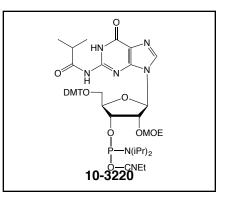


1. Product and Company Identification

Product Code: Product Name: Product Use: Manufacturer Information Company Name:

Phone Number: Web site address: Email address: Information in case of emergency CAS Number: Synonyms: 10-3220-xx G-2'-MOE-Phosphoramidite For Research Use Only

Glen Research LLC 22825 Davis Drive Sterling, VA 20164 USA 1-703-437-6191 www.glenresearch.com msds@glenres.com 1-703-437-6191 No data 5'-O-(4,4'-Dimethoxytrityl)-2'-O-met



5'-O-(4,4'-Dimethoxytrityl)-2'-O-methoxyethyl-N2-isobutyrylguanosine-3'-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 statemtents
Not a hazardous substance or mixture
Other hazards which do not result in classification
None

3. Composition/Information on Ingredients

| CAS # | Concentration | M.W. | Formula |
|---|-----------------------------|--|---|
| No data | 100 % | 914.01 | $C_{47}H_{60}N_7O_{10}P$ |
| 5'-O-(4,4'-Dimethoxytrityl)-2'-O-methoxyethyl-N2-isobutyryl- | | | |
| guanosine-3'-O-[(2-cyanoethyl)-(N,N-diisopropyl)]-phosphoramidite | | | |
| | No data 5'-O-(4,4'-Dimet | No data 100 % 5'-O-(4,4'-Dimethoxytrityl)-2'-O-me | No data 100 % 914.01 5'-O-(4,4'-Dimethoxytrityl)-2'-O-methoxyethyl-N2-isob |

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.

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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 exp | plosive, although the e | exact conditions of the hazards are unknown. |
| Wear appropriate protective clothing to | prevent contact with | skin and eyes. |
| Wear a self-contained breathing appara | tus (SCBA) if necessar | у. |
| Flammable Properties and Hazards | | |
| No data available. | | |
| Hazardous Combustion Products | | |
| Oxides of nitrogen, carbon and phospho | prous | |
| Suitable Extinguishing Media | | |
| Use a Class A Extinguisher (Dry chemica | l, carbon dioxide, wat | er or foam). |
| Unsuitable Extinguishing Media | | |
| No data available. | | |
| | 6. Accident | al Release Measures |
| Steps To Be Taken In Case Material Is Release | ed Or Spilled | |
| • | | owel. Do not let product enter the drain. |
| | | |

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.

8. Exposure Controls/Personal Protection

| Product Name G-2'-MOE-Phosphoramidite Respiratory Equipment (Specify Type) A NIOSH dust mask is recommended whe Eye Protection Safety glasses Protective Gloves Impermeable gloves Other Protective Clothing Normal laboratory apparel Engineering Controls (Ventilation etc.) | | OSHA PEL No data st inhalation exists. | ACGIH TLV No data | <i>Other Limits</i> No data | | |
|--|---|--|----------------------|--------------------------------|--|--|
| Local exhaust ventilation is usually sufficite Work/Hygienic/Maintenance Practices | ent | | | | | |
| Wash hands after handling | | | | | | |
| | 9. Physical and Chemical Properties | | | | | |
| Physical State: Appearance: Odor: Odor Threshold: pH: Melting Point: Freezing Point: Initial Boiling Point and Boiling Range: | [] Gas White to light ye Odorless No data No data No data No data No data No data | [] Liquid llow powder | [X] Solid | | | |
| Flash Point: Specific Gravity: Evaporation Rate (Water=1): Flammability: | No data ~1 << 1 No data | | | | | |
| Explosive Limits: Vapor Pressure (vs. Air or mm Hg): Vapor Density (vs. Air = 1): Relative Density: Solubility in Water: Partition Coefficient (n-octanol/water): Auto-ignition Temperature: Decomposition Temperature: Viscosity: Percent Volatile: | LEL: No data No data No data No data No data No data No data No data No data No data | UEL: No data | | | | |

10. Stability and Reactivity

SAFETY DATA SHEET G-2'-MOE-Phosphoramidite (10-3220-xx)

| Stability: | Unstable [] | Stable [X] | | |
|---|--------------------------|--------------------|-------------------------|-----------------|
| Conditions To Avoid - Instability | | | | |
| Stable under recommended storage of | conditions. | | | |
| Incompatibility - Materials To Avoid Strong oxidizing reagents | | | | |
| Hazardous Decomposition or Byproducts | | | | |
| Oxides of nitrogen, carbon and phosp | horous may evolve whe | on heated to deco | mnosition | |
| Possibility of Hazardous Reactions: | Will occur [] | Will not occur | - | |
| Conditions To Avoid - Hazardous Reactions | | | | |
| Stable material, hazardous polymeriza | | | | |
| | | ological Informa | tion | |
| | | | | |
| To the best of our knowledge, the tox | | | | gated. |
| This product should be handled with t | | - | | 05114 |
| Product Name G-2'-MOE-Phosphoramidite | CAS # No data | NTP No data | IARC No data | OSHA No data |
| G-2 -MOL-Phosphoralinute | | | | No uata |
| | 12. Eco | logical Informati | on | |
| No data available. | | | | |
| | 13. Disp | osal Consideration | ons | |
| Waste Disposal Method | | | | |
| For Product - Observe all federal, stat | e and local regulations. | | | |
| For Contaminated Packaging - Dispose | e of in compliance with | regulations. | | |
| Sweep up bulk of material and finish | by wiping with a damp t | owel. Dispose of | unused product. | |
| | 14. Tra | nsport Informati | on | |
| LAND TRANSPORT (49CFR) | | | | |
| 49CFR Shipping Name | Not a dangerous | substance as de | fined in the regulation | ons. |
| AIR TRANSPORT (ICAO/IATA) | - | | - | |
| ICAO/IATA Shipping Name | Not a dangerous | s substance as de | fined in the regulation | ons. |
| MARINE TRANSPORT (IMDG/IMO) | | | | |
| IMDG/IMO Shipping Name | Not a dangerous | s substance as de | fined in the regulation | ons. |
| Marine Pollutant: | No | | | |
| Additional Transport Information | | | | |
| | | | | |

Not regulated as a hazardous material or dangerous goods.

15. Regulatory Information

SAFETY DATA SHEET G-2'-MOE-Phosphoramidite (10-3220-xx)

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.

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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