

part of Maravai LifeSciences

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 06-Jun-2024

Revision Number 1

1. Identification

Product identifier

| Product Catalog Number: | Product Description: | |
|---|--|--|
| 10-1905-XX | 2-[2-(4-Monomethoxytrityl)aminoethoxy]ethyl- | |
| | (2-cyanoethyl)-(N,N-diisopropyl)-phosphoramidite | |
| Product Code(s) 10-1905-XX | Product Name 5'-Amino-Modifier 5 | |
| Other means of identification | | |
| Synonyms | None | |
| Registration Number(s) | CAS: 612548-86-4 | |
| 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 Oil

Physical state Liquid

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

C33H44N3O4P

| Chemical name | CAS No. | Weight-% | Information Review | Date HMIRA filed and date exemption granted (if applicable) |
|---|-------------|----------|--------------------|---|
| 2-[2-(4-Monomethoxytrityl)aminoethoxy]ethyl- (2-cyanoethyl)-N,N-diisopropyl)-phosphoramidite | 612548-86-4 | 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 impac Sensitivity to static discharge | t None. 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

Engineering controls

| 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

Showers

Eyewash stations

| 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 | |

Ventilation systems.

Individual protection measures, such 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

Liquid Density

Information on basic physical and chemical properties

| iniorination on basic physical and c | | |
|---|---------------------------|--------------------------|
| Physical state | Liquid | |
| Appearance | Oil | |
| Color | Colorless to Light Yellow | |
| Odor | Odorless | |
| Odor threshold | No information available | |
| <u>Property</u> | Values | Remarks • Method |
| рН | No data available | No data available |
| Melting point / freezing point | No data available | No data available |
| Initial boiling point and boiling range | eNo data available | No data available |
| Flash point | No data available | No information available |
| Evaporation rate | No data available | None known |
| Flammability | No data available | No information available |
| Flammability Limit in Air | | No information available |
| Upper flammability or explosive | No data available | |
| limits | | |
| Lower flammability or explosive | No data available | |
| limits | | |
| Vapor pressure | No data available | No information available |
| 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 |
| Autoignition temperature | No data available | No information available |
| Decomposition temperature | No data available | No data available |
| Kinematic viscosity | No data available | No data available |
| 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 | 577.71 | |
| VOC content | No information available | |

No information available

Bulk density

No 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/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 | o abbreviations and acronyms | used in the safe | ety data | sheet | | | | |
| <u>Legend Section</u> TWA Ceiling | <u>8: Exposure controls/personal protection</u> TWA (time-weighted average) Maximum limit value | | STEL Sk* | STEL (Short Term Skin designation | STEL (Short Term Exposure Limit) Skin designation | | | |
| Revision date | 06-Jun-20 | 24 | | | | | | |
| pertains only to | provided herein is based on s | No information available is based on sources believed to be reliable as of th gnated. Glen Research LLC makes no warranty or | | | on to its completeness, | | | |

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