are unknown.
Wear appropriate protective clothing to prevent contact with skin and eyes.
Wear a self-contained breathing apparatus (SCBA) if necessary.
Flammable Properties and Hazards
No data available.
Hazardous Combustion Products
Oxides of nitrogen, carbon and phosphorous
Suitable Extinguishing Media
Use a Class A Extinguisher (Dry chemical, carbon dioxide, water or foam).
Unsuitable Extinguishing Media
No data available.

6. Accidental Release Measures

Steps To Be Taken In Case Material Is Released Or Spilled
Sweep up bulk of material and finish by wiping with a damp towel. Do not let product enter the drain.
Wear impermeable gloves, safety glasses and a lab coat when cleaning up the spill.
A NIOSH dust mask is recommended when a possibility of dust inhalation exists. Local exhaust is usually sufficient.

7. Handling and Storage

Precautions To Be Taken in Handling
Handle using safe laboratory practices. Avoid all direct contact.
Recommended Storage
Freezer storage, -10 to -30°C, dry
Precautions To Be Taken in Storing
Keep container tightly closed. Store in well-ventilated place.
Other Precautions
Protect from sunlight.

8. Exposure Controls/Personal Protection

<i>Product Name</i>	<i>CAS #</i>	<i>OSHA PEL</i>	<i>ACGIH TLV</i>	<i>Other Limits</i>
Spacer Phosphoramidite C3	110894-23-0	No data	No data	No data

Respiratory Equipment (Specify Type)
A NIOSH dust mask is recommended when a possibility of dust inhalation exists.
Eye Protection
Safety glasses
Protective Gloves
Impermeable gloves
Other Protective Clothing
Normal laboratory apparel
Engineering Controls (Ventilation etc.)
Local exhaust ventilation is usually sufficient
Work/Hygienic/Maintenance Practices
Wash hands after handling

9. Physical and Chemical Properties

Physical State:	<input type="checkbox"/> Gas	<input type="checkbox"/> Liquid	<input checked="" type="checkbox"/> Solid
Appearance:	Colorless to light yellow oil		
Odor:	Odorless		
Odor Threshold:	No data		
pH:	No data		
Melting Point:	No data		
Freezing Point:	No data		
Initial Boiling Point and Boiling Range:	No data		
Flash Point:	No data		
Specific Gravity:	~1		
Evaporation Rate (Water=1):	<< 1		
Flammability:	No data		
Explosive Limits:	LEL: No data	UEL: No data	
Vapor Pressure (vs. Air or mm Hg):	No data		
Vapor Density (vs. Air = 1):	No data		
Relative Density:	No data		
Solubility in Water:	No data		
Partition Coefficient (n-octanol/water):	No data		
Auto-ignition Temperature:	No data		
Decomposition Temperature:	No data		
Viscosity:	No data		
Percent Volatile:	No data		

10. Stability and Reactivity

Stability: Unstable Stable

Conditions To Avoid - Instability
Stable under recommended storage conditions.

Incompatibility - Materials To Avoid
Strong oxidizing reagents

Hazardous Decomposition or Byproducts
Oxides of nitrogen, carbon and phosphorous may evolve when heated to decomposition.

Possibility of Hazardous Reactions: Will occur Will not occur

Conditions To Avoid - Hazardous Reactions
Stable material, hazardous polymerization will not occur.

11. Toxicological Information

To the best of our knowledge, the toxicological properties of this substance have not been investigated.
This product should be handled with the usual care when dealing with chemicals.

Product Name	CAS #	NTP	IARC	OSHA
Spacer Phosphoramidite C3	110894-23-0	No data	No data	No data

12. Ecological Information

No data available.

13. Disposal Considerations

Waste Disposal Method
For Product - Observe all federal, state and local regulations.
For Contaminated Packaging - Dispose of in compliance with regulations.
Sweep up bulk of material and finish by wiping with a damp towel. Dispose of unused product.

14. Transport Information

LAND TRANSPORT (49CFR)	
49CFR Shipping Name	Not a dangerous material as defined in the regulations.
AIR TRANSPORT (ICAO/IATA)	
ICAO/IATA Shipping Name	Not a dangerous goods as defined in the regulations.
MARINE TRANSPORT (IMDG/IMO)	
IMDG/IMO Shipping Name	Not a dangerous goods as defined in the regulations.
Marine Pollutant:	No
Additional Transport Information	
Not regulated as a hazardous material or dangerous goods.	

15. Regulatory Information

SARA 302 Components: No chemicals in this product are subject to reporting requirements of SARA Title III, Section 302.
California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.
SARA 313 Components: This product does not contain any chemical components with known CAS numbers that exceed the threshold reporting levels established by SARA Title III, Section 313.
This product has been reviewed for inclusion on the Candidate List of Substances of Very High Concern (SVHC) REACH – not listed.
This product has been reviewed for inclusion on the Substances Restricted under REACH – not listed

16. Other Information

For all other inquiries about this product contact Glen Research at 1-800-327-GLEN or 1-703-437-6191.

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