



开原亨泰精细化工厂

Kaiyuan Hengtai Fine Chemicals Factory

Material Safety Data Sheet L-Arginine Alpha-Ketoglutarate (1:1)

Revision Date: 8/6/09

Section 1: Chemical Product Information

Product Name:	L-Arginine Alpha-Ketoglutarate (1:1)
Catalog Codes:	Not available.
CAS#:	16856-18-1
RTECS:	Not available.
TSCA:	TSCA 8(b) inventory: Not available.
CI#:	Not available.
Synonym:	Not available.
Chemical Name:	L-Arginine Alpha-Ketoglutarate (1:1)
Chemical Formula:	C ₁₁ H ₂₀ N ₄ O ₇

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
{L-}Arginine	16856-18-1	100%

Toxicological Data on Ingredients: Not available

Section 3: Hazards Identification

Potential Acute Health Effects:

Eye Contact:	L-Arginine Alpha-Ketoglutarate (1:1) may cause irritation. Seek medical help if it persists.
Skin Contact	L-Arginine Alpha-Ketoglutarate (1:1) may cause irritation. Seek medical help if it persists.
Inhalation:	L-Arginine Alpha-Ketoglutarate (1:1) may cause irritation. Seek medical help if irritation or breathing difficulties occur.
Ingestion:	L-Arginine Alpha-Ketoglutarate (1:1) not likely to cause irritation. Seek medical help if it occurs.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS:	Not available.
MUTAGENIC EFFECTS:	Not available.
TERATOGENIC EFFECTS:	Not available.
DEVELOPMENTAL TOXICITY:	Not available.

Section 4: First Aid Measures

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Eye Contact:	Flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation persists.
Skin Contact:	Wash contacted area with cold water. Seek medical attention if irritation persists.
Inhalation:	Go to fresh air. Seek medical help if persistent irritation or breathing difficulties occur.
Ingestion:	Wash mouth out with water. Seek medical attention if difficulties occur.

Section 5: Fire and Explosion Data

Flammability of the Product:	May be combustible at high temperature.
Auto-Ignition Temperature:	Not available.
Flash Points:	Not available.
Flammable Limits:	Not available.
Products of Combustion:	These products are carbon oxides (CO, CO ₂), nitrogen oxides (NO, NO ₂ ...).
Fire Hazards in Presence of Various Substances:	Slightly flammable to flammable in presence of heat. Non-flammable in presence of shocks.
Explosion Hazards in Presence of Various Substances:	Risks of explosion of the product in presence of mechanical impact: Not available.
Fire Fighting Media and Instructions:	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.
Special Remarks on Fire Hazards:	Not available.
Special Remarks on Explosion Hazards:	Not available.

Section 6: Accidental Release Measures

Small Spill:	Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.
Large Spill:	Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7: Handling and Storage

Precautions:	Keep locked up. Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. Do not breathe dust. Wear suitable protective clothing. If you feel unwell, seek medical attention and show the label when possible. Keep away from
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Storage:	incompatibles such as oxidizing agents. Store in light-resistant containers. Store in cool, dry, well-ventilated place in tightly sealed containers.
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Section 8: Exposure Controls/Personal Protection

Engineering Controls:	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.
Personal Protection:	Safety glasses. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.
Personal Protection in Case of a Large Spill:	Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits:	Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance:	Powder.
Odor:	None reported.
Taste:	Not available.
Molecular Weight:	320.3 g/mole
Color:	White.
pH (1% soln/water):	6.5 7.0
Boiling Point:	Not available.
Melting Point:	Not available.
Critical Temperature:	Not available.
Specific Gravity:	Not available.
Vapor Pressure:	Not applicable.
Vapor Density:	Not available.
Volatility:	Not available.
Odor Threshold:	Not available.
Water/Oil Dist. Coeff.:	Not available.
Ionicity (in Water):	Not available.
Dispersion Properties:	See solubility in water.
Solubility:	Soluble in water.

Section 10: Stability and Reactivity Data

Stability:	The product is stable.
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Instability Temperature:	Not available.
Conditions of Instability:	Excess heat, light
Incompatibility with various substances	Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.
Corrosivity:	Non-corrosive in presence of glass.
Special Remarks on Reactivity:	Light sensitive.
Special Remarks on Corrosivity:	Not available.
Polymerization:	Will not occur.

Section 11: Toxicological Information

Routes of Entry:	Inhalation. Ingestion.
Toxicity to Animals:	LD50: Not available. LC50: Not available.
Chronic Effects on Humans:	Not available.
Other Toxic Effects on Humans:	May cause skin irritation or respiratory tract irritation.
Special Remarks on Toxicity to Animals:	Mutagenic effects have occurred in experimental animals.
Special Remarks on Chronic Effects on Humans:	No human data found at this time.
Special Remarks on other Toxic Effects on Humans:	Acute Potential Health Effects: Skin: May cause skin irritation. Eyes: May cause eye irritation. Inhalation: May cause respiratory tract irritation. Ingestion: Not likely to cause irritation.

Section 12: Ecological Information

Ecotoxicity:	Not available.
BOD5 and COD:	Not available.
Products of Biodegradation:	Not available.
Toxicity of the Products of Biodegradation:	Not available.
Special Remarks on the Products of Biodegradation:	Not available.

Section 13: Disposal Considerations

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14: Transport Information

DOT Classification:	Not a DOT controlled material (United States).
Identification:	Not applicable.
Special Provisions for Transport:	Not applicable.

Section 15: Other Regulatory Information

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Federal and State Regulations:	TSCA 8(b) inventory: Not available.
Other Regulations:	Not available.

Other Classifications:

WHMIS (Canada):	This product has a WHMIS classification of D28.
DSCL (EEC):	S 24/25 Avoid contact with skin and eyes.

HMIS (U.S.A.):

Health Hazard:	1
Fire Hazard:	1
Reactivity:	0
Personal Protection:	E

National Fire Protection Association (U.S.A.):

Health:	1
Flammability:	1
Reactivity:	0
Specific Hazard:	

Protective Equipment:	Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.
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Section 16: Other Information

References:	Not available.
Other Special Considerations:	Not available.

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