

## ADMA:HCL:XH2O(MAY BE HYDRATE)(ASYMMETRIC DIMETHYLARGININE)(2,3,3,4,4,5,5-D7,98%)

DLM-7476

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: 11/05/2011

Revision date: 13/09/2019

Supersedes: 23/10/2018

Version: 3.2

SECTION 1: Identification of the s	substance/mixture and of the company/undertaking
1.1. Product identifier	
Product form	: Substance
Substance name	: ADMA:HCL:XH2O(MAY BE HYDRATE)(ASYMMETRIC DIMETHYLARGININE)(2,3,3,4,4,5,5- D7,98%)
CAS-No.	: 65005-57-4 (Unlabeled)
Product code	: DLM-7476
Formula	: C8H12CID7N4O2·H2O
Synonyms	: Asym-Dimethylarginine/ ADMA
1.2. Relevant identified uses of the s	substance 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 safe	ety 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	J
Emergency telephone number	
Emergency numbers:	
Chemtrec: 1-800-424-9300 (24 hours) International: 1-703-741-5970 (24 hours)	
<b>SECTION 2: Hazards identification</b>	n
2.1. Classification of the substance of	or mixture
Classification according to Regulation (Ed Not classified	C) No. 1272/2008 [CLP]
Classification according to Directive 67/54 Not classified	48/EEC [DSD] or 1999/45/EC [DPD]
GHS-US classification Not classified	
Adverse physicochemical, human health No additional information available	and environmental effects
2.2. Label elements	
Labeling according to Regulation (EC) No No labeling applicable	). 1272/2008 [CLP]
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
ADMA:HCL:XH2O(MAY BE HYDRATE)(ASYMMETRIC DIMETHYLARGININE)(2,3,3,4,4,5,5-D7,98%)	(CAS-No.) 65005-57-4 (Unlabeled)	100	Not classified
Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
ADMA:HCL:XH2O(MAY BE HYDRATE)(ASYMMETRIC DIMETHYLARGININE)(2,3,3,4,4,5,5-D7,98%)	(CAS-No.) 65005-57-4 (Unlabeled)	100	Not classified

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

Name	Product identifier	%	GHS-US classification
ADMA:HCL:XH2O(MAY BE HYDRATE)(ASYMMETRIC DIMETHYLARGININE)(2,3,3,4,4,5,5-D7,98%) (Main constituent)	(CAS-No.) 65005-57-4 (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	: If you feel unwell, seek medical advice (show the label where possible). Evacuate danger area
First-aid measures after inhalation	: When symptoms occur: go into open air and ventilate suspected area. If not breathing give artificial respiration. Get medical advice/attention.
First-aid measures after skin contact	: Wash with plenty of soap and water. and soap. Get immediate medical advice/attention.
First-aid measures after eye contact	: Rinse cautiously with water for several minutes.
First-aid measures after ingestion	: Never give anything by mouth to an unconscious person. Rinse mouth out with water. Get medical advice/attention.
4.2. Most important symptoms and e	ffects, both acute and delayed
Symptoms/effects after inhalation	: May be harmful if inhaled. May cause respiratory irritation.
Symptoms/effects after skin contact	: May be harmful in contact with skin. May cause moderate 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	lical attention and special treatment needed
No additional information available	
SECTION 5: Firefighting measure	S
5.1. Extinguishing media	
Suitable extinguishing media	: Water spray. Dry chemical powder, alcohol-resistant foam, carbon dioxide (CO2).
5.2. Special hazards arising from the	substance or mixture
No additional information available	
5.3. Advice for firefighters	
Firefighting instructions	: Fight fire with normal precautions from a reasonable distance. Wear a self contained breathin apparatus. Do not enter fire area without proper protective equipment, including respiratory protection.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Wear recommended personal protective equipment.
<b>SECTION 6: Accidental release m</b>	easures
6.1. Personal precautions, protective	equipment and emergency procedures
6.1.1. For non-emergency personnel	

