


## Material Safety Data Sheet

Canada  
English

## Section 1. Chemical product and company identification

|                      |  |   |                |
|----------------------|--|---|----------------|
| Product name         | Cy™5 Bis NHS ester, 5 mg   |   |                |
| Catalogue Number     | 25-9004-82   | <br>9 0 2 5 9 0 0 4 8 2 |                |
| Material uses        | Industrial applications: Analytical chemistry. Research.   |   |                |
| Product type         | Solid.   |   |                |
| Validation date      | 1 December 2008  |   |                |
| Print date           | 02 December 2008   |   |                |
| Supplier             | GE Healthcare UK Ltd<br>Amersham Place<br>Little Chalfont<br>Buckinghamshire HP7 9NA<br>England<br>+44 0870 606 1921 |   |                |
| In case of emergency | US   | ChemTrec (US)   | 1-800-424-9300 |
|                      | Canada   | ChemTrec (US)   | 1-703-527-3887 |

## 2. Hazards identification

|   |  |
|---|--|
| Physical state                          | Solid.   |
| Odor                                    | Odorless.  |
| Emergency overview                      | <p>WARNING!</p> <p>HARMFUL IF INHALED. MAY CAUSE ALLERGIC RESPIRATORY AND SKIN REACTION. MAY BE HARMFUL IF ABSORBED THROUGH SKIN OR IF SWALLOWED.</p> <p>Harmful by inhalation. May be harmful if absorbed through skin or if swallowed. May cause sensitization by inhalation and skin contact. Do not ingest. Do not get in eyes or on skin or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling.</p> |
| Routes of entry                         | Dermal contact. Eye contact. Inhalation. Ingestion.  |
| <b>Potential acute health effects</b>   |  |
| Eyes                                    | No known significant effects or critical hazards.  |
| Skin                                    | Harmful in contact with skin. May cause sensitization by skin contact.   |
| Inhalation                              | Toxic by inhalation. May cause sensitization by inhalation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.   |
| Ingestion                               | Harmful if swallowed.  |
| <b>Potential chronic health effects</b> |  |
| Chronic effects                         | Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.  |
| Carcinogenicity                         | No known significant effects or critical hazards.  |
| Mutagenicity                            | No known significant effects or critical hazards.  |
| Teratogenicity                          | No known significant effects or critical hazards.  |
| Developmental effects                   | No known significant effects or critical hazards.  |
| Fertility effects                       | No known significant effects or critical hazards.  |
| Target organs                           | Not available.   |
| Inhalation                              | Adverse symptoms may include the following:<br>wheezing and breathing difficulties<br>asthma   |
| Ingestion                               | No specific data.  |
| Skin                                    | Adverse symptoms may include the following:<br>irritation<br>redness   |
| Eyes                                    | No specific data.  |



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**Medical conditions aggravated by over-exposure** ☒ Pre-existing respiratory and skin disorders may be aggravated by over-exposure to this product.

See toxicological information (section 11)

### 3. Composition/information on ingredients

| <u>Name</u>         | <u>CAS number</u> | <u>% by weight</u> |
|---------------------|-------------------|--------------------|
| Cy5 (Bis NHS ester) | 100               |                    |

### Section 4. First aid measures

|                                   |   |
|-----------------------------------|---|
| <b>Eye contact</b>                | <input checked="" type="checkbox"/> Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical attention immediately.  |
| <b>Skin contact</b>               | <input checked="" type="checkbox"/> In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.   |
| <b>Inhalation</b>                 | <input checked="" type="checkbox"/> Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.  |
| <b>Ingestion</b>                  | <input checked="" type="checkbox"/> Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.  |
| <b>Protection of first-aiders</b> | <input checked="" type="checkbox"/> No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. |

### Section 5. Fire fighting measures

|   |   |
|---|---|
| <b>Flammability of the product</b>                    | <input checked="" type="checkbox"/> No specific fire or explosion hazard.   |
| <b>Extinguishing media</b>                            |   |
| <b>Suitable</b>                                       | Use an extinguishing agent suitable for the surrounding fire.   |
| <b>Not suitable</b>                                   | None known.   |
| <b>Special exposure hazards</b>                       | <input checked="" type="checkbox"/> Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. |
| <b>Special protective equipment for fire-fighters</b> | Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.   |

