


## Section 1: Identification

<b>Common Name/Trade Name</b>	L-TYROSINE 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-Amino-3-(4-hydroxyphenyl)propionic acid 3-(4-Hydroxyphenyl)-L-alanine	
<b>Relevant Use(s) of Product</b>	Manufacture or Compounding of Substances	

## Section 2: Hazards Identification

<b>Classification of Substance or Mixture</b>	Skin irritation (Category 2), Eye irritation (Category 2A), Specific target organ toxicity - single exposure (Category 3), Respiratory system	
<b>Signal Word</b>	Warning	
<b>Hazard Statement(s)</b>	H315 H319 H335	Causes skin irritation Causes serious eye irritation May cause respiratory irritation
<b>Pictogram(s)</b>		
<b>Precautionary Statement(s)</b>	P261 P264 P271 P280 P302+P352 P304+P340 P305+P351+P338 P312 P332+P313 P337+P313 P362 P403+P233 P405 P501	Avoid breathing dust/fume/gas/mist/vapours/spray. Wash hands thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN Wash with soap and water. IF INHALED Remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. continue rinsing. Call a POISON CENTER or doctor/physician if you feel unwell. If skin irritation occurs Get medical advice/attention. If eye irritation persists Get medical advice/attention. Take off contaminated clothing and wash before reuse. Store in a well ventilated place. Keep container tightly closed. Store locked up. Dispose of contents/container to an approved waste disposal plant.
<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-Amino-3-(4-hydroxyphenyl)propionic acid 3-(4-Hydroxyphenyl)-L-alanine
<b>Common Name</b>	L-Tyrosine
<b>CAS Number</b>	60-18-4
<b>Impurities and/or Stabilizing Additives</b>	No data available

## Section 4: First Aid Measures

<b>General Advice</b>	Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
<b>If Inhaled</b>	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
<b>In Case of Skin Contact</b>	Wash off with soap and plenty of water. Consult a physician.
<b>In Case of Eye Contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>If Swallowed</b>	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
<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 section 11.

## Section 5: Fire Fighting Measures

<b>Suitable Extinguishing Media</b>	Use water spray, alcohol-resistant foam, dry and 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>	Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist, or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
<b>Methods and Materials Used for Containment</b>	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
<b>Cleanup Procedures</b>	Pick up and arrange disposal without creating dust. 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>	Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.
<b>Conditions for Safe Storage</b>	Keep container tightly closed in a dry and well-ventilated 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>	Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
<b>PPE - Eye/Face Protection</b>	Safety glasses with side-shields conforming to EN166. 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 use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
<b>PPE - Body Protection</b>	Impervious clothing. 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 use in accordance with applicable laws and good laboratory practices. Wash and dry hands.
<b>PPE - Respiratory Protection</b>	For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. 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: Fine crystals and fragments 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>	No data available
<b>Relative Density</b>	No data available
<b>Melting Point/Freezing Point</b>	Melting point/range: 343 °C (649 °F)
<b>Solubility</b>	Water solubility 0.479 g/l at 25 °C (77 °F)
<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: -2.26 at 25 °C (77 °F)
<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>	No data available
<b>Acute Toxicity - Inhalation</b>	No data available
<b>Acute Toxicity - Dermal</b>	LD50 Intraperitoneal - mouse - > 1,450 mg/kg
<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. Contact a licensed professional waste disposal service to dispose of this material.
<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 reporting requirements of SARA Title III, Section 302. SARA 313 Components: SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313. SARA 311/312 Hazards: Acute Health Hazard. Massachusetts Right To Know Components: No components are subject to the Massachusetts Right To Know Components. Pennsylvania Right To Know Components: L-Tyrosine CAS-No. 60-18-4 New Jersey Right To Know Components: L-Tyrosine CAS-No. 60-18-4. 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>	01/11/2019 09:55

### Disclaimer

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