Material Safety Data Sheet
RightSweet™ Aspartame

The Ingredient House, LLC. urges the customer receiving this Material Safety Data Sheet to study it carefully to become aware of hazards, if any, of the product involved. In the interest of safety you should (1) notify your employees, agents and contractors of the information on this sheet, (2) furnish a copy to each of your customers for the product and (3) request your customers to inform their employees and customers as well.

1. Identification of Substance

Product:	RightSweet™ Aspartame
Supplier:	The Ingredient House, LLC 5 Valley Road Pinehurst, NC 28374 Telephone: 910-235-4491 Fax: 877-542-4844 E-mail: support@theingredienthouse.com Web: www.theingredienthouse.com
Product Number:	RAPM-100 (Powder), RAPM-101 (Granules), RAPM-102 (High Density Powder), RAPM-103 (Fine Granules)

2. Product Identification

Common Name:	Aspartame
Chemical Name:	N-L-α-Aspartyl-L-Phenylalanine-1-Methyl Ester
Synonyms:	Aspartyl Phenylalanine Methyl Ester, APM
CAS Number:	22839-47-0
E Number:	E951
Molecular Weight:	294.31
Chemical Formula:	$C_{14}H_{18}O_5N_2$

3. Hazards Identification

This product is considered non-hazardous by the criteria specified in 29 CFR 1910.12.00 (Hazard Communication).

Emergency Overview	Individuals with phenylketonuria should be aware that this material releases phenylalanine upon metabolism.
	As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing. May cause slight irritation.
HMIS Health Rating:	1 - Slight
HMIS Flammability Rating:	1 - Slight
HMIS Reactivity Rating:	0 - None
HMIS Personal Protection:	E - Goggles; Gloves; Dust respirator
Storage Color Code:	Green (General Storage)
Potential Health Effects	
Inhalation:	May cause slight respiratory tract irritation.
Ingestion:	May cause slight gastrointestinal irritation.
Skin Contact:	May cause slight skin irritation.
Eye Contact:	May cause slight eye irritation.
Chronic Exposure:	Possible hyper sensitization.

4. First Aid Measures

Inhalation:	Not expected to require first aid measures. Treat symptoms and provide fresh air. Get medical advice if irritation develops.

Ingestion:	Not expected to require first aid measures. Wash mouth out with plenty of water. Aspartame is not absorbed and is completely hydrolyzed in the intestine. Get medical advice if irritation develops.
Skin Contact:	Not expected to require first aid measures. Wash exposed area with soap and water. Get medical advice if irritation develops.
Eye Contact:	Not expected to require first aid measures. Wash thoroughly with running water including under eyelids. Get medical advice if irritation develops.

5. Fire Fighting Measures

Fire:	Not considered to be a fire hazard.
Explosion:	Not considered to be an explosion hazard.
Fire Extinguishing Media:	Use any means suitable for extinguishing surrounding fire.
Special Information:	Use protective clothing and breathing equipment appropriate for the surrounding fire.

6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Sweep up and containerize for reclamation or disposal. Vacuuming or wet sweeping may be used to avoid dust dispersal.

7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage and direct sun light. Containers of this material may be hazardous when empty since they retain product residues (dust, solids); observe all warnings and precautions listed for the product.

Do not store near hazardous or odorous material.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:	None established.
Ventilation System:	In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.
Personal Respirators (NIOSH Approved):	For conditions of use where exposure to the dust or mist is apparent, a half-face dust/mist respirator may be worn. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. WARNING: Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.
Skin Protection:	Wear protective gloves and clean body-covering clothing.
Eye Protection:	Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

9. Physical and Chemical Properties

Appearance:	White crystalline powder.
Odor:	Odorless
Solubility in Water:	Sparingly Soluble. Approximately 1% at 20^{o}C.
Solubility in Ethanol:	Slightly soluble
pH of 1% Water Solution:	4.5 to 6.0
Specific Gravity:	Not available
Molecular Weight:	294.31
Melting Point:	> 245^{o}C (decomposes)
Auto Ignition Point:	Not available
Sweetness:	200 times as sweet as sucrose.

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10. Stability and Reactivity	
Stability:	Stable under ordinary conditions of use and storage.
Hazardous Decomposition Products:	When heated to decomposition, this product emits fumes of NOx. Emits toxic fumes under fire conditions.
Hazardous Polymerization:	Will not occur.
Incompatibilities:	This product may react with strong oxidizing agents.
Conditions to Avoid:	Heat, flames, ignition sources and incompatibles.

11. Toxicology Information	
Toxicity Data:	
Component Analysis:	Oral Rat LD50: > 10g/kg & 4 g/kg body weight; Oral Mouse LD50: >10 g/kg body weight.
Carcinogen Status:	
Component Analysis:	No components are listed by IARC, OSHA, or NTP.
Other Carcinogenicity Data:	Aspartame was approved as an artificial sweetener by the FDA in 1981, after numerous tests showed that it did not cause cancer or other adverse effects in laboratory animals. In 1996, a report suggested that an increase in the number of people with brain tumors between 1975 and 1992 might be associated with the introduction and use of the sweetener in the U.S. However, an analysis of National Cancer Institute statistics showed that the overall incidence of brain and central nervous system cancers began to rise in 1973, 8 years before the approval of aspartame. In 2005, a long-term carcinogenicity study found that aspartame caused cancer at 20 mg/kg when administered with feed to Sprague-Dawley rats over their natural lifetime. The European Food and Safety Authority and the FDA concluded in 2006 that this study did not provide a scientific basis for reconsidering the safety of aspartame's use in foods, due to all the available data to date, and issues in the 2005 study, including the high background incidence of chronic inflammatory disease in the rats, no clear dose-response relationship of the nerve tumors and exposure, and other major concerns
Mutagenicity Data:	No clastogenic activity was found in mice orally given daily doses of 40 and 400 mg/kg aspartame for 5 days. Aspartame was not genotoxic in a reverse mutation test on S. typhimurium, in two chromosome aberration tests in vivo on somatic cells, and in rodent dominant lethal tests on germ cells. Results of an unscheduled DNA synthesis assay on rat hepatocytes treated with aspartame in vitro were negative.
Reproductive and Developmental Effects:	Studies have not shown that aspartame or its metabolites cause fetal or maternal harm. Women who have phenylketonuria should consider aspartame as another source of phenylalanine. Neither physical nor functional development was altered in the offspring of mice exposed to 500, 1000, 2000, and 4000 mg/kg aspartame by gavage during pregnancy on days 15 through 18 of gestation. Perinatal exposure to aspartame when voluntarily consumed by pregnant rats (14 to 1614 mg/kg/day) and later directly by rat pups (32 to 3566 mg/kg/day) did not affect reflex development, morphological development, or spatial memory. Aspartame exposure at doses of 500 mg/kg throughout gestation disrupted odor-associative learning in 15 day old guinea pigs.

12. Ecological Information	
Environmental Fate:	Not readily biodegradable.
Environmental Toxicity:	Not available.

13. Disposal Considerations

Dispose of waste in accordance with all applicable Federal, State, and local laws.

14. Transport Information

Not regulated.

15. Regulatory Information

U.S. Regulatory Information:	21 CFR 172.804
International Regulatory Info:	EINECS 245-261-3.
CAS No. 22839-47-0 is listed on the TSCA 8 (b) inventory.	

16. Other Information

NFPA Ratings:	Health: **1**, Flammability: **1**, Reactivity: **0**.
Label Hazard Warning:	As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.
Label Precautions:	Store in closed container. Avoid dust cloud. Maintain adequate ventilation.
Label First Aid:	Not applicable.