SAFETY DATA SHEET: SODIUM GLUTAMATE, MONO

1. IDENTIFICATION

Product Name: SODIUM GLUTAMATE, MONO
Synonyms: Monosodium glutamate; MSG; Sodium glutamate; Sodium L-glutamate; Glutamic acid sodium salt
Formula and Formula Weight: C5H8NO4Na H2O 187.13
Integra numbers beginning with: S396.32
Recommended Use: Commercial/industrial use
Restrictions on Use: No information available

INTEGRA Chemical Company
24 Hour Emergency Response: CHEMTREC 800-424-9300 (Outside USA 703-527-3887)
1216 6th Ave N
Kent WA 98032
Phone: 253-479-7000

2. HAZARDS IDENTIFICATION

OSHA Classification: None identified
Hazard Category: Not applicable
Hazard Statement: Not applicable

3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Component</th>
<th>Synonyms</th>
<th>CAS #</th>
<th>% Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium glutamate, mono</td>
<td>Monosodium glutamate; MSG; Sodium glutamate; Sodium L-glutamate; Glutamic acid sodium salt</td>
<td>00142-47-2</td>
<td>100</td>
</tr>
</tbody>
</table>

4. FIRST AID MEASURES

Inhalation: Remove person to fresh air.
Eye Contact: Flush eyes with water for at least 15 minutes. Seek immediate medical attention.
Skin Contact: Wash with soap and water. Seek medical attention if irritation develops.
Ingestion: Do not induce vomiting. Rinse mouth. If adverse symptoms develop, seek medical attention.

5. FIRE-FIGHTING MEASURES

Extinguishing Media: Water spray, water fog, water stream, carbon dioxide, alcohol foam.
Special Equipment and Precautions: Use water to cool nearby containers and structures. Wear full protective equipment, including suitable respiratory protection.
Specific Hazards: As with most organic solids, combustion is possible at elevated temperatures.
Hazardous combustion products: Oxides of nitrogen, oxides of carbon.

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures: Remove all potential ignition sources. Prevent spread of spill. Wear suitable protective equipment. Sweep or scoop into disposal container in a manner that minimizes dust dispersion.

7. HANDLING AND STORAGE

Incompatible Materials: Incompatible with strong oxidizers.
Storage and Handling: Store in a cool, dry, well-ventilated area away from incompatible materials. Keep containers tightly closed and protect them from physical damage. Protect from direct light and minimize contact with air.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

OSHA & ACGIH Exposure Limits:

Sodium glutamate, mono

Engineering Controls: Use adequate general or local exhaust ventilation to keep fume and/or dust levels as low as possible.
Respiratory Protection: If use generates annoying or irritating dusts, mists or vapors, use a NIOSH approved respirator with a particulate filter.
Skin/Eye Protective Equipment: Safety glasses.
Facilities storing or utilizing this material should have readily accessible eyewash stations and safety showers. Select respirators and other safety equipment in accordance with regulations and based upon the particular conditions of use and risk of exposure. Always use safe chemical-handling and good industrial hygiene practices.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White to off-white needles or powder
Odor: Slight peptone-like odor
Odor Threshold: Not available
pH: Not available
Melting/Freezing Point: 232 °C
Initial Boiling Point and Boiling Range: Not available
Flash Point: Not available

OSHA SDS #: 26395 rev 101 4.7.2016 SODIUM GLUTAMATE, MONO
Evaporation Rate: Not available
Flammability: Not available
Flammable or Explosive
Limits (% by volume in air)
Vapor Pressure: Not available
Vapor Density: Not available
Relative Density: Not available
Solubility: Soluble in water
Partition Coefficient: n-octanol/water Not available
Auto-Ignition Temperature: Not available
Decomposition Temperature: Not available
Viscosity: Not available

10. STABILITY AND REACTIVITY
Reactivity: No information available
Stability: Stable
Possibility of Hazardous Reactions: Hazardous polymerization will not occur
Conditions to Avoid: Excessive heat and exposure to light.
Incompatibles: Incompatible with strong oxidizers.
Decomposition Products: Oxides of nitrogen, oxides of carbon.

11. TOXICLOGICAL INFORMATION
Effects of Over Exposure:
Inhalation: As with most nuisance dusts, inhalation of large quantities, or prolonged inhalation, may irritate the respiratory system.
Skin Contact: None identified
Eye Contact: Dusts may cause some eye irritation.
Ingestion: Low in toxicity, however, ingestion may irritate the gastrointestinal system.
Chronic Effects: None identified
Target Organs: None identified
Additional Effects: None identified
Reproductive Effects: None identified
Carcinogenicity: None identified
Toxicity Data:
Sodium glutamate, mono LD50 (oral, mouse) 11400 mg/kg
LD50 (oral, rat) 17000 mg/kg

12. ECOLOGICAL INFORMATION
Aquatic Toxicity Data: Terrestrial Toxicity Data:
Sodium glutamate, mono None identified None identified
Persistence and degradability: Biodegradable
Bioaccumulative potential: No information available
Mobility in soil: No information available
Other adverse effects: No information available

13. DISPOSAL CONSIDERATIONS
Disposal Procedures: Dispose of material and containers in accordance with all local, state and federal regulations.

14. TRANSPORTATION INFORMATION
This product is not a regulated material for domestic ground transporation.

15. REGULATORY INFORMATION
Sodium glutamate, mono is listed in the TSCA inventory.

16. OTHER INFORMATION
OSHA SDS #: 26395 rev 101 4.7.2016

NE = Not established, NA = Not applicable or Not available
The information presented above is offered for informational purposes only. This SDS, and the associated product, is intended for use only by technically qualified persons, and at their own discretion and risk. Since conditions and manner of use are outside the control of Integra Chemical Company, we make no warranties, either expressed or implied, and assume no liability in connection with any use of this information.

***** END OF SDS *****