

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) and Canadian Workplace Hazardous Material Information System (WHMIS 2015)

Revision date 05-Jun-2024

Revision Number 1

1. Identification

Product identifier

Product Catalog Number:	Product Description:	
10-1533-XX	5'-Dimethoxytrityl-N2-(4-isopropylphenoxyacetyl)-O6-[[7- (diethylamino)coumarin-4-yl]-methyl]-2'-deoxyGuanosine, 3'-[(2-cyanoethyl)-(N,N-diisopropyl)]-phosphoramidite	
Product Code(s) 10-1533-XX	Product Name DEACM Caged-dG-CE Phosphoramidite	
Other means of identification		
Synonyms	None	
Registration Number(s)	CAS: 1325717-65-4	
Recommended use of the chemical and restrictions on use		
Recommended use	For research use only	
Restrictions on use	Not for human diagnostic use	
Details of the supplier of the safety data sheet		
<u>Manufacturer Address</u> Glen Research LLC 22825 Davis Drive Sterling, VA 20164 USA		
Emergency telephone number		
Company Phone Number	1-703-437-6191	
Website	www.glenresearch.com	
E-mail address	support@glenresearch.com	
2. Hazard(s) identification		

Classification

This product is not considered hazardous by either the US 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) or the Canadian Workplace Hazardous Material Information System (WHMIS 2015)

Appearance Foam	Physical state Solid	Odor Odorless
Label elements		
Hazard statements		

This product is not considered hazardous by either the US 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200) or

the Canadian Workplace Hazardous Material Information System (WHMIS 2015)

Other information

No information available.

3. Composition/information on ingredients

Substance

Formula

C65H75N8O11P

Chemical name	CAS No.	Weight-%	Information Review	Date HMIRA filed and date exemption granted (if applicable)
5'-Dimethoxytrityl-N2-(4-isopropylphenoxy acetyl)-O6-[[7-(diethylamino)coumarin-4-yl]- methyl]-2'-deoxyGuanosine, 3'-[(2-cyanoethyl)-(N,N-diisopropyl)]- phosphoramidite	1325717-65-4	100	-	-

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

4. First-aid measures

Description of first aid measures

General advice	This product presents no hazards under normal conditions of use.	
Inhalation	Not an expected route of exposure. IF exposed or concerned: Get medical advice/attention.	
Eye contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.	
Skin contact	Wash skin with soap and water. Get medical attention if symptoms occur.	
Ingestion	Not an expected route of exposure. IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.	
Most important symptoms and effects, both acute and delayed		
Symptoms	No information available.	

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Fire-fighting measures

Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.	
Large Fire	CAUTION: Use of water spray when fighting fire may be inefficient.	
Unsuitable extinguishing media	Do not scatter spilled material with high pressure water streams.	
Specific hazards arising from the chemical	No information available.	
Hazardous combustion products	Nitrogen oxides (NOx). Carbon oxides. Phosphorus oxides.	
Explosion data Sensitivity to mechanical impact None. Sensitivity to static discharge None.		
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.	

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation. Use personal protective equipment as required.		
For emergency responders	Use personal protective equipment as required.		
Methods and material for containment and cleaning up			
Methods for containment	Prevent further leakage or spillage if safe to do so.		
Methods for cleaning up	Soak up with inert absorbent material. Take up mechanically, placing in appropriate containers for disposal.		
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.		

7. Handling and storage

Precautions for safe handling		
Advice on safe handling	Handle in accordance with good industrial hygiene and safety practice.	
Conditions for safe storage, including any incompatibilities		
Storage Conditions	Keep at temperatures between -10 and -30 °C. Keep containers tightly closed in a dry, cool and well-ventilated place.	
Packaging materials	Glass. Plastic container.	

