

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:
10-1601-XX	5'-Dimethoxytrityl-N-phenoxyacetyl-2'-deoxyAdenosine,
	3'-[(2-cyanoethyl)-(N,N-diisopropyl)]-phosphoramidite

Product Code(s) Product Name

10-1601-XX Pac-dA-CE Phosphoramidite

Other means of identification

Synonyms None

Registration Number(s) CAS: 110543-74-3

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

Manufacturer Address

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 Free-flowing powder 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 C48H54N7O8P

Chemical name	CAS No.	Weight-%	Information Review	Date HMIRA filed and date exemption granted (if applicable)
5'-Dimethoxytrityl-N-phenoxyacetyl-2'- deoxyAdenosine,3'-[(2-cyanoethyl)- (N,N-diisopropyl)]-phosphoramidite	110543-74-3	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

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, such as personal protective equipment

If splashes are likely to occur:. Wear safety glasses with side shields (or goggles). Eye/face protection

Hand protection No special protective equipment required.

Skin and body protection If there is a risk of contact:. Wear suitable protective clothing.

No protective equipment is needed under normal use conditions. If exposure limits are Respiratory protection

exceeded or irritation is experienced, ventilation and evacuation may be required.

No information available. Other protective equipment

Environmental exposure controls Avoid creating dust. Prevent product from entering drains.

Handle in accordance with good industrial hygiene and safety practice. **General hygiene considerations**

Thermal hazards No information available.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state Solid

Appearance Free-flowing powder Color White to off-white

Odor Odorless

No information available **Odor threshold**

Remarks • Method Property Values pН No data available No data available Melting point / freezing point No data available No data available Initial boiling point and boiling rangeNo data available No data available No data available No information available Flash point

Evaporation rate No data available None known

Flammability No data available No information available No information available Flammability Limit in Air

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

No data available No information available Vapor pressure Relative vapor density No data available No information available

Relative density ~1

None known Water solubility No data available None known

Solubility in other solvents No data available No information available Partition coefficient No data available No information available No data available No information available **Autoignition temperature** No data available No data available **Decomposition temperature** No data available No data available Kinematic viscosity Dynamic viscosity No data available No data available

Other information

Explosive properties No information available **Oxidizing properties** No information available Softening point No information available

Molecular weight 887.97

No information available **VOC** content

Liquid DensityNo information availableBulk densityNo information available

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, 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/irritationNo 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 toxicityNo information available.

STOT - single exposure No information available.

STOT - repeated exposureNo information available.

Aspiration hazard No information available.

12. Ecological information

EcotoxicityThe 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

DOTThis product is not classified as dangerous goods, per U.S. DOT regulations under 49 CFR

172,101

<u>IATA</u> 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.
AllC 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

<u>SARA 313</u>

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 Health hazards 0 Flammability 0 Instability 0 Special hazards - HMIS Health hazards 0 Flammability 0 Physical hazards 0 Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value Sk* Skin designation

Revision date 05-Jun-2024

Revision Note No information available

Disclaimer

The information provided herein is based on sources believed to be reliable as of the issue date of this document, and pertains only to the material designated. Glen Research LLC makes no warranty or representation to its completeness, accuracy or currency. This material is intended for use by persons with the pertinent technical skills an at their discretion 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