

## Section 1: Identification

<b>Common Name/Trade Name</b>	L- GLUTAMINE USP	
<b>Supplier Information</b>	Letco Medical, LLC 1316 Commerce Drive NW Decatur, AL 35601 1 (800) 239-5288 +1 (734) 843-4693	<b>IN CASE OF EMERGENCY:</b> Chemtrec 1 (800) 424-9300 (24 hours)
<b>Product Synonym(s)</b>	(S)-2,5-Diamino-5-oxopentanoic acid L-Glutamic acid 5-amide	
<b>Relevant Use(s) of Product</b>	Manufacture or Compounding of Substances	

## Section 2: Hazards Identification

<b>Classification of Substance or Mixture</b>	Not a hazardous substance or mixture.
<b>Signal Word</b>	None
<b>Hazard Statement(s)</b>	N/A
<b>Pictogram(s)</b>	N/A
<b>Precautionary Statement(s)</b>	N/A
<b>Hazards Not Otherwise Classified</b>	No data available
<b>Ingredient(s) with Unknown Toxicity</b>	No data available

## Section 3: Composition/Information on Ingredients

<b>Chemical Name</b>	(S)-2,5-Diamino-5-oxopentanoic acid L-Glutamic acid 5-amide
<b>Common Name</b>	L- Glutamine
<b>CAS Number</b>	56-85-9
<b>Impurities and/or Stabilizing Additives</b>	No data available

## Section 4: First Aid Measures

<b>General Advice</b>	No ingredients are hazardous according to OSHA criteria. No components need to be disclosed according to the applicable regulations.
<b>If Inhaled</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration.
<b>In Case of Skin Contact</b>	Wash off with soap and plenty of water.
<b>In Case of Eye Contact</b>	Flush eyes with water as a precaution.
<b>If Swallowed</b>	Never give anything by mouth an unconscious person. Rinse mouth with water.
<b>Most Important Symptoms and Effects</b>	The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

## Section 5: Fire Fighting Measures

<b>Suitable Extinguishing Media</b>	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
<b>Special Hazards Arising From the Substance/Mixture</b>	Carbon oxides, nitrogen oxides (NOx)
<b>Special PPE and/or Precautions for Firefighters</b>	Wear self contained breathing apparatus for fire fighting if necessary.

## Section 6: Accidental Release Measures

<b>Personal Precautions, Protective Equipment and Emergency Procedures</b>	Avoid dust formation. Avoid breathing vapours, mist, or gas.
<b>Methods and Materials Used for Containment</b>	Sweep up and shovel. Keep in suitable, closed containers for disposal.
<b>Cleanup Procedures</b>	Sweep up and shovel. Keep in suitable, closed containers for disposal. Do not let product enter drains.

## Section 7: Handling and Storage

<b>Precautions for Safe Handling</b>	Provide appropriate exhaust ventilation at places where dust is formed.
<b>Conditions for Safe Storage</b>	Keep container tightly closed in a dry and well-ventilated place. Keep in a dry place.

## Section 8: Exposure Controls/Personal Protection

<b>Components with Workplace Control Parameters</b>	Contains no substances with occupational exposure limit values.
<b>Appropriate Engineering Controls</b>	General industrial hygiene practice.
<b>PPE - Eye/Face Protection</b>	Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).
<b>PPE - Skin Protection</b>	Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after in use accordance with applicable laws and good laboratory practices. Wash and dry hands.
<b>PPE - Body Protection</b>	Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after in use accordance with applicable laws and good laboratory practices. Wash and dry hands.
<b>PPE - Respiratory Protection</b>	Respiratory protection is not required. Where protection from nuisance levels of dust are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

