L-ASPARTIC ACID ,99% + PURITY

SECTION 1: CHEMICAL PRODUCT IDENTIFICATION

Product Name: L-ASPARTIC ACID
Product Code: CM 23,500
CAS#: 56-84-8
Synonym: L-Aminosuccinic acid
Chemical Name: Not Available.
Chemical Formula: $C_4H_7NO_4$
Formula Weight: 133.11

SECTION 2: COMPOSITION ANDINFORMATION ON INGREDIENTS

Composition:
Name: L-ASPARTIC ACID
Toxicological Data on Ingredients:
Classification according to Regulation (EC) No 1272/2008
Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

SECTION 3: HAZARDS IDENTIFICATION

Potential Acute Health Effects: Slightly hazardous in case of skin contact (irritant), of eye contact (irritant)
Potential Chronic Health Effects: Not available.
Carcinogenic effects: Not available.
Mutagenic effects: Not available.
Teratogenic effects: Not available.
Developmental toxicity: Not available

SECTION 4: FIRSTAID MEASURES

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Warm water must be used. Get medical attention if irritation occurs.
Skin Contact: Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.
Serious Skin Contact: Not available
Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Serious Inhalation: Not available
Ingestion: Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Serious Ingestion: Not available

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, CO2), nitrogen oxides (NO, NO2...)
Fire Hazards in Presence of Various Substances: Not Applicable.
Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not Available.
Risks of explosion of the product in presence of static discharge: 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: As with most organic solids, fire is possible at elevated temperatures. .
Special Remarks on Explosion Hazards: Fine dust dispersed in air in sufficient concentrations, and in the presences of an ignition source is a potential dust explosion hazard.

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 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. Avoid contact with eyes. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If you feel unwell, seek medical attention and show the label when possible
Storage:
Keep container tightly closed. Keep container in a cool, well-ventilated area.

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, Gloves. Be sure to use an approved/certified respirator or equivalent.
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 ANDCHEMICAL PROPERTIES

Physical state and appearance	:	WhiteCrystalline powder
Odor	:	Odourless
Taste	:	Not available

Molecular Weight	:	294.3
Color	:	Not available
pH(10% soln/water)	:	Not available
BoilingPoint	:	Not available
MeltingPoint	:	270 °C (518°F)
CriticalTemperature	:	Not available
Specific Gravity	:	1.66 (Water±1)
Vapor Pressure	:	Not applicable
Vapor Density	:	Not available
Volatility	:	Not available
Odor Threshold	:	Not available
Water/Oil Dist.Coeff.	:	The product is more soluble in water; log(oil/water) = -3.9
Ionicity(in Water)	:	Not available
Dispersion Properties	:	Not available
Solubility	:	Very slightly soluble in cold water. Insoluble in diethyl ether. Insoluble in ethanol, benzene. Solubility in water: 5.02 g/liter @ 25 deg. C. Soluble in acids and alkalies.

SECTION10:STABILITYANDREACTIVITY DATA

Stability: The product is chemically stable under standard ambient conditions.
Instability Temperature: Not available.
Conditions of Instability: Excess heat and light.
Incompatibility with various substances: Strong oxidizing material.
Corrosivity: Non corrosive in presence of glass.
Special Remarks on Reactivity: Light Sensitive.
Special Remarks on Corrosivity: Not available
Polymerization: Not available.

SECTION 11: TOXICOLOGICAL INFORMATION

Routes of Entry: Eye Contact and ingestion and Inhalation.
Toxicity to Animals:
LD_{50}: Not available
LC_{50}: Not available.
Chronic Effects on Humans: Slightly hazardous in case of skin contact (irritant), of ingestion, of inhalation
Other Toxic Effects on Humans: Not available
Special Remarks on Toxicity to Animals: Not available.
Special Remarks on Chronic Effects on Humans: Passes through the placental barrier in human. May affect genetic material (mutagenic)
Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity: Not Available.
BOD and COD: Not Available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation: The products of degradation are more toxic.
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

Federal and State Regulations: TSCA 8(b) inventory: L-Aspartic Acid
Other Regulations: EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.
Other Classifications:
WHMIS (Canada): Not controlled under WHMIS (Canada).
DSCL (EEC): R40- Possible risks of irreversible effects. S2- Keep out of the reach of children. S36/37- Wear suitable protective clothing and gloves.
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, Safety glasses, and Dust respirator - be sure to use an approved/certified respirator or equivalent.

SECTION 16: OTHER INFORMATION

References: Full text of H and R-Statements.
Not Applicable
Other Special Considerations: Not available

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