



Aspartame 22839-47-0 MSDS

Name:	L-Aspartyl-L-Phenylalanine Methyl Ester 98% Material Safety Data Sheet
Synonym:	Aspartame; Methyl Aspartylphenylalate
CAS:	22839-47-0

Section 1 - Chemical Product

MSDS Name: L-Aspartyl-L-Phenylalanine Methyl Ester 98% Material Safety Data Sheet

Synonym: Aspartame; Methyl Aspartylphenylalate

Section 2 - COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	Content	EINECS#
22839-47-0	L-Phenylalanine, N-L-.Alpha.-Aspartyl-	98%	245-261-3

Hazard Symbols: None Listed.

Risk Phrases: None Listed.

Section 3 - HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Not available.

Potential Health Effects

Eye:

May cause eye irritation.

Skin:

May cause skin irritation.

Ingestion:

May cause irritation of the digestive tract. Low hazard for usual industrial handling. Ingestion of large amounts may cause gastrointestinal disturbances, headache, fever, dizziness, urticaria, folliculitis and conjunctivitis.

Inhalation:

Low hazard for usual industrial handling. May cause respiratory tract irritation.

Chronic:

Adverse reproductive effects have been reported in animals.



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:

Wash mouth out with water. Get medical aid if irritation or symptoms occur.

Inhalation:

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. 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.

Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas.

Extinguishing Media:

Use agent most appropriate to extinguish fire. For small fires, use dry chemical, carbon dioxide, water spray or regular foam.

Section 6 - ACCIDENTAL RELEASE MEASURES

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

Spills/Leaks:

Clean up spills immediately, observing precautions in the Protective Equipment section. Sweep up or absorb material, then place into a suitable clean, dry, closed container for disposal. Avoid generating dusty conditions. Provide ventilation.

Section 7 - HANDLING and STORAGE

Handling:

Wash thoroughly after handling. Wash hands before eating. Remove contaminated clothing and wash before reuse. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Use with adequate ventilation.

Storage:



Store in a cool, dry place. Keep container closed when not in use.

No special precautions indicated.

Section 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls:

Use adequate ventilation to keep airborne concentrations low.

Exposure Limits CAS# 22839-47-0: 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:

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Crystalline powder

Color: white

Odor: odorless

pH: 5.3 @ 8% soln. H₂O

Vapor Pressure: Not available.

Viscosity: Not available.

Boiling Point: Not available.

Freezing/Melting Point: 248 - 250 deg C

Autoignition Temperature: Not available.

Flash Point: Not available.

Explosion Limits, lower: 3.00 vol %

Explosion Limits, upper: 17.50 vol %

Decomposition Temperature:

Solubility in water: slightly soluble

Specific Gravity/Density:

Molecular Formula: C₁₄H₁₈N₂O₅

Molecular Weight: 294.30



Section 10 - STABILITY AND REACTIVITY

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to Avoid:

Incompatible materials, dust generation, excess heat, strong oxidants.

Incompatibilities with Other Materials:

Strong oxidizing agents.

Hazardous Decomposition Products:

Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Will not occur.

Section 11 - TOXICOLOGICAL INFORMATION

RTECS#:

CAS# 22839-47-0: WM3407000 LD50/LC50:

CAS# 22839-47-0: Oral, mouse: LD50 = >10 gm/kg; Oral, rat: LD50 = >10 gm/kg.

Carcinogenicity:

L-Phenylalanine, N-L-.Alpha.-Aspartyl-, 1-Methyester - Not listed by ACGIH, IARC, or NTP.

Other:

See actual entry in RTECS for complete information.

Section 12 - ECOLOGICAL INFORMATION

Other No information available.

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# 22839-47-0: 0

Canada

CAS# 22839-47-0 is listed on Canada's DSL List.

CAS# 22839-47-0 is not listed on Canada's Ingredient Disclosure List.

US FEDERAL

TSCA

CAS# 22839-47-0 is listed on the TSCA inventory.

SECTION 16 - ADDITIONAL INFORMATION

N/A