

part of Maravai LifeSciences

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Revision date 06-Jun-2024

Revision Number 1

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product Catalog Number:	Product Description:
10-1981-XX	1-[5-(4,4'-dimethoxytrityloxy)pentylamido]-3-[5-levulinyloxypentylamido]- propyl-2-[(2-cyanoethyl)-(N,N-diisopropyl)]-phosphoramidite
Product Code(s) 10-1981-XX	Product Name Asymmetric Doubler (Lev) Phosphoramidite
Pure substance/mixture Formula	Substance C48H67N4O10P
Molecular weight	891.04
1.2. Relevant identified uses of the	substance or mixture and uses advised against
Recommended use	For research use only
Uses advised against	Not for human diagnostic use
1.3. Details of the supplier of the sa	afety data sheet
For further information, please contact	<u>xt</u>
E-mail address	support@glenresearch.com
Website	www.glenresearch.com
Company Phone Number	1-703-437-6191
1.4. Emergency telephone number	_

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP] This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.2. Label elements

This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP] Hazard statements This substance is classified as not hazardous according to regulation (EC) 1272/2008 [CLP]

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Chemical name	Weight-%	REACH registration number	· ·	Classification according to Regulation (EC) No.	concentration	M-Factor	M-Factor (long-term)
				1272/2008 [CLP]	limit (SCL)		
1-[5-(4,4'-dimethoxy	100	No data available	-	No data available	-	-	-
trityloxy)pentylamido							
]-							
3-[5-levulinyloxypent							
ylamido]-							
propyl-2-[(2-cyanoet							
hyl)-							
(N,N-diisopropyl)]-p							
hosphoramidite							
2195357-46-9							

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate No information available

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. 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.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3. Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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.		
5.2. Special hazards arising from the substance or mixture			
Specific hazards arising from the chemical	No information available.		
Hazardous combustion products	Nitrogen oxides (NOx). Carbon oxides. Phosphorus oxides.		
5.3. Advice for firefighters			
Special protective equipment and precautions for fire-fighters	Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.		

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Ensure adequate ventilation. Use personal protective equipment as required.		
For emergency responders	Use personal protection recommended in Section 8.		
6.2. Environmental precautions			
Environmental precautions	See Section 12 for additional Ecological Information.		
6.3. 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.		
6.4. Reference to other sections			
Reference to other sections	See section 8 for more information. See section 13 for more information.		

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling	Ensure adequate ventilation. Use personal protection equipment. Wash thoroughly at handling.	
General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.		
7.2. Conditions for safe storage, including any incompatibilities		
Storage Conditions	Keep container tightly closed in a dry and well-ventilated place.	

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. 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.			
Biological occupational exposure limits This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.				
Derived No Effect Level (DNEL) Predicted No Effect Concentration (PNEC)	No information available. No information available.			
8.2. Exposure controls				
Engineering controls	Showers Eyewash stations Ventilation systems			
Personal protective equipment				
Eye/face protection	If splashes are likely to occur:. Wear safety glasses with side shields (or goggles).			
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.			
Thermal hazards	No information available.			
General hygiene considerations	Handle in accordance with good industrial hygiene and safety practice.			
Environmental exposure controls	No information available.			

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties		
Physical state	Liquid	
Appearance	Oil	
Color	Clear	
Odor	Odorless	
Odor threshold	No information available	
Property Molting point (freezing point	<u>Values</u> No data available	
Melting point / freezing point Initial boiling point and boiling rang		

Remarks • Method No data available No data available

Flammability	No data available	No information available
Flammability Limit in Air Upper flammability or explosive	No data available	
limits Lower flammability or explosive	No data available	
limits		
Flash point	No data available	No information available
Autoignition temperature	No data available	No information available
Decomposition temperature		No data available
pH	No data available	No data available
pH (as aqueous solution)	No data available	No information available
Kinematic viscosity	No data available	No data available
Dynamic viscosity	No data available	No data available
Water solubility	No data available	None known
Solubility(ies)	No data available	No information available
Partition coefficient	No data available	No information available
Vapor pressure	No data available	No information available
Relative density	~1	None known
Bulk density	No data available	
Liquid Density	No data available	
Relative vapor density	No data available	No information available
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	
<u>9.2. Other information</u> Molecular weight	891.04	

9.2.1. Information with regard to physical hazard classes Not applicable No information available

9.2.2. Other safety characteristics No information available

SECTION 10: Stability and reactivity

1	O.	1	Reactivity	

Reactivity	No information available.		
10.2. Chemical stability			
Stability	Stable under normal conditions.		
Explosion data Sensitivity to mechanical impac Sensitivity to static discharge	t None. None.		
10.3. Possibility of hazardous reactions			
Possibility of hazardous reactions	None under normal processing.		
10.4. Conditions to avoid			
Conditions to avoid	None known based on information supplied.		
10.5. Incompatible materials			
Incompatible materials	None known based on information supplied.		

10.6. Hazardous decomposition products

Hazardous decomposition products None under normal use conditions.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

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 v	vell 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.		
11.2. Information on other hazards			
11.2.1. Endocrine disrupting properties			

Endocrine disrupting properties	No information available.			
11.2.2. Other information				
Other adverse effects	No information available.			
SECTION 12: Ecological ir	nformation			
12.1. Toxicity				
Ecotoxicity	The environmental impact of this product has not been fully investigated.			
12.2. Persistence and degradability				
Persistence and degradability	No information available.			
12.3. Bioaccumulative potential				
Bioaccumulation	There is no data for this product.			
12.4. Mobility in soil				
Mobility in soil	No information available.			
12.5. Results of PBT and vPvB assessment				
PBT and vPvB assessment	No information available.			
12.6. Endocrine disrupting properties				
Endocrine disrupting properties	No information available.			
12.7. Other adverse effects				

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment 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.

SECTION 14: Transport information

<u>IATA</u>

14.1	UN number or ID number	Not regulated
14.2	UN proper shipping name	Not regulated
14.3	Transport hazard class(es)	Not regulated
14.4	Packing group	Not regulated
14.5	Environmental hazards	Not applicable

14.6 Special precautions for user Special Provisions	None
IMDG14.1UN number or ID number14.2UN proper shipping name14.3Transport hazard class(es)14.4Packing group14.5Environmental hazards14.6Special precautions for user Special Provisions14.7Maritime transport in bulk according to IMO instruments	Not regulated Not regulated Not regulated Not regulated Not applicable None No information available
RID14.1UN number or ID number14.2UN proper shipping name14.3Transport hazard class(es)14.4Packing group14.5Environmental hazards14.6Special precautions for user Special Provisions	Not regulated Not regulated Not regulated Not regulated Not applicable None
ADR 14.1 UN number or ID number 14.2 UN proper shipping name 14.3 Transport hazard class(es) 14.4 Packing group 14.5 Environmental hazards 14.6 Special precautions for user Special Provisions	Not regulated Not regulated Not regulated Not regulated Not applicable

SECTION 15: Regulatory information

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

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorizations and/or restrictions on use:

This product does not contain substances subject to authorization (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009 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

15.2. Chemical safety assessment

Chemical Safety Report No information available

SECTION 16: Other information

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

Legend

SVHC: Substances of Very High Concern for Authorization:

Legend	Section 8: Exposure controls/personal protection		
TŴĂ	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	Sk*	Skin designation

Revision date

06-Jun-2024

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