1 Identification of the substances/ mixture and of the company/ undertaking

1.1 Product Identifiers
Product Number: MB545
Product Name: HiPurA® Mycobacterium tuberculosis DNA Purification Kit
REACH Registration Number: Reach registration number is not available for this mixture. The annual tonnage does not require a REACH registration or it is envisaged for a later registration deadline.

1.2 Relevant identified uses of the substance or mixture and uses advised against
1.2.1 Relevant identified uses: In Vitro Diagnostic Use

1.3 Details of the supplier of the safety data sheet
Produced by: HiMedia Laboratories Private Limited
Address: 23, Vadhani Industrial Estate, LBS Marg, Ghatkopar (W), Mumbai - 400 086 India
Tel. No.: +91-22-2500 0970, +91-22-2500 1607
Fax No.: +91-22-25002468
Mail Id: mb@himedialabs.com
Website: www.himedialabs.com

1.4 Emergency Tel. No.
Emergency Tel. No.: Please contact the regional HiMedia representation in your country

2 Hazards Identification

2.1 Classification of the substance or mixture
CLP Classification-Regulation (EC) No. 1272/2008[EUGHS/CLP]
- Flammable solids, (Category 2), H228
- Acute toxicity, Oral, (Category 4), H302
- Acute toxicity, Inhaled, (Category 4), H332
- Skin corrosion or irritation, (Category 2), H315
- Serious eye damage or eye irritation, (Category 1), H318
- Specific target organ toxicity, single exposure, Respiratory tract irritation, (Category 3), H335
- Hazardous to the aquatic environment, long term hazard, (Category 3), H412
- Serious eye damage or eye irritation, (Category 2A), H319
- Sensitisation, respiratory, (Category 1), H334
For the full text of the H-Statements mentioned in this Section, See Section 16

2.2 Label elements
Labeling according to Regulation (EC) No.1272/2008

Pictogram
Signal word: Danger
Hazard Statement(s)
H228 Flammable solid
H302 Harmful if swallowed
H332 Harmful if inhaled
H315 Causes skin irritation
H318 Causes serious eye damage
H335 May cause respiratory irritation
H412 Harmful to aquatic life with long lasting effects
H319 Causes serious eye irritation
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary Statement(s)
P210 Keep away from heat/sparks/open flames/hot surfaces. — No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 IF eye irritation persists: Get medical advice/attention.
P342 + P311 IF experiencing respiratory symptoms: call a POISON CENTER or doctor/physician.

2.3 Other Hazards
None

3 Composition/Information On Ingredients
3.2 Mixture

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lauryl sulphate sodium salt, For Molecular Biology</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=5 - &lt;=10%</td>
</tr>
<tr>
<td>CAS No. :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>151-21-3</td>
<td>Flam. Sol. 1; Acute Tox. oral 4; Acute</td>
<td></td>
</tr>
<tr>
<td>EC No. :</td>
<td>Tox. dermal. 3; Skin Irrit. 2; Eye Dam. 1;</td>
<td></td>
</tr>
<tr>
<td>205-788-1</td>
<td>STOT SE 3 H228; H302; H311; H315; H318; H335</td>
<td></td>
</tr>
<tr>
<td>Molecular Formula :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C₁₂H₂₅NaO₄S</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Molecular Weight :</td>
<td></td>
<td></td>
</tr>
<tr>
<td>288.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Guanidine hydrochloride, For Molecular Biology</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CAS No. :                         50-01-1
EC No. :                           200-002-3
Molecular Formula :       CH₅N₃.HCl
Molecular Weight :        95.53

As Per EC Regulation 1272/2008
Acute Tox.oral 4; Skin Irrit. 2; Eye Irrit.
2A H302; H315; H319

>=25 - <=50%

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proteinase K, From Pichia pastoris, For Molecular Biology</td>
<td>As Per EC Regulation 1272/2008</td>
<td>&gt;=95 - &lt;=100%</td>
</tr>
</tbody>
</table>
| CAS No. :                         39450-01-6
EC No. :                           254-457-8
Index-No :                       647-014-00-9
Molecular Weight :        28.93 kDa |
| Skin Irrit. 2; Eye Irrit. 2A; Resp. Sens. 1;
STOT SE 3 H315; H319; H334; H335 |

4  First Aid Measures
4.1  Description of first aid measures

General advice
Consult a physician. Show this safety data sheet to the doctor in attendance.

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact
Wash with plenty of soap and water. Consult a physician.

In case of eye contact
Rinse immediately with plenty of water for at least 15 minutes. Consult a physician.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2  Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

4.3  Indication of immediate medical attention and special treatment needed
Treat symptomatically.

5  Fire Fighting Measures
5.1  Extinguishing media

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Unsuitable extinguishing media
No data available.

