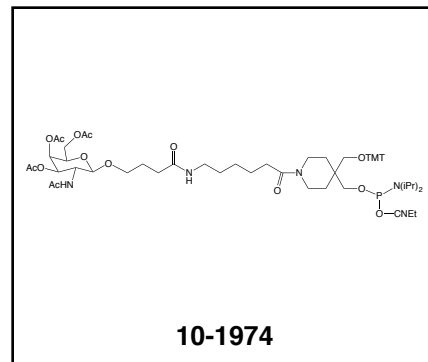


1. Product and Company Identification

Product Code: 10-1974-xx
 Product Name: 5'-GalNAc C3 Phosphoramidite
 Product Use: For Research Use Only
 Manufacturer Information
 Company Name: Glen Research LLC
 22825 Davis Drive
 Sterling, VA 20164 USA
 Phone Number: 1-703-437-6191
 Web site address: www.glenresearch.com
 Email address: msds@glenres.com

Information in case of emergency
 CAS Number: No data
 Synonyms:

(4-(Trimethoxytrityloxymethyl)-1-(6-(4-(3,4,6-O-triacetyl-2-acetylamino-2-deoxy-β-D-galactopyranosyl)butanamido)hexanoyl) piperidin-4-yl)methyl-O-[(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% 5'-GalNAc C3 Phosphoramidite

Product Name	CAS #	Concentration	M.W.	Formula
5'-GalNAc C3 Phosphoramidite	No data	100 %	1206.38	C ₆₂ H ₈₈ N ₅ O ₁₇ P
Synonyms:	(4-(Trimethoxytrityloxymethyl)-1-(6-(4-(3,4,6-O-triacetyl-2-acetylamino-2-deoxy-β-D-galactopyranosyl)butanamido)hexanoyl) piperidin-4-yl)methyl-O-[(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.

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

Refrigerated storage, maximum of 2-8°C, dry

Precautions To Be Taken in Storing

Keep container tightly closed. Store in well-ventilated place.

Other Precautions

Protect from sunlight.

SAFETY DATA SHEET
5'-GalNAc C3 Phosphoramidite
(10-1974-xx)

8. Exposure Controls/Personal Protection

<i>Product Name</i>	<i>CAS #</i>	<i>OSHA PEL</i>	<i>ACGIH TLV</i>	<i>Other Limits</i>
5'-GalNAc C3 Phosphoramidite	No data	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:	White to off-white powder		
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		

SAFETY DATA SHEET
5'-GalNAc C3 Phosphoramidite
(10-1974-xx)

10. Stability and Reactivity

Stability: Unstable [] Stable [X]

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 [X]

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
5'-GalNAc C3 Phosphoramidite	No data	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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