MATERIAL SAFETY DATA SHEET

PRODUCT NAME: MONOAMMONIUM GLYCYRRHIZINATE

EFFECTIVE DATE: 6/15/09

1. PRODUCT IDENTIFICATION

Synonyms: Monoammonium Glycyrrhizinate

CAS No.: 53956-04-0

2. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT	CAS NO.	PERCENT	HAZARDOUS
Monoammonium Glycyrrhizinate	53956-04-0	100	No

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

CAUTION! May cause irritation to skin, eyes and respiratory tract

 $\begin{array}{lll} \mbox{HEALTH RATING:} & 0-\mbox{None} \\ \mbox{FLAMMABILITY RATING:} & 1-\mbox{Slight} \\ \mbox{REACTIVITY RATING:} & 0-\mbox{None} \\ \end{array}$

POTENTIAL HEALTH EFFECTS

INHALATION: Overexposure to dust may produce irritation of the respiratory system

INGESTION: Ingestion of large amounts may produce gastrointestinal disturbances.

SKIN CONTACT: None.

EYE CONTACT: Contact may produce mechanical irritation.

CHRONIC EXPOSURE: No information found.

AGGRAVATION OF PRE-EXISTING CONDITIONS: No information found.

4. FIRST AID MEASURES

INHALATION: If respiratory irritation occurs upon inhalation, remove to fresh air. Seek medical attention if symptoms persist.

INGESTION: If large amounts were swallowed, get medical advice. Do not induce vomiting unless directed to do so by medical personnel.

SKIN CONTACT: For skin contact, wash with soap and water.

EYE CONTACT: Immediately flush eyes with plenty of water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

5. FIREFIGHTING MEASURES

FLASH POINT: Not applicable

UPPER FLAMMABLE LIMIT: Not applicable LOWER FLAMMABLE LIMIT: Not applicable AUTOIGNITION TEMPERATURE: Not available FLAMMABILITY CLASS: Not applicable

RATE OF BURNING: Not applicable

GENERAL FIRE HAZARDS: Accumulation of airborne dusts may present an explosion or fire hazard in

the presence of an ignition source.

HAZARDOUS COMBUSTION PRODUCTS: None

EXTINGUISHING MEDIA: Dry chemical, foam, carbon dioxide, water fog

FIRE FIGHTING EQUIPMENT/INSTRUCTIONS: Firefighters should wear full protective clothing,

including self-contained breathing apparatus.

6. ACCIDENTAL RELEASE MEASURES

CONTAINMENT PROCEDURES: Contain the discharged material. If sweeping of a contaminated are is necessary, use a dust suppressant.

CLEAN-UP PROCEDURES: Wear protective equipment and clothing during clean-up. Sweep or vacuum spilled material. Use of moist absorbent is recommended.

EVACUATION PROCEDURES: Not necessary.

SPECIAL PROCEDURES: None.

7. HANDLING AND STORAGE

HANDLING PROCEDURES: Avoid getting this material into contact with your eyes. Wash thoroughly after handling. Avoid the formation of airborne dusts.

STORAGE PROCEDURES: Keep container tightly closed and store at room temperature.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES

A. General Product Information

Exposures should be minimized in accordance with good industrial hygiene practices.

B. Component Exposure Limits

OSHA: 15 mg/cu. m; ACGIH: 10/mg/cu.m.

ENGINEERING CONTROLS: Ventilation should be sufficient to effectively remove and prevent buildup of airborne dusts.

PERSONAL PROTECTIVE EQUIPMENT:

Personal Protective Equipment: Eyes/Face

Wear appropriate eye protection.

Personal Protective Equipment: Skin

Wear impervious gloves for prolonged contact.

Personal Protective Equipment: Respiratory

If ventilation is not sufficient to effectively remove and prevent buildup of dusts, appropriate NIOSH/MSHA approved respiratory protection should be provided.

Personal Protective Equipment: General

Use good industrial hygiene practices in handling this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: White crystalline powder

PHYSICAL STATE: Solid

VAPOR PRESSURE: Not applicable BOILING POINT: Not applicable FREEZING POINT: Not applicable SOFTENING POINT: Not available

VISCOSITY: Not applicable

PERCENT VOLATILE: 3% (moisture)

ODOR: Practically odorless

pH: Not applicable

VAPOR DENSITY: Not applicable SPECIFIC GRAVITY: Not available PARTICLE SIZE: Not available

EVAPORATION RATE: Not applicable

BULK DENSITY: Not available

MOLECULAR WEIGHT: Not available

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable

CHEMICAL STABILITY: Conditions to avoid: Avoid accumulation of airborne dusts.

HAZARDOUS DECOMPOSITION PRODUCTS: None HAZARDOUS POLYMERIZATION: Will not occur

INCOMPATABILITIES: None

11. TOXICOLOGICAL INFORMATION

LD₅₀P.O. (mice): 12700 mg/kg LD₅₀ (mice): 1070 mg/kg

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

No data available for this product.

ENVIRONMENTAL FATE:

No data available for this product.

13. DISPOSAL CONSIDERATIONS

US EPA Waste Number & Descriptions

A. General Product Information

Empty container retains product residue. Do not distribute, make available, furnish or reuse empty container except for storage and shipment of original product. Empty container, remove all product residue. Puncture or otherwise destroy empty container before disposal.

B. Component Waste Numbers:

No EPA Waste Numbers are applicable for this product components.

DISPOSAL INSTRUCTIONS

All wastes must be handled in accordance with local, state and federal regulations.

14. TRANSPORT INFORMATION

US DOT INFORMATION

Not regulated

INTERNATIONAL TRANSPORTATION REGULATIONS

Not regulated as dangerous goods.

15. REGULATORY INFORMATION

US FEDERAL REGULATIONS

- A. General Product Information No information available
- B. Component Analysis
 None of this products components are listed under SARA Section 302 (40CFR 355 Appendix A), SARA Section 313 (40CFR 372.6) or CERCLA (40CFR302.4)

16. OTHER INFORMATION	
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