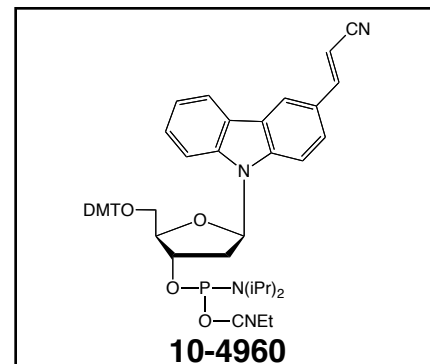


SAFETY DATA SHEET
3-Cyanovinylcarbazole Phosphoramidite (^{CNV}K)
(10-4960-xx)

1. Product and Company Identification

Product Code:	10-4960-xx
Product Name:	3-Cyanovinylcarbazole Phosphoramidite (^{CNV} K)
Product Use:	For Research Use Only
Manufacturer Information	
Company Name:	Glen Research Corporation
	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	1-703-437-6191
CAS Number:	No data
Synonyms:	5'-O-(4,4'-Dimethoxytrityl)-1'-(3-cyanovinylcarbazol-9-yl)-2'-deoxy-β-D-ribofuranosyl-3'-[(2-cyanoethyl)-(N,N-diisopropyl)]-phosphoramidite



2. Hazards Identification

GHS Hazard Statements

- H303: May be harmful if swallowed.
- H313: May be harmful in contact with skin.
- H320: Causes eye irritation.
- H333: May be harmful if inhaled.

GHS Precautionary Statements

- P103: Read label before use.
- P232: Protect from moisture.
- P233: Keep container tightly closed.
- P280: Wear protective gloves / protective clothing / eye protection / face protection.

GHS Response Statements

- P301 + 330: IF SWALLOWED: Rinse mouth with water.
- P302 + 350: IF ON SKIN: Gently wash with soap and water.
- P304 + 340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305 + 351 + 338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so - continue rinsing.
- P306 + 360: IF ON CLOTHING: Rinse contaminated clothing and skin immediately with plenty of water before removing clothes.
- P314: Get medical advice / attention if you feel unwell.
- P362: Take off contaminated clothing and wash before use.

GHS Storage and Disposal Phrases

- P401 Store in a cool, dry place
- P501: Dispose of contents / container in a safe way in accordance with all federal, state and local regulations.

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Emergency Overview

No known OSHA hazards. May cause eye, skin, and respiratory tract irritation.

Route(s) of Entry:

Inhalation? Yes Skin? Yes Eyes? Yes Ingestion? Yes

Potential Health Effects (Acute and Chronic)

No data available.

Recommended Exposure Limits

No data available.

LD 50 / LC 50

No data available.

Signs and Symptoms of Exposure

No data available.

Medical Conditions Generally Aggravated By Exposure

No data available.

3. Composition/Information on Ingredients

Product Name

3-Cyanovinylcarbazole Phosphoramidite (^{CNV}K)

CAS #

No data

Concentration

100 %

M.W.

836.95

Formula

C₅₀H₅₃N₄O₆P

Synonyms:

5'-O-(4,4'-Dimethoxytrityl)-1'-(3-cyanovinylcarbazol-9-yl)-2'-deoxy-β-D-ribofuranosyl-3'-[(2-cyanoethyl)-(N,N-diisopropyl)]-phosphoramidite

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.

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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 in the dark. Light sensitive material.

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

Product Name	CAS #	OSHA PEL	ACGIH TLV	Other Limits
3-Cyanovinylcarbazole Phosphoramidite (^{CNV} K)	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 solid		
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		

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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
3-Cyanovinylcarbazole Phosphoramidite (CNVK)	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 substance as defined in the regulations.

AIR TRANSPORT (ICAO/IATA)

ICAO/IATA Shipping Name Not a dangerous substance as defined in the regulations.

MARINE TRANSPORT (IMDG/IMO)

IMDG/IMO Shipping Name Not a dangerous substance as defined in the regulations.

Marine Pollutant: No

Additional Transport Information

Not regulated as a hazardous material or dangerous goods.

15. Regulatory Information

Regulatory Information

SARA 302 Components: No chemicals in this product are subject to reporting requirements of SARA Title III, Section 302.

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.

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16. Other Information

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

The information provided herein is based on sources believed to be reliable as of August 15, 2012 and pertains only to the material designated. Glen Research Corporation makes no warranty or representation to its completeness, accuracy or currency. This material is intended for use by persons with the pertinent technical skills and at their discretion and risk. It is the responsibility of the user to determine the product's suitability for its intended use, the product's safe use and the product's proper disposal. Disposal of hazardous material may be subject to federal, state or local regulations.

msds.description White to off-white solid

msds_oxides.toUse nitrogen, carbon and phosphorous