5.2  Special hazards arising from the substance or mixture
No data available.

5.3  Precautions for fire-fighters
Wear self contained breathing apparatus for fire fighting if necessary
5.4 Further information
No data available

6 Accidental Release Measures
6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid breathing vapours, mist or gas. Wear disposable gloves, dust mask and eye protection.

6.2 Environmental precautions
No special environmental precautions required.

6.3 Methods and materials for containment and cleaning up
Soak up with inert adsorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Clean up affected area. Flush spill area with water.

6.4 Reference to other sections
For disposal see Section 13.

7 Handling and Storage
7.1 Precautions for safe handling
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Recommended Storage Temperature: Store between 15-25°C

7.3 Specific end uses
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

8 Exposure Controls/Personal Protection
8.1 Control parameters
Components with workplace control parameters

8.2 Exposure controls
Appropriate engineering controls
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the products.

Personal protective equipment
Hygiene measure
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with the product.

Eye/face protection
Tightly fitting safety goggles; Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.
**Body protection**
Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**
Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Environment exposure controls**
No special environmental precautions required.

---

9  **Physical and chemical properties**

9.1  **Information on basic physical and chemical properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour Threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting/freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (Solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour density</td>
<td>No data available</td>
</tr>
<tr>
<td>Thermal decomposition</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2  **Other safety information**
No data available

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10  **Stability and Reactivity**

10.1  **Reactivity**
No data available

10.2  **Chemical stability**
Stable under recommended storage conditions.

10.3  **Possibility of hazardous reactions**
No data available

10.4  **Conditions to avoid**
No data available

10.5  **Incompatible materials**
No data available
10.6 Hazardous decomposition products
Other Decomposition products. No Data Available

11 Toxicological Information
11.1 Information on toxicological effects

Acute toxicity
No data available

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitisation
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
No data available

Specific target organ toxicity- single exposure
No data available

Aspiration hazard
No data available

Potential Health Effects

Inhalation
REFER SECTION 2

Skin
REFER SECTION 2

Eyes
REFER SECTION 2

Ingestion
REFER SECTION 2

Additional Information
RTECS : Not applicable

12 Ecological Information
12.1 Toxicity
No data available

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
12.4 Mobility in soil
No data available

12.5 PBT and vPvB assessment
No data available

12.6 Other adverse effects
No data available

13 Disposal Considerations

13.1 Waste treatments methods
Product
Offer surplus and non-recyclable solutions to a licenced company.

13.2 Contaminated packaging
Dispose of as unused product.

14 Transport Information

14.1 UN-No
ADNR : ADR : IATA_C : IATA_P : IMDG : RID :

14.2 UN proper shipping name
ADNR : Not dangerous goods
ADR : Not dangerous goods
IATA_C : Not dangerous goods
IATA_P : Not dangerous goods
IMDG : Not dangerous goods
RID : Not dangerous goods

14.3 Transport hazard class(es)
ADNR : - ADR : - IATA_C : - IATA_P : - IMDG : - RID :

14.4 Packaging group
ADNR : ADR : IATA_C : IATA_P : IMDG : RID :

14.5 Environmental hazards
ADNR : No ADR : No IMDG : No IATA_C : No IATA_P : No RID : No

14.6 Special precautions for use
No data available

15 Regulatory Information

15.1 Safety health and environment regulations/legislation specific for the substance or mixture
No data available

15.2 Chemical Safety Assessment
No data available

16 Other information
H228 Flammable solid
H302 Harmful if swallowed
H311 Toxic in contact with skin
H315 Causes skin irritation
H318 Causes serious eye damage
H319 Causes serious eye irritation
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled
H335 May cause respiratory irritation
Acute Tox. dermal. 3 Acute toxicity, dermal, Category 3
Acute Tox.oral 4 Acute toxicity, oral, Category 4
Eye Dam. 1 Serious eye damage or eye irritation, Category 1
Eye Irrit. 2A Serious eye damage or eye irritation, Category 2A
Flam. Sol. 1 Flammable solids, Category 1
Resp. Sens. 1 Sensitisation, respiratory, Category 1
Skin Irrit. 2 Skin corrosion or irritation, Category 2
STOT SE 3 Specific target organ toxicity, single exposure, Respiratory tract irritation, Category 3

Further Information

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The information given in this safety data sheet is believed to be correct yet does not claim to be all inclusive. This document is intended only as a guide for appropriate precautionary handling of the material by properly trained individuals, information here being commensurate with the present state of our knowledge regarding the manner and conditions of use, handling, storage or disposal. The information provided herein shall not be considered as guarantee of the properties of the product. HiMedia Laboratories, shall not be held liable for any damage resulting from improper handling or contact with the above product. Unless explicitly stated on the product or in any of the documentation accompanying the product, it is intended for research or testing purpose only and is not to be used for any other purpose.