## Section 9: Physical and Chemical Properties

<b>Appearance</b>	Form: Powder Colour: White
<b>Upper/Lower Flammability or Explosive Limits</b>	No data available
<b>Odor</b>	No data available
<b>Vapor Pressure</b>	No data available
<b>Odor Threshold</b>	No data available
<b>Vapor Density</b>	No data available
<b>pH</b>	5.0 - 6 at 14.6 g/l at 25 °C (77 °F)
<b>Relative Density</b>	No data available
<b>Melting Point/Freezing Point</b>	Melting point/range: 185 °C (365 °F)
<b>Solubility</b>	Water Soluble 14.6 g/l at 20 °C (68 °F) - completely soluble
<b>Initial Boiling Point and Boiling Range</b>	No data available
<b>Flash Point</b>	No data available
<b>Evaporation Rate</b>	No data available
<b>Flammability (Solid, Gas)</b>	No data available
<b>Partition Coefficient</b>	log Pow: -4.609
<b>Auto-Ignition Temperature</b>	No data available
<b>Decomposition Temperature</b>	No data available
<b>Viscosity</b>	No data available

## Section 10: Stability and Reactivity

<b>Reactivity</b>	No data available
<b>Chemical Stability</b>	Stable under recommended storage conditions.
<b>Possibility of Hazardous Reactions</b>	No data available
<b>Conditions to Avoid</b>	No data available
<b>Incompatible Materials</b>	Strong oxidizing agents
<b>Hazardous Decomposition Products</b>	Other decomposition products-No data available

## Section 11: Toxicological Information

<b>Acute Toxicity - LD50 Oral</b>	LD50 Oral - rat - 7,500 mg/kg
<b>Acute Toxicity - Inhalation</b>	No data available
<b>Acute Toxicity - Dermal</b>	No data available
<b>Acute Toxicity - Eye</b>	No data available
<b>Skin Corrosion/Irritation</b>	No data available
<b>Serious Eye Damage/Irritation</b>	No data available
<b>Respiratory or Skin Sensitization</b>	No data available
<b>Germ Cell Mutagenicity</b>	No data available
<b>Carcinogenicity IARC</b>	No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
<b>Carcinogenicity ACGIH</b>	No component of this product at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
<b>Carcinogenicity NTP</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
<b>Carcinogenicity OSHA</b>	No component of this product present at levels greater than or equal to 0.1% is identified as carcinogen or potential carcinogen by OSHA.
<b>Reproductive Toxicity</b>	No data available
<b>Specific Target Organ Toxicity - Single Exposure</b>	No data available
<b>Specific Target Organ Toxicity - Repeated Exposure</b>	No data available
<b>Aspiration Hazard</b>	No data available

## Section 12: Ecological Information

<b>Toxicity</b>	No data available
<b>Persistence and Degradability</b>	No data available
<b>Bio-accumulative Potential</b>	No data available
<b>Mobility in Soil</b>	No data available
<b>Other Adverse Effects</b>	No data available

## Section 13: Disposal Considerations

<b>Waste Treatment Methods Product</b>	Offer surplus and non-recyclable solutions to a licensed disposal company.
<b>Waste Treatment Methods Packaging</b>	Dispose of as unused product.
<b>Special Precautions Landfill or Incinerations</b>	No data available
<b>Other Information</b>	No data available

## Section 14: Transport Information

<b>UN Number</b>	Not dangerous goods.
<b>UN Proper Shipping Name</b>	N/A
<b>Transport Hazard Class(es)</b>	N/A
<b>Packaging Group</b>	N/A
<b>Environmental Hazards</b>	N/A

## Section 15: Regulatory Information

SARA 302 Components: SARA 302: No chemicals in this material are subject to the following requirements of SARA Title III, Section 302. SARA 313 Components: SARA 313: This material does not contain any chemical components with known CAS number that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. SARA 311/312 Hazards: No SARA Hazards. Massachusetts Right To Know Components: No components are subject to the Massachusetts Right To Know Act. Pennsylvania Right To Know Components: L-Glutamine CAS-No. 56-85-9. New Jersey Right To Know Components: L-Glutamine CAS-No. 56-85-9. California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

## Section 16: Other Information

<b>Additional Information</b>	
<b>Prepared By</b>	Lisa Russell
<b>Revision Date</b>	01/08/2019 15:54

### Disclaimer

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