

# Aspartame

## SAFETY DATA SHEET SINOSWEET® ASPARTAME

### SECTION 1 : IDENTIFICATION

|                      |  |  |
|----------------------|--|--|
| <b>PRODUCT NAME</b>  | Aspartame  |  |
| <b>SYNONYMS</b>      | Asp-Phe Methyl Ester, Asp-Phe-OMe, N-(L-alpha-Aspartyl)-L-phenylalanine methyl ester |  |
| <b>SUPPLIER</b>      | SinoSweet® Co. Ltd<br>Yangzhu, Dingshu Town<br>Yixing<br>Jiangsu, China 214226       | Emergency Contact: 0086(510)87454202<br>Fax: 0086(510)87454201 |
| <b>MANUFACTURER</b>  | SinoSweet® Co. Ltd<br>Yangzhu, Dingshu Town<br>Yixing<br>Jiangsu, China 214226       | Emergency Contact: 0086(510)87454202<br>Fax: 0086(510)87454201 |
| <b>INTENDED USES</b> | Sweetener, Food Additive   |  |

### SECTION 2 : HAZARDS IDENTIFICATION

#### HMIS RATING

|              |   |
|--------------|---|
| HEALTH       | 0 |
| FLAMMABILITY | 0 |
| REACTIVITY   | 0 |

HEALTH:0  
FLAMMABILITY: 0  
REACTIVITY: 0

#### NFPA RATING



HEALTH:0  
FLAMMABILITY: 0  
REACTIVITY: 0

#### CLASSIFICATION

- Classification according to Directive 67/548/EEC
- Not considered as dangerous substance.
- Classification according to Regulation (EC) No 1272/2008 (CLP)
- Not considered as hazardous substance.
- Labelling according to Regulation (EC) No 1272/2008 (CLP)
- None

### SECTION 3 : COMPOSITION/INFORMATION ON INGREDIENT

Formula:  $C_{14}H_{18}N_2O_5$   
CAS: 22839-47-0  
EINECS Number: 245-261-3

Molecular Weight: 294.31  
E Number: E951  
Flashpoint: Not Applicable

Chemical Name: N-(L-alpha-Aspartyl)-L-phenylalanine methyl ester  
% by Weight: 100

### SECTION 4 : SECTION 4: FIRST AID MEASURES

If used under ordinary circumstances no special treatment is necessary. Wash thoroughly after handling.

**ORAL EXPOSURE** Not toxic if swallowed in small amounts based on toxicology studies.

**INHALATION EXPOSURE** Move to fresh air, if breathing becomes difficult call a physician.



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### SECTION 4 : FIRST AID MEASURES - CONTINUED

|                        |   |
|------------------------|---|
| <b>DERMAL EXPOSURE</b> | No special treatment required. Flush with copious amount of water if needed.        |
| <b>EYE EXPOSURE</b>    | Flush eyes with copious amounts of water for at least 15 minutes. Call a physician. |

### SECTION 5 : FIRE FIGHTING MEASURES

|                                  |   |
|----------------------------------|---|
| <b>FLASH POINT</b>               | N / A   |
| <b>AUTO IGNITION TEMPERATURE</b> | N / A   |
| <b>FLAMMABILITY</b>              | Stable under normal conditions. Special consideration should be taken to ensure the potential for dust concentration in the flammable range is minimized. |
| <b>EXTINGUISHING MEDIA</b>       | Suitable: Water spray, Carbon Dioxide, dry chemical powder, or appropriate foam.  |
| <b>FIREFIGHTING</b>              | Protective Equipment: Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.                              |

### SECTION 6 : ACCIDENTAL RELEASE MEASURES

|                                |   |
|--------------------------------|---|
| <b>FOR PERSONAL PRECAUTION</b> | Wear appropriate protective equipment   |
| <b>METHODS FOR CLEANING UP</b> | Sweep up, place in bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill area after material pickup is complete. |

### SECTION 7 : HANDLING AND STORAGE

|                 |  |
|-----------------|--|
| <b>HANDLING</b> | Avoid creating dusty conditions, inhalation, eye, skin and clothing contact. Worker exposure can be minimized if good industrial hygiene practices are utilized. |
| <b>STORAGE</b>  | Keep container tightly closed. Store in a cool, dry area.  |

