

2'-DEOXYADENOSINE PHOSPHORAMIDITE (15N5, 98%) 95% CHEMICAL PURITY

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830 and according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations Date of issue: 11/01/2011 Revision date: 28/06/2018 Supersedes: 06/01/2017 Version: 3.1 NLM-6829

SECTION 1: Identification of the sub	stance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Substance
Substance name	: 2'-DEOXYADENOSINE PHOSPHORAMIDITE (15N5, 98%) 95% CHEMICAL PURITY
CAS-No.	: 98796-53-3 (Unlabeled)
Product code	: NLM-6829
Formula	: C47H52N2*N5O7P
Synonyms	: DMT-dA(bz) Amidite / DMT-dA(bz) Phosphoramidite / N6-BenzoyI-5'-O-(4,4'-dimethoxytrityI)-2'- deoxyadenosine-3'-O-[O-(2-cyanoethyI)-N,N'-diisopropyIphosphoramidite]
1.2. Relevant identified uses of the subs	tance or mixture and uses advised against
1.2.1. Relevant identified uses	
Main use category	: Professional use
Industrial/Professional use spec	: For professional use only
1.2.2. Uses advised against	
No additional information available	
1.3. Details of the supplier of the safety	data sheet
Cambridge Isotope Laboratories, Inc. 50 Frontage Road Andover, MA 01810 USA	
USA: 1-800-322-1174 Int: 1-978-749-8000 cilsales@isotope.com www.isotope.com	
Emergency telephone number	
Emergency numbers:	
Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours)	
SECTION 2: Hazards identification	
2.1. Classification of the substance or m	lixture
Classification according to Regulation (EC) N Not classified	lo. 1272/2008 [CLP]
Classification according to Directive 67/548/E Not classified	EC [DSD] or 1999/45/EC [DPD]
GHS-US classification Not classified	
Adverse physicochemical, human health and	environmental effects

No additional information available

2.2. Label elements

Labeling according to Regulation (EC) No. 1272/2008 [CLP] No labeling applicable

GHS-US labeling

No labeling applicable

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2.3. Other hazards

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances			
Name	Product identifier	%	Classification according to Directive 67/548/EEC
2'-DEOXYADENOSINE PHOSPHORAMIDITE (15N5, 98%) 95% CHEMICAL PURITY	(CAS-No.) 98796-53-3 (Unlabeled)	100	Not classified
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]

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

Name	Product identifier	%	GHS-US classification
2'-DEOXYADENOSINE PHOSPHORAMIDITE (15N5, 98%) 95% CHEMICAL PURITY (Main constituent)	(CAS-No.) 98796-53-3 (Unlabeled)	100	Not classified

Full text of H-phrases: see section 16

3.2. Mixtures Not applicable SECTION 4: First aid measures 4.1. Description of first aid measures First-aid measures general : Move out of dangerous area. Consult a physician and show this safety data sheet. : If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a

	physician.
First-aid measures after skin contact	: Wash with soap and plenty of water. Consult a physician.
First-aid measures after eye contact	: Flush eyes with water as a precaution.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
4.2. Most important symptoms and e	effects, both acute and delayed
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory tract irritation.
Symptoms/effects after skin contact	: May be harmful if absorbed through skin. May cause skin irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.
4.3. Indication of any immediate med	dical attention and special treatment needed
No additional information available	
SECTION 5: Firefighting measure	S
5.1. Extinguishing media	
Suitable extinguishing media	: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.
U U	
Suitable extinguishing media	
Suitable extinguishing media 5.2. Special hazards arising from the	
Suitable extinguishing media 5.2. Special hazards arising from the No additional information available	
Suitable extinguishing media 5.2. Special hazards arising from the No additional information available 5.3. Advice for firefighters	 Substance or mixture Fight fire with normal precautions from a reasonable distance. Wear a self contained breathing apparatus. Do not enter fire area without proper protective equipment, including respiratory

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

: Avoid dust formation. Avoid breathing vapors, mist or gas.

Emergency procedures

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6.1.2. For emergency responders

6.1.2. For emergency responders	
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
Prevent entry to sewers and public waters. Do	not allow to enter drains or water courses. Avoid release to the environment.
6.3. Methods and material for containn	nent and cleaning up
For containment	: Sweep up and shovel. Keep in suitable, closed containers for disposal.
Methods for cleaning up	: This material and its container must be disposed of in a safe way, and as per local legislation.
6.4. Reference to other sections	
For further information refer to section 13.	
SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
Additional hazards when processed	: Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
Precautions for safe handling	: Provide adequate ventilation to minimize dust and/or vapor concentrations.
Hygiene measures	: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
7.2. Conditions for safe storage, includ	ling any incompatibilities
Technical measures	: Store in a well-ventilated place. Keep container tightly closed.
Storage conditions	: Store in freezer (-80 C) and dessicated. Protect from light.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/per	sonal protection
8.1. Control parameters	
No additional information available	
8.2. Exposure controls	
Appropriate engineering controls	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
Personal protective equipment	: Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.
Materials for protective clothing	: Wear suitable protective clothing and gloves.
Hand protection	: Wear suitable protective clothing and gloves.
Eye protection	: Wear eye protection. Chemical goggles or face shield with safety glasses.
Skin and body protection	: Wear suitable protective clothing, gloves and eye/face protection.
Respiratory protection	: In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.
Environmental exposure controls	: Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and	d chemical properties
Physical state	: Solid
Appearance	: Powder
Molecular mass	: 862.9 g/mol (Labeled)
Color	: White to off-white
Odor	: Odorless
Odor threshold	: No data available
рН	: No data available
Relative evaporation rate (butyl acetate=1)	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available

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Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapor pressure	: No data available
Relative vapor density at 20 °C	: No data available
Relative density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available
Explosion limits	: No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

One year after receipt of order if stored as stated in "Storage" section. Re-QC after one year.

