

Material Safety Data Sheet

Date of Preparation: 9/3/04

Number of Pages: 3

Section 1 – Company and Product Information

Trade Name: Buffer 4 (Genomic DNA Extraction Kit: Plant)

Synonyms: Plant Genomic DNA Extraction Kit Buffer 4

Cartagen Molecular Systems, Inc.

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Section 2 - Composition / Information on Ingredients

Aqueous solution of proprietary compound mixture.

According to the OSHR 29 CFR 1910.1200, a mixture that contains less than one percent by weight or volume of a non-carcinogenic hazardous component is not considered hazardous, unless there is evidence to the contrary. We do not consider Buffer 4 to be hazardous, however we recommend the use of gloves, lab coats, and eye protection when working with these or any chemical reagents.

Section 3 - Hazards Identification

Emergency Overview

Appearance: Clear liquid. May cause eye and skin irritation. May cause respiratory and digestive tract irritation.

Target Organs: None known.

Potential Health Effects

Eye: May cause eye irritation.

Skin: May cause skin irritation.

Ingestion: May cause irritation of the digestive tract. The toxicological properties of this substance have not been fully investigated.

Inhalation: May cause respiratory tract irritation. The toxicological properties of this substance have not been fully investigated.

Chronic: No information found.

Section 4 - First Aid Measures

In case of eye contact: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

In case of skin contact: Get medical aid. Flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

If ingested: Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

If inhaled: Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Use agent most appropriate to extinguish fire. Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Flash Point: Not applicable.

Autoignition Temperature: Not applicable.

Explosion Limits, Lower: Not available.

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Upper: Not available.

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 0

Section 6 - Accidental Release Measures

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

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid breathing dust, vapor, mist, or gas. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage: Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances.

Section 8 - Exposure Controls / Personal Protection

Engineering Controls: Use adequate ventilation to keep airborne concentrations low. Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Exposure Limits: None listed

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: Not required for normal use. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Odor: None reported

Vapor Pressure: Not available

Boiling Point: Not available

Solubility: Soluble in water

Molecular Formula: Mixture

Appearance: Colorless

pH: 7.5

Viscosity: Not available

Freezing / Melting Point: Not available

Specific Gravity/Density: Not available

Section 10 - Stability and Reactivity

Chemical Stability: Stable at room temperature in closed containers under normal storage and handling conditions.

Conditions to Avoid: Incompatible materials, dust generation, excess heat, strong oxidants.

Incompatibilities with Other Materials: Oxidizing agents.

Hazardous Decomposition Products: Carbon monoxide, oxides of nitrogen, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

Not applicable.

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Dispose of container, used, and unused contents in accordance with federal, state, or local requirements.

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Section 14 – Transport Information

DOT:

Proper Shipping Name: None

Non-hazardous for transport

IATA: Non-hazardous for transport

Section 15 – Regulatory Information

Not available.

Section 16 – Other Information

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

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