### SECTION 8 : EXPOSURE CONTROLS/PERSONAL PROTECTION

|                                      |  |
|--------------------------------------|--|
| <b>ENGINEERING CONTROLS</b>          | It is recommended that mechanical exhaust is utilized to minimize hazards contributed to dust explosions.                            |
| <b>PERSONAL PROTECTIVE EQUIPMENT</b> | Utilize appropriate PPE for handling of powders. Eye goggles, gloves and dust masks will create a more comfortable work environment. |
| <b>GENERAL HYGIENE MEASURES</b>      | Wash thoroughly after handling.  |

|  |  |  |
|--|--|--|
| <b>RECOMMENDED AIRBORNE EXPOSURE LIMITS FOR DUST</b> | OSHA PEL<br>15mg/m <sup>2</sup> (Total Dust) 8- hour TWA<br>5 mg/m <sup>3</sup> (respirable) 8- hour TWA | ACGIH TLV:<br>10 mg/m <sup>3</sup> (inhalable) 8 – TWA<br>3mg/m <sup>3</sup> (respirable) 8-hour TWA |
|--|--|--|



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### SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White crystalline powder or granule  
Partition Coefficient:n-octanol/water: N/A  
Odor: Practically odorless  
Evaporation Rate: N/A  
Purity (on dry basis): 98-102%  
Vapor Pressure: N/A  
Moisture: NMT 4.5%  
Relative Density: 0.2-0.6 g/ml (Solid)  
Residue on Ignition: NMT 0.2%

Solubility: 1%  
Melting Point Range: 248-250 °C  
Flammability: N/A  
pH: 4.5- 6.0 (10% Solution)  
Auto-Ignition Temperature: N/A  
Initial Boiling Point: N/A  
Decomposition Temperature: 248-250 °C  
Flash Point: N/A  
Viscosity: N/A

Minimal Explosion concentration for dust:  
Maximal Explosion Pressure  
Kst:

**Granular**  
0.110 g/l  
9.8 Bars  
206 bar-m/sec

**Powder**  
0.055 g/l  
9.8 Bars  
206 bar- m/sec

### SECTION 10 : STABILITY AND REACTIVITY

#### STABILITY

Stable for 5 years when stored under proper conditions. Materials to Avoid: Strong oxidizing agents

#### HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide, carbon dioxide, and nitrogen oxides formed under fire conditions.

#### HAZARDOUS POLYMERIZATION

None

### SECTION 11 : TOXICOLOGICAL INFORMATION

#### ROUTES OF ENTRY

Dermal contact, eye contact, inhalation, and ingestion

#### TOXICITY TO ANIMALS

Acute Oral Toxicity (LD50): 10000 mg/kg (mouse)

#### CHRONIC EFFECTS ON HUMANS

Documented studies have shown the safety of aspartame to humans. Oral doses of 75 mg/kg/day to human subjects did not produce any clinical signs. The Acceptable Daily Intake (ADI) approved by the U.S. FDA is 50 mg/kg/day.

### SECTION 12 : ECOLOGICAL INFORMATION

#### ECOTOXICITY

Not Available

#### BOD5 AND COD

Not Available

#### FURTHER INFO ON ECOLOGY

Not Available

Biodegradable studies in published literature suggests aspartame would meet OECD guidelines for classifications as "readily biodegradable"



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### SECTION 13 : DISPOSAL CONSIDERATIONS

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Dispose in accordance with federal, state and local regulations

### SECTION 14 : TRANSPORTATION INFORMATION

Aspartame is considered to be non-hazardous for ground, sea and air transport.

### SECTION 15 : TRANSPORTATION INFORMATION

#### United States Regulatory Information

#### SARA LISTED

Hazard Categories under Title III Rules (40 CFR 370): Not applicable  
Section 302 Extremely Hazardous Substances: Not applicable  
Section 313 Toxic Chemical(s): Not applicable

#### EUROPE

Please check the consequences of national regulations on produce according to direct 67/548/EC.

There are no substances present within the products supplied to you considered to be of Very High Concern (SVHC), or included on the "Candidate List" as defined by REACH.

Polythene liner utilized as the Contact/Primary Packaging material is classified suitable for Food Grade use.

### SECTION 16 : OTHER INFORMATION

#### REFERENCES

Not available

#### OTHER SPECIAL CONSIDERATIONS

None

#### CREATED

May 1, 2016

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. SinoSweet Co., Ltd., extends no warranties and makes no representation as to the accuracy or completeness of the information contained herein. Users should make a determination of the suitability of the information for their particular purpose.