8. Exposure controls/personal protection

Control parameters Exposure Limits

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

Appropriate engineering controls

Engineering controls	Showers Eyewash stations Ventilation systems.
Individual protection measures, suc	ch as personal protective equipment
Eye/face protection	If splashes are likely to occur:. Wear safety glasses with side shields (or goggles).
Hand protection	No special protective equipment required.
Skin and body protection	If there is a risk of contact:. Wear suitable protective clothing.
Respiratory protection	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required.
Other protective equipment	No information available.
Environmental exposure controls	Avoid creating dust. Prevent product from entering drains.
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.
Thermal hazards	No information available.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state	Solid
Appearance	Foam
Color	yellow
Odor	Odorless
Odor threshold	No information available

Melting point / freezing pointNo data availableNo data availableInitial boiling point and boiling rangeNo data availableNo data availableNo data availableFlash pointNo data availableNo informatioEvaporation rateNo data availableNone knownFlammabilityNo data availableNone knownFlammability Limit in AirNo data availableNo informatioUpper flammability or explosiveNo data availableNo informatioLower flammability or explosiveNo data availableNo informatiolimitsLower flammability or explosiveNo data availableNo informatioVapor pressureNo data availableNo informatioRelative vapor densityNo data availableNo informatioRelative density~1None knownSolubility in other solventsNo data availableNo informatioPartition coefficientNo data availableNo informatioAutoignition temperatureNo data availableNo informatioDecomposition temperatureNo data availableNo data availablePartition coefficientNo data availableNo data availableNo data availableNo data availableNo data availableOther informationNo data availableNo data availableExplosive propertiesNo information availableNo data availableOxidizing propertiesNo informatio	<u>Property</u> pH	<u>Values</u> No data available	<u>Remarks</u> • No data avai
Initial boiling point and boiling rangeNo data availableNo data availableFlash pointNo data availableNo informationEvaporation rateNo data availableNone knownFlammabilityNo data availableNo informationFlammability Limit in AirNo data availableNo informationUpper flammability or explosiveNo data availableNo informationImitsLower flammability or explosiveNo data availableNo informationVapor pressureNo data availableNo informationRelative vapor densityNo data availableNo informationRelative density~1None knownSolubility in other solventsNo data availableNo informationPartition coefficientNo data availableNo informationAutoignition temperatureNo data availableNo informationDynamic viscosityNo data availableNo data availableOther informationExplosive propertiesNo information available		No data available	
Flash pointNo data availableNo informationEvaporation rateNo data availableNone knownFlammabilityNo data availableNo informationFlammability Limit in AirNo data availableNo informationUpper flammability or explosiveNo data availableNo informationIimitsNo data availableNo informationVapor pressureNo data availableNo informationRelative vapor densityNo data availableNo informationRelative density~1None knownWater solubility in other solventsNo data availableNo informationPartition coefficientNo data availableNo informationAutoignition temperatureNo data availableNo informationMinematic viscosityNo data availableNo informationOther informationNo data availableNo data availableOther informationNo information availableNo data availableExplosive propertiesNo information availableNo data available	•••••••	eNo data available	No data avai
FlammabilityNo data availableNo informationFlammability Limit in AirNo data availableNo informationUpper flammability or explosiveNo data availableNo informationLower flammability or explosiveNo data availableNo informationLower flammability or explosiveNo data availableNo informationVapor pressureNo data availableNo informationRelative vapor densityNo data availableNo informationRelative density~1None knownWater solubilityNo data availableNo informationPartition coefficientNo data availableNo informationAutoignition temperatureNo data availableNo informationDecomposition temperatureNo data availableNo data availableNo data availableNo data availableNo data availableOther informationNo data availableNo data availableExplosive propertiesNo information availableNo data available	•••••••••••••••••••••••••••••••••••••••	·	No information
Flammability Limit in Air Upper flammability or explosive limitsNo data availableNo informationLower flammability or explosive limitsNo data availableNo informationVapor pressureNo data availableNo informationRelative vapor densityNo data availableNo informationRelative density~1None knownWater solubilityNo data availableNo informationSolubility in other solventsNo data availableNo informationPartition coefficientNo data availableNo informationAutoignition temperatureNo data availableNo informationDecomposition temperatureNo data availableNo data availableNo data availableNo data availableNo data availableOther information Explosive propertiesNo information available	Evaporation rate	No data available	None known
Upper flammability or explosive limitsNo data availableLower flammability or explosive limitsNo data availableVapor pressureNo data availableRelative vapor densityNo data availableRelative density~1None knownWater solubilityNo data availableSolubility in other solventsNo data availablePartition coefficientNo data availableAutoignition temperatureNo data availableNo data availableNo informationDecomposition temperatureNo data availableNo data availableNo data availableNo data availableNo informationDynamic viscosityNo data availableOther information Explosive propertiesNo information available	Flammability	No data available	No information