### Section 6. Accidental release measures

|                                  |   |
|----------------------------------|---|
| <b>Personal precautions</b>      | <input checked="" type="checkbox"/> No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see section 8). |
| <b>Environmental precautions</b> | <input checked="" type="checkbox"/> Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).   |
| <b>Methods for cleaning up</b>   | <input checked="" type="checkbox"/> Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.                 |
| <b>Small spill</b>               | <input checked="" type="checkbox"/> Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.   |

### Section 7. Handling and storage

|                 |  |
|-----------------|--|
| <b>Handling</b> | <input checked="" type="checkbox"/> Put on appropriate personal protective equipment (see section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Persons with a history of skin sensitization problems or asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. |
| <b>Storage</b>  | <input checked="" type="checkbox"/> Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.   |



## Section 8. Exposure controls/personal protection

Consult local authorities for acceptable exposure limits.

### Recommended monitoring procedures

☑ If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment.

### Engineering measures

☑ Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### Hygiene measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

### Personal protection

#### Respiratory

☑ Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

#### Hands

Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

#### Eyes

☑ Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists or dusts.

#### Skin

Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### Environmental exposure controls

☑ Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

## Section 9. Physical and chemical properties

### Physical state

Solid.

### Color

Blue.

### Odor

Odorless.

### Volatility

0% (w/w)

### VOC

0 (g/l).

### Solubility

☑ Not available.

## Section 10. Stability and reactivity

### Stability

☑ The product is stable.

### Hazardous polymerization

☑ Under normal conditions of storage and use, hazardous polymerization will not occur.

### Conditions of reactivity

Non-flammable in the presence of the following materials or conditions: open flames, sparks and static discharge, heat, shocks and mechanical impacts, oxidizing materials, reducing materials, combustible materials, organic materials, metals, acids, alkalis and moisture.  
Not considered to be a product presenting a risk of explosion.

## Section 11. Toxicological information

### Acute toxicity

#### Product/ingredient name

Not available.

#### Result

#### Species

#### Dose

#### Exposure

#### Conclusion/Summary

Not available.

### Classification

#### Product/ingredient name

Not available.

#### ACGIH

#### IARC

#### EPA

#### NIOSH

#### NTP

#### OSHA

### Synergistic products

Not available.

## Section 12. Ecological information

### Environmental effects

☑ No known significant effects or critical hazards.

### Octanol/water partition coefficient

Not available.

### Bioconcentration factor

Not available.

### Other adverse effects

☑ No known significant effects or critical hazards.



## Section 13. Disposal considerations

### Waste disposal

The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

### RCRA classification

Not available.

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## Section 14. Transport information

### International transport regulations

Not classified.

## Section 15. Regulatory information

### WHMIS (Canada)

Class D-1B: Material causing immediate and serious toxic effects (Toxic).

### Canadian lists

CEPA Toxic substances: None of the components are listed.

Canadian ARET: None of the components are listed.

Canadian NPRI: None of the components are listed.

Alberta Designated Substances: None of the components are listed.

Ontario Designated Substances: None of the components are listed.

Quebec Designated Substances: None of the components are listed.

### Canada inventory

Not determined.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

### EU regulations

#### Hazard symbol or symbols



#### Risk phrases

R20/21/22- Harmful by inhalation, in contact with skin and if swallowed.  
R42/43- May cause sensitization by inhalation and skin contact.

#### Safety phrases

S22- Do not breathe dust.  
S36/37- Wear suitable protective clothing and gloves.  
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

### International regulations

#### International lists

Australia inventory (AICS): Not determined.

China inventory (IECSC): Not determined.

Japan inventory (ENCS): Not determined.

Japan inventory (ISHL): Not determined.

Korea inventory (KECI): Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

Philippines inventory (PICCS): Not determined.

## Section 16. Other information

The customer is responsible for determining the PPE code for this material.



Indicates information that has changed from previously issued version.

### History

#### Date of printing

02 December 2008

#### Date of previous issue

10 April 2006

#### Date of issue

01 December 2008

#### Version

4

### Notice to reader



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25900482



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To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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