

Material Safety Data Sheet

Date of Preparation: 2/17/05

Number of Pages: 4

Section 1 – Company and Product Information

Trade Name: Stock Buffer (mRNA Isolation Kit)

Synonyms: mRNA Stock Buffer

Cartagen Molecular Systems, Inc.

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Section 2 - Composition / Information on Ingredients

Aqueous solution of proprietary compound mixture.

Hazardous compounds:

Name: Sodium Dodecyl Sulfate

CAS No. 151-21-3

Percentage: 1 - 5

Section 3 - Hazards Identification

Emergency Overview

Warning! Irritant.

Harmful if swallowed.

May cause allergic skin reaction.

Possible reproductive system hazard based on animal data.

Potential Health Effects

Eye: Can cause moderate irritation, tearing and reddening, but not likely to permanently injure eye tissue.

Skin: Can cause moderate skin irritation, defatting, and dermatitis. Not likely to cause permanent damage.

May cause allergic skin reaction.

Ingestion: Mildly irritating to mouth, throat, and stomach. Can cause abdominal discomfort. Harmful if swallowed. May cause systemic poisoning.

Inhalation: Can cause minor respiratory irritation, dizziness, weakness, fatigue, nausea, and headache. No toxicity expected from inhalation.

Chronic: No data on cancer. Contains a substance that is a possible reproductive system hazard based on animal studies at doses that could be encountered in the workplace.

Section 4 - First Aid Measures

In Case of Eye Contact: Flush eyes with plenty of water for at least 20 minutes retracting eyelids often.

Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.

In Case of Skin Contact: Wash with soap and water. Remove contaminated clothing and launder. Get medical attention if irritation develops or persists.

If Ingested: Do not induce vomiting and seek medical attention immediately. Drink two glasses of water or milk to dilute. Provide medical care provider with this MSDS.

If Inhaled: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen. If not breathing, give artificial respiration and have a trained individual administer oxygen. Get medical attention immediately.

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Note To Physician: Treat symptomatically.

Section 5 - Fire Fighting Measures

General Information: Do not enter fire area without proper protection including self-contained breathing apparatus and full protective equipment. Fight fire from a safe distance and a protected location due to the potential of hazardous vapors and decomposition products.

Hazardous Combustion Products: Includes carbon dioxide, carbon monoxide, and dense smoke.

Extinguishing Media: Use alcohol resistant foam, carbon dioxide, dry chemical, or water spray when fighting fires. Water or foam may cause frothing if liquid is burning but it still may be a useful extinguishing agent if carefully applied to the fire. Do not direct a water stream directly into the hot burning liquid. Use water spray/fog for cooling.

Flash Point: Not available.

Autoignition Temperature: Not available.

Explosion Limits, Lower: Not available.

Upper: Not available.

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Exposure to the spilled material may be irritating or harmful. Additional precautions may be necessary based on special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred. Also consider the expertise of employees in the area responding to the spill. Ventilate the contaminated area. Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section VIII at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation.

Section 7 - Handling and Storage

Handling: Harmful or irritating material. Avoid contacting and avoid breathing the material. Use only in a well ventilated area. Keep closed or covered when not in use.

Storage: Store in a cool dry ventilated location. Isolate from incompatible materials and conditions. Keep container(s) closed. Suitable for most general chemical storage areas.

Storage Pressure: Ambient

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

Exposure Limits: OSHA PEL AGCIH TWA

Component (ppm) (ppm)

SODIUM DODECYL SULFATE Not established.

Personal Protective Equipment

Eyes: An eye wash station must be available where this product is used. Wear chemical goggles.

Skin: Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work. Have a safety shower available.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.

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Section 9 - Physical and Chemical Properties

Physical State: Liquid solution

Appearance: Colorless

Odor: None

Vapor Pressure: Not established.

Vapor Density: Not established.

Evaporation Rate: Not established.

Viscosity: Not established.

Decomposition Temperature: Not established.

Specific Gravity/Density: Not established.

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal conditions.

Conditions to Avoid: Strong oxidizing agents. High temperatures. Strong acids.

Hazardous Decomposition Products: Carbon monoxide. Carbon dioxide. Sulfur containing gases. Toxic gases. Nitrogen oxides.

Hazardous Polymerization: Hazardous polymerization will not occur.

Section 11 – Toxicological Information

Acute Toxicity:

Dermal/Skin:

Sodium Dodecyl Sulfate: Dermal LD50 >10 G/KG

Inhalation/Respiratory: Not determined.

Oral/Ingestion:

Sodium dodecyl sulfate: Oral LD50 = 1288 MG/KG

Target Organs: No data found.

Carcinogenicity:

NTP: Not tested.

IARC: Not listed.

OSHA: Not regulated.

Other Toxicological Information: Contains a substance(s) that is a possible reproductive system hazard based on high dose tests with laboratory animals.

Section 12 - Ecological Information

Ecotoxicological Information: No ecological information available.

Environmental Fate (Degradation, Transformation, and Persistence): Bioconcentration is not expected to occur.

Section 13 - Disposal Considerations

Clean up and dispose of waste in accordance with all federal, state, and local environmental regulations.

Section 14 – Transport Information

DOT:

Proper Shipping Name: Not determined

Non-hazardous for transport

IATA:

Non-hazardous for transport

Section 15 – Regulatory Information

UNITED STATES:

TSCA:

This product is solely for research and development purposes only and may not be used, processed or distributed for a commercial purpose. It may only be handled by technically qualified individuals.

Prop 65 Listed Chemicals: PROP 65 PERCENT

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No Prop 65 Chemicals.

No 313 Chemicals

CANADA:

DSL/NDSL: Not determined.

COMPONENT WHMIS Classification

SODIUM DODECYL SULFATE D2B

EUROPEAN UNION:

PRODUCT RISK PHRASES: None assigned.

PRODUCT SAFETY PHRASES: Not applicable.

PRODUCT CLASSIFICATION: Xn

EINECS

Component Number

SODIUM DODECYL SULFATE 205-788-1

Section 16 – Other Information

Disclaimer: For R&D use only. Not for drug, household or other uses.

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