limits Lower flammability or explosive limitsNo data availableVapor pressureNo data availableNo informationRelative vapor densityNo data availableNo informationRelative density~1None knownWater solubilityNo data availableNone knownSolubility in other solventsNo data availableNo informationPartition coefficientNo data availableNo informationAutoignition temperatureNo data availableNo informationDecomposition temperatureNo data availableNo data availableDecomposition temperatureNo data availableNo data availableNo data availableNo data availableNo data availableOther information Explosive propertiesNo information available	Flammability Limit in Air		No information
Lower flammability or explosive limitsNo data availableVapor pressureNo data availableNo informationRelative vapor densityNo data availableNo informationRelative density~1None knownWater solubilityNo data availableNone knownSolubility in other solventsNo data availableNo informationPartition coefficientNo data availableNo informationAutoignition temperatureNo data availableNo informationDecomposition temperatureNo data availableNo data availableNo data availableNo data availableNo data availableDynamic viscosityNo data availableNo data availableOther information Explosive propertiesNo information available	Upper flammability or explosive	No data available	
limitsNo data availableNo informationVapor pressureNo data availableNo informationRelative vapor densityNo data availableNo informationRelative density~1None knownWater solubilityNo data availableNone knownSolubility in other solventsNo data availableNo informationPartition coefficientNo data availableNo informationAutoignition temperatureNo data availableNo informationDecomposition temperatureNo data availableNo data availableNo data availableNo data availableNo data availableDynamic viscosityNo data availableNo data availableOther informationExplosive propertiesNo information available	limits		
Vapor pressureNo data availableNo informatioRelative vapor densityNo data availableNo informatioRelative density~1None knownWater solubilityNo data availableNone knownSolubility in other solventsNo data availableNo informatioPartition coefficientNo data availableNo informatioAutoignition temperatureNo data availableNo informatioDecomposition temperatureNo data availableNo data availableNo data availableNo data availableNo data availableDecomposition temperatureNo data availableNo data availableNo data availableNo data availableNo data availableDynamic viscosityNo data availableNo data availableOther informationExplosive propertiesNo information available	Lower flammability or explosive	No data available	
Relative vapor densityNo data availableNo informationRelative density~1None knownWater solubilityNo data availableNone knownSolubility in other solventsNo data availableNo informationPartition coefficientNo data availableNo informationAutoignition temperatureNo data availableNo informationDecomposition temperatureNo data availableNo data availableNo data availableNo data availableNo data availableDynamic viscosityNo data availableNo data availableOther informationExplosive propertiesNo information available	limits		
Relative density~1None knownWater solubilityNo data availableNone knownSolubility in other solventsNo data availableNo informationPartition coefficientNo data availableNo informationAutoignition temperatureNo data availableNo informationDecomposition temperatureNo data availableNo data availableNo data could be availableNo data availableNo data availableDynamic viscosityNo data availableNo data availableOther informationExplosive propertiesNo information available	Vapor pressure	No data available	No information
Water solubilityNo data availableNone knownSolubility in other solventsNo data availableNo informationPartition coefficientNo data availableNo informationAutoignition temperatureNo data availableNo informationDecomposition temperatureNo data availableNo data availableNo data availableNo data availableNo data availableDecomposition temperatureNo data availableNo data availableDynamic viscosityNo data availableNo data availableOther informationExplosive propertiesNo information available	Relative vapor density	No data available	No information
Solubility in other solventsNo data availableNo informatioPartition coefficientNo data availableNo informatioAutoignition temperatureNo data availableNo informatioDecomposition temperatureNo data availableNo data availableNo data availableNo data availableNo data availableDecomposition temperatureNo data availableNo data availableDynamic viscosityNo data availableNo data availableOther informationExplosive propertiesNo information available	Relative density	~1	None known
Partition coefficientNo data availableNo informationAutoignition temperatureNo data availableNo informationDecomposition temperatureNo data availableNo data availableKinematic viscosityNo data availableNo data availableDynamic viscosityNo data availableNo data availableOther informationExplosive propertiesNo information available	Water solubility	No data available	None known
Autoignition temperature Decomposition temperatureNo data available No data availableNo information No data availableKinematic viscosityNo data availableNo data availableDynamic viscosityNo data availableNo data availableOther information Explosive propertiesNo information available	Solubility in other solvents	No data available	No information
Decomposition temperature Kinematic viscosityNo data available No data availableNo data avai No data availableDynamic viscosityNo data availableNo data availableOther information Explosive propertiesNo information available	Partition coefficient	No data available	
Kinematic viscosityNo data availableNo data availableDynamic viscosityNo data availableNo data availableOther informationExplosive propertiesNo information available	Autoignition temperature	No data available	No information
Dynamic viscosityNo data availableNo data availableOther information Explosive propertiesNo information available		No data available	No data avai
Other information Explosive properties No information available	Kinematic viscosity	No data available	No data avai
Explosive properties No information available	Dynamic viscosity	No data available	No data avai
Explosive properties No information available			
	Other information		
Oxidizing properties No information available			
	Oxidizing properties	No information available	

