



SAFETY DATA SHEET

Preparation Date: No data available Product identifier Revision Date: 01/28/2015

Revision Number: G1

A3903 DL-ARGININE HYDROCHLORIDE

Other means of identification

Synonyms: CAS #: RTECS # CI#:

Product code:

Product Name:

Arginine monohydrochloride 32042-43-6 Not available Not available

Recommended use of the chemical and restrictions on use

Recommended use: Uses advised against	No information available. No information available
Supplier:	Spectrum Chemicals and Laboratory Products, Inc. 14422 South San Pedro St. Gardena, CA 90248 (310) 516-8000
Order Online At:	https://www.spectrumchemical.com
Emergency telephone number	Chemtrec 1-800-424-9300
Contact Person:	Martin LaBenz (West Coast)
Contact Person:	Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Not a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Label elements

Not classified

Hazards not otherwise classified (HNOC) Not Applicable

Other hazards Not available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
DL-Arginine Hydrochloride 32042-43-6	32042-43-6	100	*

4. FIRST AID MEASURES

First aid measures General Advice:	Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126)
Skin Contact:	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention if irritation develops. Consult a physician if necessary.
Eye Contact:	Flush eye with water for 15 minutes. Get medical attention if irritation occurs. If symptoms persist, call a physician.
Inhalation:	Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Ingestion:	Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Consult a physician if necessary.
Most important symptoms and effect	ts, both acute and delayed
Symptoms	Health injuries are not known or expected under normal use.
Indication of any immediate medical	attention and special treatment needed

Notes to Physician: Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media Suitable Extinguishing Media:	Carbon dioxide (CO2). Dry chemical. Water spray. Alcohol- resistant foam.
Unsuitable Extinguishing Media:	No information available.
Specific hazards arising from the chemical	
Hazardous Combustion Products:	Carbon oxides, Nitrogen oxides, Halogenated compounds, HCl gas
Specific hazards:	May be combustible at high temperatures Fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard

Special Protective Actions for Firefighters

Special Protective Equipment for Firefighters:

No information available.

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency proceduresPersonal Precautions:Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes
and clothing. Avoid dust formation. Keep people away from and upwind of spill/leak. Do not
touch damaged containers or spilled material unless wearing appropriate protective clothing.
Remove all sources of ignition.Environmental precautionsPrevent further leakage or spillage if safe to do so. Prevent product from entering
drains. Prevent entry into waterways, sewers, basements or confined areas.Methods and material for containment and cleaning upStop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.Methods for cleaning upSweep up and shovel into suitable containers for disposal. Clean contaminated
surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

Safe Handling Advice:

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Avoid dust formation. Do not ingest. Do not breathe vapours/dust. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials. Sensitive to light. Store in light-resistant containers.

Incompatible Materials:

Oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
DL-Arginine Hydrochloride - 32042- 43-6		None	None	None

Canada

Components	Alberta	British Columbia	Ontario	Quebec

	None	None	None	None
DL-Arginine Hydrochloride - 32042-				
43-6				

Australia and Mexico

Components	Australia	Mexico
DL-Arginine Hydrochloride	None	None
32042-43-6		

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

Eye protection:	Safety glasses. Safety glasses with side-shields.
Skin and body protection:	Long sleeved clothing. Chemical resistant apron. Gloves.
Respiratory protection:	Effective dust mask. Wear respirator with dust filter
Hygiene measures:	Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke.

9. PHYSICAL AND CHEMICAL PROPERTIES

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Physical state: Solid.

Odor: No information available

Formula: C6H14N4O2•HCI

Flash Point Tested according to: Not available

Autoignition Temperature (°C/°F): No information available

Boiling point/range(°C/°F): No information available

Specific gravity: No information available

Evaporation rate: No information available

Odor threshold (ppm): No information available

Miscibility: No information available Appearance: No information available

Taste No information available

Flash point (°C): No data available

Lower Explosion Limit (%): No information available

pH: No information available

Decomposition temperature(°C/°F): No information available

Vapor pressure @ 20°C (kPa): No information available

Vapor density: No information available

Partition coefficient (n-octanol/water): No information available

Solubility: No information available

10. STABILITY AND REACTIVITY

Color: White. Off-white.

Molecular/Formula weight: 210.66

Flashpoint (°C/°F): No information available.

