Eurogentec Material Safety Data Sheet Experience true partnership Printing date: 01/03/2017 Reviewed on: 01/03/2017 Page 1 of 4 1. Identification of the substance/mixture and of the company/undertaking 1.1 Product details Component name **HMBS** Probe Product name Hydroxymethyl-bilane synthase Control kit Catalog number **RT-CKYD-HMBS** 1.2 Relevant identified uses of the substance/preparation and uses advised against For laboratory use only. 1.3 Manufacturer/Supplier: Kaneka Eurogentec s.a. Parc Scientifique du Sart Tilman 4102 Seraing Belgium Tel +32-4-3727400 Fax +32-4-2640788 E-mail scientific.support@eurogentec.com Kaneka Eurogentec Helpdesk Tel. +32-4-3727665 **1.4 Emergency information** Please contact the regional Kaneka Eurogentec representation in your country or Kaneka Eurogentec S.A. directly (from 8 am to 6 pm). MSDS-Nr.: MSDS-HMBSPROBE-V2 2. **Hazards identification** 2.1 Classification of the substance or mixture: Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008. 2.2 Label elements: None 2.3 Other hazards: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. 3. Composition/information on ingredients

3.1 Substance:

Not applicable

3.2 Mixture:

All ingredients in this product are not dangerous and not classified by GHS standard.

4. First-aid measures

4.1 Description of first aid measures:

| After inhalation: After skin contact: After eye contact: After swallowing: | Fresh air. Consult a doctor in case of complaints. Wash off with soap and plenty of water. Rinse out with plenty of water. Wash out mouth with water. Never give anything by mouth to an unconscious person. Consult a doctor if feeling unwell. |
|---|--|
| 4.2 Most important symptoms and effects: | See section 11 |

4.3 Immediate medical attention and special treatment needed:

5. Fire-fighting measures

5.1 Suitable extinguishing agents: Water, CO2, powder.

5.2 Special hazards:5.3 Advice for firefighters:

No data available. Wear self-contained breathing apparatus for firefighting if necessary.

No data available

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6. Accidental release measures

| | Avoid contact with skin, avoid breathing vapors or mist. |
|--|---|
| 6.2 Environmental precautions | Prevent further leakage or spillage if safe to do so. |
| | Do not let enter drains. |
| 6.3 Measures and materials fo | r containment and cleaning up: |
| | Absorb with liquid-binding material. |
| 6.4 Reference to other section | s: For disposal see section 13. |
| 7. Handling and storage | |
| | |
| 7.1 Precautions for safe handl | ing: Wear laboratory gloves, avoid inhalation of vapour or mist |
| | ing: Wear laboratory gloves, avoid inhalation of vapour or mist e, incl. any incompatibilities: Store at -20°C. |
| 7.2 Conditions for safe storage 7.3 Specific end use(s): | e, incl. any incompatibilities: Store at -20°C. see section 1.2, no other use stipulated |
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| 7.2 Conditions for safe storag 7.3 Specific end use(s): 8. Exposure controls/perso 8.1 Control parameters: - | e, incl. any incompatibilities: Store at -20°C. see section 1.2, no other use stipulated |
| 7.2 Conditions for safe storage 7.3 Specific end use(s): 8. Exposure controls/personal 8.1 Control parameters: - 8.2 Exposure controls: - Appropriate engineering controls Personal protective equipment | e, incl. any incompatibilities: Store at -20°C. see section 1.2, no other use stipulated onal protection ols: General laboratory hygiene practice t: General laboratory hygiene practice |
| 7.2 Conditions for safe storage 7.3 Specific end use(s): 8. Exposure controls/personal 8.1 Control parameters: - 8.2 Exposure controls: - Appropriate engineering control Personal protective equipment Eye-face protection: Us | e, incl. any incompatibilities: Store at -20°C. see section 1.2, no other use stipulated onal protection General laboratory hygiene practice |
| 7.2 Conditions for safe storag 7.3 Specific end use(s): 8. Exposure controls/perso 8.1 Control parameters: - 8.2 Exposure controls: - Appropriate engineering control Personal protective equipmen Eye-face protection: Us Skin protection: | e, incl. any incompatibilities: Store at -20°C. see section 1.2, no other use stipulated onal protection ols: General laboratory hygiene practice t: General laboratory hygiene practice e equipment for eye protection tested and approved under appropriate government standards thas NIOSH (US) or EN 166(EU). Handle with gloves, preferentially nitrile rubber gloves. |
| 7.2 Conditions for safe storage 7.3 Specific end use(s): 8. Exposure controls/perso 8.1 Control parameters: - 8.2 Exposure controls: - Appropriate engineering control Personal protective equipment Eye-face protection: Us | e, incl. any incompatibilities: Store at -20°C. see section 1.2, no other use stipulated onal protection ols: General laboratory hygiene practice t: General laboratory hygiene practice e equipment for eye protection tested and approved under appropriate government standards ch as NIOSH (US) or EN 166(EU). |