Method

ailable ailable ailable ion available n ion available ion available

ion available ion available n n ion available ion available ion available ailable ailable ailable

10. Stability and reactivity

Reactivity	No information available.	
Chemical stability	Stable under normal conditions.	
Possibility of hazardous reactions	None under normal processing.	
Conditions to avoid	None known based on information supplied.	
Incompatible materials	None known based on information supplied.	
Hazardous decomposition products None under normal use conditions.		

11. Toxicological information

Information on likely routes of exposure

Inhalation	Specific test data for the substance or mixture is not available.
Eye contact	Specific test data for the substance or mixture is not available.
Skin contact	Specific test data for the substance or mixture is not available.
Ingestion	Specific test data for the substance or mixture is not available.
Symptoms related to the physical, of	chemical and toxicological characteristics
Symptoms	No information available.
Acute toxicity	
Numerical measures of toxicity	

No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure			
Skin corrosion/irritation	No information available.		
Serious eye damage/eye irritation	No information available.		
Respiratory or skin sensitization	No information available.		
Germ cell mutagenicity	No information available.		
Carcinogenicity	No information available.		

Reproductive toxicity	No information available.		
STOT - single exposure	No information available.		
STOT - repeated exposure	No information available.		
Aspiration hazard	No information available.		
12. Ecological information			
Ecotoxicity	The environmental impact of this product has not been fully investigated.		
Persistence and degradability	No information available.		
Bioaccumulation	There is no data for this product.		
Mobility in soil	No information available.		
Other adverse effects	No information available.		

13. Disposal considerations				
Disposal methods				
Waste from residues/unused products	Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.			
Contaminated packaging	Dispose of in accordance with federal, state and local regulations. Do not reuse empty containers.			

14. Transport information

<u>DOT</u>	This product is not classified as dangerous goods, per U.S. DOT regulations under 49 CFR 172.101
IATA	This product is not classified as Dangerous Goods, by rules of IATA.
IMDG	This product is not classified as Dangerous Goods by the International Maritime Organization.

15. Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture

International Regulations

The Montreal Protocol on Substances that Deplete the Ozone Layer Not applicable

The Stockholm Convention on Persistent Organic Pollutants Not applicable

The Rotterdam Convention Not applicable

International Inventories

TSCA	Not determined.
DSL/NDSL	Not determined.
EINECS/ELINCS	Not determined.
ENCS	Not determined.
IECSC	Not determined.
KECI	Not determined.
PICCS	Not determined.
AIIC	Not determined.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
 DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List
 EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
 ENCS - Japan Existing and New Chemical Substances
 IECSC - China Inventory of Existing Chemical Substances
 KECL - Korean Existing and Evaluated Chemical Substances
 PICCS - Philippines Inventory of Chemicals and Chemical Substances

AIIC - Australian Inventory of Industrial Chemicals

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

This product does not contain any substances regulated under applicable state right-to-know regulations

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information						
NFPA HMIS	Health hazards 0 Health hazards 0	Flammability Flammability		Instability 0 Physical hazards 0	Special hazards - Personal protection X	
Key or legend to abbreviations and acronyms used in the safety data sheet						
		STEL (Short Term Skin designation	rt Term Exposure Limit) nation			
Revision date	05-Jun-20	24				
Revision Note No information available <u>Disclaimer</u>						

and risk. It is responsibility of the user to determine te 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.

End of Safety Data Sheet