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

1.1 **Product Identifiers**
- Product Code: RM1298
- Product Name: DNA synthesizer

1.2 **Relevant identified uses of the substance or mixture and uses advised against**
- Identified uses: Laboratory chemicals, Manufacture of substances

1.3 **Details of the supplier of the safety data sheet**
- Produced by: HiMedia Laboratories Pvt. Ltd.
- Address: 23, Vadhani Indl.Estate, LBS Marg, Mumbai 400 086, India.
- Tel. No.: +91-22-2500 0970, +91-22-2500 1607
- Fax No.: +91-22-2500 2468

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**
- **Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]**
  - Flammable solids (Category 1)
  - Flammable solids (Category 2)
  - Acute toxicity, oral (Category 3)
  - Acute toxicity, dermal (Category 3)
  - Acute toxicity, inhalation (Category 3)
- **Classification according to EU Directives 67/548/EEC or 1999/45/EC**
  - Highly flammable.
  - Toxic by inhalation, in contact with skin and if swallowed.

2.2 **Label elements**
- **Labelling according Regulation (EC) No 1272/2008 [CLP]**
  - **Pictogram**
  - **Signal word**: Danger

Hazard Statement(s)
- H228 Flammable solid
- H228 Flammable solid
- H301 Toxic if swallowed
- H311 Toxic in contact with skin
- H331 Toxic if inhaled

Precautionary Statement(s)
- P240 Ground/bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting/equipment.
- P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P271 Use only outdoors or in a well-ventilated area.
- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
- P264 Wash hands thoroughly after handling. Wash skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.
P302 + P352 IF ON SKIN: wash with plenty of soap and water.
P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing.
P363 Wash contaminated clothing before reuse.
P361 Remove/Take off immediately all contaminated clothing.
P370 + P378 In case of fire: Use for extinction.
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.
P405 Store locked up.
P501 Dispose of contents/container to waste disposed plant


Symbol(s)

R-Phrase(s)
R11 Highly flammable.
R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.

S-Phrase(s)
S16 Keep away from sources of ignition No smoking.
S27/36/37 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

2.3 Other hazards - none

3. Composition/Information on Ingredients
3.1 Substances
Synonym: 1H-Tetrazole

<table>
<thead>
<tr>
<th>Component</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>DNA synthesizer</td>
<td></td>
</tr>
<tr>
<td>CAS-No.</td>
<td>288-94-8</td>
</tr>
</tbody>
</table>

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 off with soap and plenty of water. Consult a physician.

In case of eye contact
Rinse thoroughly with plenty of water for at least 15 minutes and 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
No data available

4.3 Indication of immediate medical attention and special treatment needed
No data available
5. Fire Fighting Measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Under fire conditions, hazardous fumes will be present

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 vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see Section 13.

7. Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Normal measures for preventive fire protection.

7.3 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 below 30°C

7.3 Specific end uses

No data available

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 product.

Personal protective equipment

Hygiene measure
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands face after working with the substance

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 of 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 the 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**
Do not empty into drains

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### 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>White to yellow crystals or powder or solid</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>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/lowerflammability or explosive limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
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</tr>
<tr>
<td>Vapour density</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Water Solubility</td>
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</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>Explosive properties</td>
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</tr>
<tr>
<td>Oxidizing properties</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

No data available

#### 10.3 Possibility of hazardous reactions

No data available

#### 10.4 Conditions to avoid

No data available

#### 10.5 Incompatible materials

Strong oxidizing agents

#### 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 Available

12 Ecological Information
12.1 Toxicity
No data available

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

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

13.2 Contaminated packaging
Dispose of as unused product.

14 Transport Information
14.1 UN-No.
ADR/RID: 1835  IMDG: 1835  IATA: 1835

14.2 UN proper shipping name
ADR/RID : DNA synthesizer
IMDG : DNA synthesizer
IATA : DNA synthesizer

14.3 Transport hazard class(es)
ADR/RID: 8  IMDG: 8  IATA: 8

14.4 Packaging group
ADR/RID: 2  IMDG: 2  IATA: 2
14.5 Environmental hazards
ADR/RID: No    IMDG: Marine Pollutant:No   IATA: No

14.6 Special precautions for use
No data available

15 Regulatory Information
This safety datasheet complies with the requirements of Regulation(EC) No.1907/2006

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
Further information
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