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties:

| a. | Appearance: | Fluid | |
|----|------------------------------|---------------------|--|
| b. | Color: | Colorless | |
| c. | Odor: | Odorless | |
| d. | Odor threshold: | No data available | |
| e. | pH: | No data available | |
| | Change in condition | | |
| f. | Melting point/range: | No data available | |
| g. | Boiling point/range: | No data available | |
| h. | Flash point: | Not applicable | |
| i. | Self-igniting: | Not self-igniting | |
| j. | Danger of explosion: | No explosion hazard | |
| k. | Density: | No data available | |
| Ι. | Solubility in water: | Fully soluble | |
| m. | Miscibility with water: | Fully miscible | |
| 9 | .2 Other safety information: | No data available | |
| | | | |

10. Stability and reactivity

10.1 Reactivity:

10.2 Chemical stability:

10.3 Possibility of hazardous reactions:

No data available Stable under recommended storage conditions. No data available

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10.4 Conditions to avoid:

10.5 Incompatible materials:

10.6 Hazardous decomposition products:

11. Toxicological information

11.1 Information on toxicological effects:

No data available Acute toxicity: Skin corrosion/irritation: Irritant to skin and mucous membranes Serious eye damage/irritation: Irritating effect Respiratory or skin sensitization: Possible No data available Germ cell mutagenicity Carcinogenicity No data available Reproductive toxicity No data available Specific target organ toxicity-single exposure No data available Specific target organ toxicity-repeated exposure No data available Aspiration hazard No data available

Additional toxicological information:

The product should be handled with the usual care when dealing with chemicals.

12. Ecological information

| 12.1 Toxicity: | Slightly hazardous for water. |
|--|-------------------------------|
| 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 Results of PBT and vPvB assessment: | No data available. |
| 12.6 Other adverse effects: | No data available. |

13. Disposal considerations

13.1 Waste treatment methods:

Product:

Uncleaned packaging:

Dispose as special waste in compliance with official regulations. Do not allow product to reach sewage system. Dispose as special waste in compliance with official regulations.

14. Transport information

| 14.1 UN number: | | |
|------------------------------------|----------------------|-----------|
| ADR/RID: - | IMDG: - | IATA: |
| 14.2 UN proper shipping name: | Not dangerous goods. | |
| 14.3 Transport hazard class(es): | | |
| ADR/RID: - | IMDG: - | IATA: |
| 14.4 Packaging group: | | |
| ADR/RID: - | IMDG: - | IATA: |
| 14.5 Environmental hazards: | | |
| ADR/RID: no | IMDG: no | IATA: no. |
| 14.6 Special precautions for user: | None | |

15. Regulation information

15.1 Safety, health and environmental regulations/legislation specific for the substance/mixture: none

15.2 Chemical safety assessment:

For this substance/mixture a chemical safety assessment was not done



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Excess heat, incompatible materials, water/moisture No data available. No data available.

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16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

The information in this document is intended only as a guide to the appropriate precautionary handling of this material by a person trained in, or supervised by a person trained in chemical handling. The user is responsible for determining the precautions and danger of this chemical material in his application. This material may react with other substances and since potential users are so varied, Kaneka Eurogentec S.A., cannot warn of all potential dangers. Therefore, Kaneka Eurogentec S.A., will not assume responsibility and expressly disclaims liability for loss, damage, or expense arising from the use, handling, storage, or disposal of this product. Kaneka Eurogentec S.A. urges each user to carefully read the MSDS prior to using the product and become aware to the adverse health effects associated with this product. While the information provided in the MSDS is believed to be correct, the information is provided without any warranty expressed or implied, regarding its corrective uses.

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