

Material Safety Data Sheet

MagCore Viral Nucleic Acid Extraction Kit

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1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Commercial Product name: MagCore Viral Nucleic Acid Extraction Kit
 Product number: MVN400-02 SP
 Intended use: Biochemical kit

Supplier: RBC Bioscience Corp.
 3F, 3F.-1,2, No. 132, Ln. 235, BAO QIAO Rd., Xindian Dist.,
 New Taipei City 23145, Taiwan (R.O.C.)
 Phone Number: +886-2-8912-1200
 Emergency telephone number: +886-2-8912-1200

2. CHEMICAL CHARACTERISATION

Component 1:

Lysis buffer: 1 piece(s), pH: 8.8, Boiling point: 102°C, Flash point: NA.
 Ingredients 60-70% Guanidine Hydrochloride; 40% distilled H2O.

Component 2:

Binding buffer: 1 piece(s), pH: 8.0, Boiling point: 82°C, Flash point: 22°C.
 Ingredients 50~70% Isopropanol; 50% distilled H2O.

Component 3:

Beads Mixture: 1 Piece (s), pH: 7.4, Boiling point: 78°C, Flash point: 12°C.
 No hazardous substances in concentrations to be declared.

Component 4:

Wash 1 buffer: 1 Piece (s), pH:5.6, Boiling point: 88°C, Flash point: 22°C.
 Ingredients 50-60% Guanidine Hydrochloride; 50% distilled H2O.

Component 5:

Wash 2 buffer: 1 Piece (s), pH:8.1, Boiling point: 88°C, Flash point: 22°C.
 No hazardous substances in concentrations to be declared.

Component 6:

DEPC water: 1 Piece (s), pH:7.0, Boiling point: 100°C, Flash point: NA.
 No hazardous substances in concentrations to be declared.

Component 7:

Carrier RNA: 1 Piece (s), powder, pH: NA, Boiling point: NA, Flash point: NA.
 No hazardous substances in concentrations to be declared.



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Component 8:

RNase free water: 1 Piece (s), pH:7.0, Boiling point: 100°C, Flash point: NA.
No hazardous substances in concentrations to be declared.

Component 9:

Proteinase K: 1 Piece (s), powder, pH: NA, Boiling point: NA, Flash point: NA.
No hazardous substances in concentrations to be declared.

Component 10:

PK storage buffer: 1 Piece (s), pH:7.4, Boiling point: 100°C, Flash point: NA.
No hazardous substances in concentrations to be declared.

3. HAZARDS IDENTIFICATION

***** EMERGENCY OVERVIEW *****

Component 3, 5, 6, 7, 8, 9 and 10 – Occupational exposure presents little or no health hazard.

Component 1, 2, 4 - Warning! Irritant. Harmful if swallowed.

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, defecting, and dermatitis. Not likely to cause permanent damage. Contact may irritate/inflame the skin.

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

Ingestion: Mildly irritating to mouth, throat, and stomach. Can cause abdominal discomfort. Ingestion of this product may result in central nervous system effects including headache, sleepiness, dizziness, slurred speech and blurred vision. Harmful if swallowed. May cause systemic poi.

Chronic: No data on cancer.

4. FIRST AID MEASURES

Eye: 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.

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

Inhalation: Remove to fresh air. If breathing is difficult, have a trained individual administer oxygen.

Ingestion: 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.

Flash Point and Method: N/A

Erode character: No information available.

Note To Physician: Treat symptomatically.

5. FIRE FIGHTING MEASURE



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Flashpoint Deg C: Not available.

Upper Flammable Limit %: Not available.

Lower Flammable Limit %: Not available.

Auto-ignition Temperature Deg C: Not available.

Extinguishing Media: **Component 3, 5, 6, 7, 8, 9 and 10** – Use means appropriate for surrounding materials.

Component 1, 2, 4 - Use alcohol resistant foam, carbon dioxide, or dry chemical 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 surface of the fire. Do Not direct a stream of water into the hot burning liquid. Use water spray/fog for cooling.

Firefighting Techniques/Equipment: 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

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

6. ACCIDENTAL RELEASE MEASURES

Accidental releases may be subject to special reporting requirements and other regulatory mandates. Refer to Section 8 for personal protection equipment recommendations.

Spill Cleanup: **Component 3, 5, 6, 7, 8, 9 and 10** – Absorb spill. Common absorbent materials should be effective. Deposit in appropriate containers for removal and disposal.

Component 1, 2, 4 - Exposure to the spilled material may be irritating or harmful. Follow personal protective equipment recommendations found in Section VIII of this MSDS. 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.

7. HANDLING AND STORAGE



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Storage of some materials is regulated by federal, state, and/ or local laws.

Storage Pressure: Ambient

Handling Procedures: **Component 3, 5, 6, 7, 8, 9 and 10** – Keep closed or covered when not in use.

Component 1, 2, 4 – 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 Procedures: Suitable for most general chemical storage areas.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Drinking, and when leaving work. Have a safety shower available

Respiratory: 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/physical state: Liquid solution / suspension

Order: No odor.

Specific Gravity/Density: Not established.

Octanol/water Partition Coeff: Not established.

Volatiles: Not established.

Evaporation Rate: Not established.

Viscosity: Not established.

10. STABILITY AND REACTIVITY

Stable under normal conditions.

Conditions to Avoid: Strong-oxidizing agents.

Hazardous Decomposition Products: Carbon dioxide. Carbon monoxide. Nitrogen oxides. Hydrogen chloride.

Hazardous Polymerization: Hazardous polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

No toxic, no infectious, no corrosive material inside.

Not applied to IATA DGR

Proper Shipping Name: Not determined.

Subsidiary Hazards: Not determined.

12. Ecological Information

Eco-toxicological Information: No ecological information available.

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

13. DISPOSAL CONSIDERATIONS

Regulatory Information: Not applicable.

Disposal Method: Clean up and dispose of waste in accordance with all federal, state, and or local environmental.

14. TRANSPORT INFORMATION



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No toxic, no infectious, no corrosive material inside.
Not applied to IATA DGR
Proper Shipping Name: Not determined.
Subsidiary Hazards: Not determined.

15. OTHER INFORMATION

WHMIS Rating 0-4:

FIRE:0.

HEALTH: 2.

REACTIVITY: 0

Abbreviations

N/A - Data is not applicable or not available

SARA - Superfund and Reauthorization Act

HMIS - Hazard Material Information System

WHMIS - Workplace Hazard Materials Information System

NTP - National Toxicology Program

OSHA - Occupational Health and Safety Administration

IARC - International Agency for Research on Cancer

PROP 65 - California Safe Drinking Water and Toxic Enforcement Act of 1986

EINECS - European Inventory of Existing Commercial
Chemical Substances