

L-alanine 56-41-7 MSDS

Name:	L-Alanine Material Safety Data Sheet		
Synonym:	L-alpha-Alanine; (S)-Alanine; L-2-Aminopropanoic acid; non-essential amino acid		
	for human development		
CAS:	56-41-7		

Section 1 - Chemical Product

MSDS Name: L-Alanine Material Safety Data Sheet

Synonym: L-alpha-Alanine; (S)-Alanine; L-2-Aminopropanoic acid; non-essential amino acid for human

development

Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	content	EINECS#
56-41-7	L-Alanine	>98.5	-

Hazard Symbols: None Listed. Risk Phrases: None Listed.

Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Not available.

Potential Health Effects

Eye:

Dust may cause mechanical irritation. Contact may cause transient eye irritation.

Skin

May cause skin irritation. Low hazard for usual industrial handling.

Ingestion:

May cause irritation of the digestive tract.

Inhalation:

May cause respiratory tract irritation.

Chronic:

No information found.



Section 4 - FIRST AID MEASURES

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. If irritation develops, get medical aid.

Skin:

Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

Ingestion:

If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation

Remove from exposure and move to fresh air immediately. Get medical aid if cough or other symptoms appear.

Notes to Physician:

Section 5 - FIRE FIGHTING MEASURES

General Information:

As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dusts at sufficient concentrations can form explosive mixtures with air. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media:

Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Section 6 - ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8. Spills/Leaks:

Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Provide ventilation.

Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage:

Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Dark room.



Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Good general ventilation should be sufficient to control airborne levels.

Exposure Limits CAS# 56-41-7: Russia: 5 mg/m3 TWA Personal Protective Equipment Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin

Wear appropriate protective gloves to prevent skin exposure.

Clothing:

Wear appropriate protective clothing to minimize contact with skin.

Respirators:

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Solid

Color: white

Odor: None reported. pH: 5.5-7 (2.5% soln) Vapor Pressure: Negligible.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: 297 deg C (dec)
Autoignition Temperature: Not applicable.

Flash Point: Not applicable.

Explosion Limits, lower: Not available.

Explosion Limits, upper: Not available.

Decomposition Temperature: 297 deg C

Solubility in water: 166.5 g/l @ 25 C

Specific Gravity/Density: 1.401

Molecular Formula: CH3CH(NH2)CO2H

Molecular Weight: 89.09

Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:



Light, dust generation, moisture, excess heat.

Incompatibilities with Other Materials:

Strong oxidizing agents.

Hazardous Decomposition Products:

Nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 56-41-7: AY2990000 LD50/LC50:

Not available.

Carcinogenicity:

L-Alanine - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

Section 12 - ECOLOGICAL INFORMATION

Section 13 - DISPOSAL CONSIDERATIONS

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

Section 14 - TRANSPORT INFORMATION

IATA

Not regulated as a hazardous material.

IMO

Not regulated as a hazardous material.

RID/ADR

Not regulated as a hazardous material.

Section 15 - REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Not available.



Risk Phrases:

Safety Phrases:

S 24/25 Avoid contact with skin and eyes.

WGK (Water Danger/Protection)

CAS# 56-41-7: 0

Canada

CAS# 56-41-7 is listed on Canada's DSL List.

CAS# 56-41-7 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 56-41-7 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

N/A