Upper Explosion Limit (%): No information available

Melting point/range(°C/°F): 128.0°-130.0°C/262.0°-266.0°F

Bulk density: No information available

Density (g/cm3): No information available

VOC content (g/L): No information available

Viscosity: No information available

Reactivity Reactive with oxidizing agents

Chemical stability Stability:	Sensitive to light. Exposure to light accelerates decomposition. Stable under recommended storage conditions.
Possibility of Hazardous Reactions:	Hazardous polymerization does not occur
Conditions to avoid:	Heat. Ignition sources. Incompatible materials. Exposure to light.
Incompatible Materials:	Oxidizing agents.
Hazardous decomposition products:	Carbon oxides. Halogenated compounds. Hydrogen chloride gas. Nitrogen oxides (NOx).
Other Information	
Corrosivity:	No information available
Special Remarks on Corrosivity:	No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure: Eyes. Ingestion. Inhalation.

Acute Toxicity

Component Information

DL-Arginine Hydrochloride - 32042-43-6

LD50/oral/rat = No information available LD50/oral/mouse = No information available LD50/dermal/rat = No information available LD50/dermal/rabbit = No information available LC50/inhalation/rat = No information available LC50/inhalation/mouse = No information available Other LD50 or LC50information = No information available

Product Information

LD50/oral/rat = VALUE- Acute Tox Oral = No information available

LD50/oral/mouse = Value - Acute Tox Oral = No information available

LD50/dermal/rabbit VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat VALUE -Acute Tox Dermal = No information available

LC50/inhalation/rat VALUE-Vapor = No information available VALUE-Gas = No information available VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Symptoms

Skin Contact:	May cause skin irritation.
Eye Contact:	May cause eye irritation.
Inhalation Ingestion	May cause irritation of respiratory tract. Health injuries are not known or expected under normal use.
Aspiration hazard	No information available
Delayed and immediate ef	fects as well as chronic effects from short and long-term exposure
Chronic Toxicity	No information available
Sensitization:	No information available

Mutagenic Effects:

No information available

Carcinogenic effects:

Not considered carcinogenic

Components	ACGIH - Carcinogens	IARC	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
DL-Arginine Hydrochloride	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

Reproductive toxicity	No data is available
Reproductive Effects:	No information available
Developmental Effects:	No information available
Teratogenic Effects:	No information available
Specific Target Organ Toxicity	
STOT - single exposure	No information available
STOT - repeated exposure	No information available
Target Organs:	No information available

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects:	No data available.
Persistence and degradability:	No information available
Bioaccumulative potential:	No information available
Mobility:	No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
DL-Arginine Hydrochloride	None	None	None	None

14. TRANSPORT INFORMATION

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Not Regulated

None

No information available

No data available

Not Regulated

Not Regulated

Not Regulated

No information available

No information available No information available No information available No information available

DOT

UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group: ERG No: Marine Pollutant DOT RQ (lbs):

TDG (Canada)

UN-No:Not RegulatedProper Shipping Name:No information availableHazard Class:No information availableSubsidiary Risk:No information availablePacking Group:No information availableDescription:No information available

ADR

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Packing Group:	No information available
Subsidiary Risk:	No information available
Classification Code:	No information available
Description:	No information available
CEFIC Tremcard No:	No information available

IMO / IMDG

UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group: Description: IMDG Page: Marine Pollutant MFAG: Maximum Quantity:

RID

UN-No: Proper Shipping Name: Hazard Class: Subsidiary Risk: Packing Group: Classification Code: Description:

ICAO

UN-No:
Proper Shipping Name:
Hazard Class:
Subsidiary Risk:
Packing Group:
Description:

IATA

UN-No:	Not Regulated
Proper Shipping Name:	No information available
Hazard Class:	No information available
Subsidiary Risk:	No information available
Packing Group:	No information available
Description:	No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
DL-Arginine Hydrochloride	Not Listed	Not present	Not present	Not present	Not present	Not present	Present 250-903-0

U.S. Regulations

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicitv	Female Reproductive Toxicity:
DL-Arginine Hydrochloride	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

	Substances and their	Hazardous	Section 302 Extremely Hazardous Substances and RQs	Chemical Category	Section 313 - Reporting de minimis
DL-Arginine Hydrochloride	None	None	None	None	None

U.S. TSCA

•	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
DL-Arginine Hydrochloride	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

Non-controlled

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Inventory

Components	Canada (DSL)	Canada (NDSL)
DL-Arginine Hydrochloride	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Manditory Reporting
DL-Arginine Hydrochloride	Not listed	Not listed

EU Classification

R-phrase(s) not determined (not applicable)

S -phrase(s) none

Components	Classification	Concentration Limits:	Safety Phrases
DL-Arginine Hydrochloride		No information	

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger: None.

16. OTHER INFORMATION

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Revision Date: Prepared by: 01/28/2015 Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet