Name of the Product : HiPer® RT-PCR Teaching Kit
Code No. : HTBM024

Section 1 : Chemical Identification & Company Information
Code No. : HTBM024
Name of the Product : HiPer® RT-PCR Teaching Kit
Produced by : HiMedia Laboratories Pvt. Ltd.
Address : 23, Vadhani Indl. Estate, LBS Marg, Mumbai 400 086, India.
Tel. No. : 2500 0970, 2500 1607 Fax No. 022 2500 2468

Section 2 : Composition / Information on ingredients

Kit components

- Total RNA
- Random hexamer
- 10X RT Buffer
  Description : Proprietary mixture of various substances.
  - RNase Inhibitor
  - Oligo dT
  - Molecular Biology Grade Water
  - 25mM MgCl₂
  - 2.5mM dNTP mix
  - HiMMLV Reverse Transcriptase
  - Agarose
- 50X TAE
  Description : Proprietary mixture of various substances.
  - 6X Gel Loading Buffer
  - PCR Tubes
  - Forward Primer (10 nM)
  - Reverse Primer (10 nM)
- 10X Assay Buffer
  Description : Proprietary mixture of various substances.
  - 1Kb DNA Ladder
  - Taq DNA Polymerase

Section 3 : Hazards Identification

Special indication of hazards to humans and the environment
Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin. May cause sensitization by inhalation.

Section 4 : First - Aid Measures

In case of swallowing, wash out mouth with water provided person is conscious. In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. In case of inhalation, remove to fresh air. If breathing becomes difficult, call physician. In case of contact with eyes, wash with copious amounts of water for at least 15 minutes. Assure adequate washing by separating the eyelids with fingers. In serious conditions, call a physician, show the container or label.
Section 5: **Fire Fighting Measures**

Extinguishing Media. Water spray. Carbon dioxide, dry chemical powder or appropriate foam. Special firefighting procedures. Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Unusual fire and explosion hazards. Emits toxic fumes under fire conditions.

Section 6: **Accidental Release Measures**

Wear respirator, chemical safety goggles, rubber boots and heavy rubber gloves. Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete. Do not allow product to reach sewage system or any water course.

Section 7: **Handling and Storage**

Handling - Refer to Section 8

Storage - Store between 15 - 25°C except certain components specified in each kit.

Section 8: **Exposure Controls / Personal Protection**

Wear appropriate NIOSH/MSHA-approved respirator, chemical-resistant gloves, safety goggles, other protective clothing. Mechanical exhaust required.

Section 9: **Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Chemical</th>
<th>Form</th>
<th>Colour</th>
<th>Odour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total RNA</td>
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<td>Colourless</td>
<td>Odourless</td>
</tr>
<tr>
<td>Random hexamer</td>
<td>Liquid</td>
<td>Colourless</td>
<td>Odourless</td>
</tr>
<tr>
<td>10X RT Buffer</td>
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<td>Odourless</td>
</tr>
<tr>
<td>RNase Inhibitor</td>
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<td>Odourless</td>
</tr>
<tr>
<td>Oligo dT</td>
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<td>Odourless</td>
</tr>
<tr>
<td>HiMMLV Reverse Transcriptase</td>
<td>Liquid</td>
<td>Colourless</td>
<td>Odourless</td>
</tr>
<tr>
<td>10X Assay Buffer</td>
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<td>Odourless</td>
</tr>
<tr>
<td>Control PCR Product</td>
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<td>Colourless</td>
<td>Odourless</td>
</tr>
<tr>
<td>2.5 mM dNTP Mix</td>
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<td>Colourless</td>
<td>Odourless</td>
</tr>
<tr>
<td>1kb DNA Ladder</td>
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<td>Colourless</td>
<td>Odourless</td>
</tr>
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<td>Forward Primer</td>
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</tr>
<tr>
<td>Reverse Primer</td>
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<td>Taq DNA Polymerase</td>
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<td>Odourless</td>
</tr>
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<td>Template DNA</td>
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<td>Molecular Biology Grade Water</td>
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<td>Agarose</td>
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<tr>
<td>50X TAE</td>
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<td>Odourless</td>
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<tr>
<td>6X Gel Loading Buffer</td>
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<td>Blue</td>
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<td>Mineral oil</td>
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</tr>
<tr>
<td>Polypropylene Tubes</td>
<td>Plastic</td>
<td>Transparent</td>
<td>NA</td>
</tr>
</tbody>
</table>

0.2 ml (PCR Tubes)
Section 10 : **Stability and Reactivity**

Stability : Product is stable if stored as per the conditions specified under storage of Section No. 7. Product loses its potency/performance above 45°C.

Conditions to avoid : Strong oxidizing agents, strong bases or fire.

Section 11 : **Toxicological Information**

Acute Effects : May be harmful if swallowed.

Exposure can cause : Stomach pains, vomiting, diarrhoea. Severe inflammation of the colon. Appears to penetrate well into bone and central nervous system. Possesses neuromuscular blocking activity.

Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

Target organ(s) : G.I. system

Section 12 : **Ecological Information**

The potential effects of a single package on the environment are considerably low.

Hazard to drinking water only if large amounts enter the subsoil and waters

Section 13 : **Disposal Considerations**

Waste treatments methods

**Product**

Must not be disposed off together with household garbage. Do not allow product to reach sewage system. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contact a licensed professional waste disposal service to dispose of this material.

**Contaminated packaging**

Dispose of as unused product.

Section 14 : **Transport Information**

UN No. : Not applicable

Section 15 : **Regulatory Information**

R-Phrases: 20/21/22 - 36/37/38

- Harmful by inhalation.
- Harmful in contact with skin.
- Harmful if swallowed.
- Irritating to the respiratory system.
- Irritating to the skin.
- Irritating to the eyes.

S-Phrases: 26 - 36 - 46

- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- Wear suitable protective clothing.
- If swallowed, seek medical advice immediately and show this container label.

Section 16 : **Other Information**

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

Warranty : The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.