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Formed under fire conditions: Carbon oxides, nitrogen oxides (NOx)

SECTION 11: Toxicological information

11.1. Information on toxicological effects	
Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitization	: Not available
Germ cell mutagenicity	: Not available
Carcinogenicity	: Not classified
Reproductive toxicity	: Not available
Specific target organ toxicity - single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: Not classified
Potential Adverse human health effects and symptoms	: This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory tract irritation
Symptoms/effects after skin contact	: May be harmful if absorbed through skin. May cause skin irritation
Symptoms/effects after eye contact	: May cause eye irritation
Symptoms/effects after ingestion	: May be harmful if swallowed

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SECTION 12: Ecological information	
12.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
12.2. Persistence and degradability	
	15N5, 98%) 95% CHEMICAL PURITY (98796-53-3 (Unlabeled))
Persistence and degradability	Not available.
12.3. Bioaccumulative potential	
2'-DEOXYADENOSINE PHOSPHORAMIDITE	15N5, 98%) 95% CHEMICAL PURITY (98796-53-3 (Unlabeled))
Bioaccumulative potential	Not available.
12.4. Mobility in soil	
2'-DEOXYADENOSINE PHOSPHORAMIDITE	15N5, 98%) 95% CHEMICAL PURITY (98796-53-3 (Unlabeled))
Ecology - soil	Not available.
12.5. Results of PBT and vPvB assessmen	it
No additional information available	
12.6. Other adverse effects	
Other adverse effects	: Not available.
SECTION 13: Disposal consideration	s
13.1. Waste treatment methods	5
Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and local
	environmental control regulations.
Product/Packaging disposal recommendations	: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.
Ecology - waste materials	: Dispose of as unused product.
SECTION 14: Transport information	
In accordance with ADR / RID / IMDG / IATA / AD	N
14.1. UN number	
Not applicable	
14.2. UN proper shipping name	
Not applicable	
14.3. Additional information	
Other information	: No supplementary information available.
Special transport precautions	: Not dangerous goods.
Overland transport	
No additional information available	
Transport by sea	
No additional information available	
Air transport	
No additional information available	
44.4 Environmental house to	
14.4. Environmental hazards Other information	: No supplementary information available.
14.5. Special precautions for user Special transport precautions Image: Comparison of the second s	: Not dangerous goods.
	. Hot dangelous yoods.
14.6. Transport in bulk according to Anne	x II of MARPOL 73/78 and the IBC Code
Not applicable	
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SECTION 15: Regulatory information	
15.1. US Federal regulations	
2'-DEOXYADENOSINE PHOSPHORAMIDITE (1	5N5, 98%) 95% CHEMICAL PURITY (98796-53-3 (Unlabeled))
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporing requirements of the United States SARA Section 302
SARA Section 313 - Emission Reporting	Not subject to reporing requirements of the United States SARA Section 313

15.2. International regulations

CANADA

2'-DEOXYADENOSINE PHOSPHORAMIDITE (15N5, 98%) 95% CHEMICAL PURITY (98796-53-3 (Unlabeled)) Listed on the Canadian DSL (Domestic Substances List)

15.2.1. National regulations

No additional information available

15.3. US State regulations

2'-DEOXYADENOSINE PHOSPHORAMIDITE (15N5, 98%) 95% CHEMICAL PURITY (98796-53-3 (Unlabeled))		
U.S California - Proposition 65 - Carcinogens List	No	
U.S California - Proposition 65 - Developmental Toxicity	No	
U.S California - Proposition 65 - Reproductive Toxicity - Female	No	
U.S California - Proposition 65 - Reproductive Toxicity - Male	No	
State or local regulations	U.S Pennsylvania - RTK (Right to Know) List U.S New Jersey - Right to Know Hazardous Substance List	

SECTION 16: Other information	
Other information	: This product is not radioactive. The data given for this product are those of the corresponding unlabeled compound, unless specifically indicated otherwise. Health and safety data for labeled compounds are generally not available, but are assumed to be similar or identical to the corresponding unlabeled compound.
NFPA health hazard	: 0 - Materials that, under emergency conditions, would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard	: 0 - Materials that will not burn under typical fire conditions, including intrinsically noncombustible materials such as concrete, stone, and sand.
NFPA reactivity	: 0 - Material that in themselves are normally stable, even under fire conditions.
Hazard Rating	
Health	: 0 Minimal Hazard - No significant risk to health
Flammability	: 0 Minimal Hazard
Physical	: 0 Minimal Hazard

CIL Substance SDS

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product