#### 6.1.1. For non-emergency personnel Emergency procedures

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

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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. D	Do not allow to enter drains or water courses. Avoid release to the environment.
6.3. Methods and material for contain	nment and cleaning up
For containment	: Take up mechanically (sweeping, shoveling) and collect in suitable container 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	e
7.1. Precautions for safe handling	
Precautions for safe handling	: Provide adequate ventilation to minimize dust and/or vapor concentrations.
Hygiene measures	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Handle in accordance with good industrial hygiene and safe practice.
7.2. Conditions for safe storage, incl	luding any incompatibilities
Technical measures	: Store in a well-ventilated place. Keep container tightly closed.
Storage conditions	: Store at room temperature, desiccated and away from light.
7.3. Specific end use(s)	
No additional information available	
SECTION 8: Exposure controls/pe	ersonal protection
8.1. Control parameters	
No additional information available	
8.2. Exposure controls	
8.2. Exposure controls Appropriate engineering controls	: Wash hands and other exposed areas with mild soap and water before eating, drinking or
	: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.
Appropriate engineering controls	smoking and when leaving work.
Appropriate engineering controls Personal protective equipment	smoking and when leaving work. : Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.
Appropriate engineering controls Personal protective equipment Materials for protective clothing	<ul> <li>smoking and when leaving work.</li> <li>Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.</li> <li>Wear suitable protective clothing and gloves.</li> </ul>
Appropriate engineering controls Personal protective equipment Materials for protective clothing Hand protection	<ul> <li>smoking and when leaving work.</li> <li>Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.</li> <li>Wear suitable protective clothing and gloves.</li> <li>Wear suitable protective clothing and gloves.</li> </ul>
Appropriate engineering controls Personal protective equipment Materials for protective clothing Hand protection Eye protection	<ul> <li>smoking and when leaving work.</li> <li>Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.</li> <li>Image: Content of the second secon</li></ul>
Appropriate engineering controls Personal protective equipment Materials for protective clothing Hand protection	<ul> <li>smoking and when leaving work.</li> <li>Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.</li> <li>Wear suitable protective clothing and gloves.</li> <li>Wear suitable protective clothing and gloves.</li> </ul>
Appropriate engineering controls Personal protective equipment Materials for protective clothing Hand protection Eye protection Skin and body protection	<ul> <li>smoking and when leaving work.</li> <li>Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.</li> <li>Image: Self-contained breathing apparatus.</li> <li>Image: Self-contained breathing apparatus.</li> <li>Wear suitable protective clothing and gloves.</li> <li>Wear suitable protective clothing and gloves.</li> <li>Wear eye protection. Chemical goggles or face shield with safety glasses.</li> <li>Wear suitable protective clothing, gloves and eye/face protection.</li> </ul>
Appropriate engineering controls Personal protective equipment Materials for protective clothing Hand protection Eye protection Skin and body protection Respiratory protection Environmental exposure controls	<ul> <li>smoking and when leaving work.</li> <li>Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.</li> <li>Image: Self-contained breathing apparatus.</li> <li>Image: Self-contained breathing apparatus.</li> <li>Image: Wear suitable protective clothing and gloves.</li> <li>Image: Wear suitable protective clothing, gloves and eye/face protection.</li> <li>Image: Image: Image:</li></ul>
Appropriate engineering controls Personal protective equipment Materials for protective clothing Hand protection Eye protection Skin and body protection Respiratory protection Environmental exposure controls SECTION 9: Physical and chemic	<ul> <li>smoking and when leaving work.</li> <li>Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.</li> <li>Image: Self-contained breathing apparatus.</li> <li>Image: Self-contained breathing apparatus.</li> <li>Image: Wear suitable protective clothing and gloves.</li> <li>Image: Wear suitable protective clothing and gloves.</li> <li>Image: Wear suitable protective clothing and gloves.</li> <li>Image: Wear suitable protective clothing, gloves and eye/face protection.</li> <li>In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.</li> <li>Image: Avoid release to the environment.</li> </ul>
Appropriate engineering controls Personal protective equipment Materials for protective clothing Hand protection Eye protection Skin and body protection Respiratory protection Environmental exposure controls SECTION 9: Physical and chemic	<ul> <li>smoking and when leaving work.</li> <li>Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.</li> <li>Image: Self-contained breathing apparatus.</li> <li>Image: Self-contained breathing apparatus.</li> <li>Image: Wear suitable protective clothing and gloves.</li> <li>Image: Wear suitable protective clothing and gloves.</li> <li>Image: Wear suitable protective clothing and gloves.</li> <li>Image: Wear suitable protective clothing, gloves and eye/face protection.</li> <li>In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.</li> <li>Image: Avoid release to the environment.</li> </ul>
Appropriate engineering controls Personal protective equipment Materials for protective clothing Hand protection Eye protection Skin and body protection Respiratory protection Environmental exposure controls SECTION 9: Physical and chemic 9.1. Information on basic physical ar	<ul> <li>smoking and when leaving work.</li> <li>Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.</li> <li> <b>Wear Suitable Protective Clothing and gloves.</b> </li> <li>Wear suitable protective clothing and gloves.</li> <li>Wear suitable protective clothing and gloves.</li> <li>Wear suitable protective clothing and gloves.</li> <li>Wear suitable protective clothing, gloves and eye/face protection.</li> <li>In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.</li> <li>Avoid release to the environment.</li> </ul>
Appropriate engineering controls Personal protective equipment Materials for protective clothing Hand protection Eye protection Skin and body protection Respiratory protection Environmental exposure controls <b>SECTION 9: Physical and chemic</b> <b>9.1.</b> Information on basic physical ar Physical state	<ul> <li>smoking and when leaving work.</li> <li>Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.</li> <li> <b>Wear suitable protective clothing and gloves.</b> </li> <li>Wear suitable protective clothing and gloves.</li> <li>Wear suitable protective clothing and gloves.</li> <li>Wear suitable protective clothing, gloves and eye/face protection.</li> <li>In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.</li> <li>Avoid release to the environment.</li> </ul> <li> <b>al properties a constrained breathing and gloves a constrai</b></li>
Appropriate engineering controls Personal protective equipment Materials for protective clothing Hand protection Eye protection Skin and body protection Respiratory protection Environmental exposure controls SECTION 9: Physical and chemic 9.1. Information on basic physical ar Physical state Appearance	<ul> <li>smoking and when leaving work.</li> <li>Gloves. Protective clothing. Protective goggles. Self-contained breathing apparatus.</li> <li><i>Wear</i> suitable protective clothing and gloves.</li> <li>Wear suitable protective clothing and gloves.</li> <li>Wear suitable protective clothing and gloves.</li> <li>Wear suitable protective clothing, gloves and eye/face protection.</li> <li>In case of inadequate ventilation wear respiratory protection. Approved supplied air respirator.</li> <li>Avoid release to the environment.</li> </ul>

