



JUNSEI

Material safety data sheet

SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Catalog Numbers: 13020

Catalog Name: L(+)-Arginine hydrochloride

Company Identification:

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CREATION DATE: July 18, 2013

SECTION 2 HAZARDS IDENTIFICATION

Physical and chemical hazard

Pyrophoric solids

: Out of category

GHS label elements including precautionary statements

Symbol : -

Signal ward : -

Hazard statement : -

SECTION 3 COMPOSITION, INFORMATION ON INGREDIENTS

Substance/Mixture : Substance

COMPONENT L(+)-Arginine hydrochloride

CAS NUMBER : 1119-34-2, 74-79-3(free)

US TSCA:inventory : Registration(anh)

EC NUMBER (EINECS): 214-275-1

JAPAN NUMBER (ENCS): 2-1307 (L-Arginine), 1-215(Hydrogen chloride)

PERCENTAGE:(GR) 99.0+%

SECTION 4 FIRST AID MEASURES

If inhalation : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

If on skin : Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

If in eyes : Rinse cautiously with water for several minutes.
Remove contact lenses ,if present and easy to do. Continue rinsing.

If eyes irritation persists, get medical advice/attention.
If swallowed : Rinse mouth. Call a POISON CENTER or doctor/physician.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing media : Water spray, dry chemical powder, alcohol-resistant foam, carbon dioxide
Prohibited extinguishing media : No data available.
Particular fire fighting : Move containers form fire area if it can be done without risk, if not possible, apply water form a safe distance to cool and protect surrounding area.
Protection for firefighters : Firefighters should wear protective equipment.

SECTION 6 ACCIDENTAL RELEASE MEASURES

General Information : Use proper personal protective equipment as indicated in Section 8.
Cautions for environment : Avoid release to the rivers, lakes, ocean, groundwater.
Spills/Leak : Place into a suitable disposal container for later disposal.

SECTION 7 HANDLING AND STORAGE

Handling : Avoid breathing dust, vapor, mist, or gas. Avoid contact with skin and eyes.
Use only in a chemical fume hood.
Storage : Keep away from sources of ignition.
Store in a cool, dry place. Store in the dark.
Store in a tightly closed container. Store in well-ventilated place.

SECTION 8 EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls : Use adequate ventilation to keep airborne concentrations low.
Occupational exposure limits
ACGIH (2010) : Not established.
OELs (2012) : Not established.
Personal protective equipment :
Eye Protection : Goggles
Hand Protection : Protective gloves
Skin and body protection : Wear appropriate protective gloves and clothing to prevent skin exposure.
Respiratory Protection : Wear respiratory protection.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Physical State : Crystal or crystalline powders.
Appearance : White.
Odor : No data available.
pH : No data available.
Freezing/Melting Point :. 218 (Sinters)
Boiling Point : 235 .
Flash Point : No data available

Explosion Limits, lower ~ upper : Not data available.
Vapor Pressure : 1.33×10^{-8} mmHg(25 , estimated)
Vapor Density (Air = 1) : No data available.
Specific Gravity/Density : No data available.
Solubility in water : No data available.
Octanol/Water Partition Coefficient : log Pow = -4(estimated)
Autoignition Temperature : No data available.
Decomposition Temperature : No data available.
Molecular Formula : $C_6H_{15}ClN_4O_2$
Molecular Weight : 210.67

SECTION 10 STABILITY AND REACTIVITY

Chemical Stability : Stable in ordinary handling conditions.
Conditions to Avoid : Contact with open flames or heat.
Incompatibilities with Other Materials : No data available.
Hazardous Decomposition Products: Nitrogen oxide, carbon monoxide, carbon dioxide,
hydrogen chloride
Hazardous Polymerization : Will not occur.

SECTION 11 TOXICOLOGICAL INFORMATION

Acute toxicity:

Oral : Not possible to classify because of no data.
Dermal : Not possible to classify because of no data.
Gas : Not applicable (GHS definition).
Vapours : Not possible to classify because of no data.
Dusts and mists : Not possible to classify because of no data.

Skin corrosion/Irritation: Not possible to classify because of no data.
Serious eye damage/eye irritation: Not possible to classify because of no data.
Respiratory sensitization: Not possible to classify because of no data.
Skin sensitization: Not possible to classify because of no data.
Mutagenicity: Not possible to classify because of no data.
Carcinogenic effects: Not possible to classify because of no data.
Effects on the reproductive system: Not possible to classify because of no data.
Specific target organ systemic toxicity (single exposure): Not possible to classify because of no data.
Specific target organ systemic toxicity (repeated exposure): Not possible to classify because of no data.
Aspiration hazard: Not possible to classify because of no data.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity:

Hazardous to the aquatic environment (acute)
: Not possible to classify because of no data.
Hazardous to the aquatic environment (chronic)
: Not possible to classify because of no data .

SECTION 13 DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

SECTION 14 TRANSPORT INFORMATION

Not regulated for transport.

SECTION 15 REGULATORY INFORMATION

Fire Service Act : Not regulated

Poisonous and Deleterious Substances Control Act : Not regulated

Industrial Safety and Health Act : Not regulated

Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the
Environment and Promotion of Improvements to the Management Thereof (MSDS
required) (Effective from October 1, 2009) : Not regulated

Substance Registration :

US TSCA inventory : Registration.

EC number (EINECS) : 214-275-1

JAPAN number (ENCS) : 2-1307 (L-Arginine), 1-215(Hydrogen chloride)

Australia (AICS) : Registration.

Canada(DSL) : Registration.

Korea number (ECL) : KE-01904

China(IECSC) : Not registration

SECTION 16 OTHER INFORMATION

REFERENCES:

- The Merck Index 15 edition, Monographs No. 770
- Chemical Risk Information Platform (CHRIP)
- GHS Classification Guidance for the Japanese Government 2nd revised (March, 2010).

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

Junsei Chemical Co.,Ltd. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.