- Odor threshold : No data available pН : 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
- Flash point : No data available

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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	
Five years after receipt if stored as stated in "Store	age" section. Re-QC after 5 years.
10.3. Possibility of hazardous reactions	
No additional information available	
10.4. Conditions to avoid	
No additional information available	
10.5. Incompatible materials	
Strong oxidizing agents. Hydrogen chloride gas.	
10.6. Hazardous decomposition products	
Carbon oxides (CO, CO2). Nitrogen oxides.	
SECTION 11: Toxicological information	on
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 classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
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 irritation.
Symptoms/effects after skin contact	: May be harmful in contact with skin. May cause moderate irritation.
Symptoms/effects after eye contact	: May cause eye irritation.
Symptoms/effects after ingestion	: May be harmful if swallowed.

# ADMA:HCL:XH2O(MAY BE HYDRATE)(ASYMMETRIC DIMETHYLARGININE)(2,3,3,4,4,5,5-D7,98%) DLM-7476

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SECTION 12: Ecological information	
2.1. Toxicity	
Ecology - general	: The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.
2.2. Persistence and degradability	
No additional information available	
I2.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessment No additional information available	t
12.6. Other adverse effects No additional information available	
SECTION 13: Disposal considerations	
13.1. Waste treatment methods Regional legislation (waste)	: Waste materials should be disposed of under conditions which meet Federal, State, and loc
	environmental control regulations.
Product/Packaging disposal recommendations	: Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licens 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 / ADI	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	
14.4. Environmental hazards	
Other information	: No supplementary information available.
14.5. Special precautions for user	
Special transport precautions	: Not dangerous goods.
_	
14.6. Transport in bulk according to Annex	II of MARPOL 73/78 and the IBC Code

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SECTION 15: Regulatory information	
15.1. US Federal regulations	
ADMA:HCL:XH2O(MAY BE HYDRATE)(ASYMM	IETRIC DIMETHYLARGININE)(2,3,3,4,4,5,5-D7,98%) (65005-57-4 (Unlabeled))
SARA Section 302 Threshold Planning Quantity (TPQ)	Not subject to reporting requirements of the United States SARA Section 302
SARA Section 313 - Emission Reporting	Not subject to reporting requirements of the United States SARA Section 313

#### 15.2. International regulations

#### CANADA

ADMA:HCL:XH2O(MAY BE HYDRATE)(ASYMMETRIC DIMETHYLARGININE)(2,3,3,4,4,5,5-D7,98%) (65005-57-4 (Unlabeled)) Not listed on the Canadian DSL (Domestic Substances List)

#### 15.2.1. National regulations

No additional information available

#### 15.3. US State regulations

ADMA:HCL:XH2O(MAY BE HYDRATE)(ASYMMETR	IC DIMETHYLARGININE)(2,3,3,4,4,5,5-D7,98%)(65005-57-4 (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 New Jersey - Right to Know Hazardous Substance List U.S Pennsylvania - RTK (Right to Know) List

<b>SECTION 16: Other information</b>	on
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