Material Safety Data Sheet

Section 1. Chemical product and company identification

Product name: ME25/21 ST, 0.45 µm 47 mm, 100 pack
Catalogue Number: 10406870

Product type: Solid.
Validation date: 11 June 2009
Print date: 11 June 2009
Supplier: GE Healthcare UK Ltd
Amersham Place
Little Chalfont
Buckinghamshire HP7 9NA
England
+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
FLAMMABLE SOLID.
Flammable solid. Keep away from heat, sparks and flame. Avoid contact with skin and clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use.

Potential acute health effects

Eyes: No known significant effects or critical hazards.
Skin: No known significant effects or critical hazards.
Inhalation: No known significant effects or critical hazards.
Ingestion: No known significant effects or critical hazards.

Potential chronic health effects

Chronic effects: No known significant effects or critical hazards.
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.

Over-exposure signs/symptoms

Inhalation: No specific data.
Ingestion: No specific data.
Skin: No specific data.
Eyes: No specific data.

Medical conditions aggravated by over-exposure
None known.

See toxicological information (section 11)
3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS number</th>
<th>% by weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrocellulose; with &lt;12.6% N</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Section 4. First aid measures

**Eye contact**
In case of contact with eyes, rinse immediately with plenty of water. Get medical attention if irritation occurs.

**Skin contact**
Wash with soap and water. Get medical attention if irritation develops.

**Inhalation**
If inhaled, remove to fresh air. Get medical attention if symptoms appear.

**Ingestion**
Do not ingest. Get medical attention if symptoms appear.

**Protection of first-aiders**
No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

**Notes to physician**
No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Section 5. Fire fighting measures

**Flammability of the product**
Flammable solid. Runoff to sewer may create fire or explosion hazard.

**Extinguishing media**

<table>
<thead>
<tr>
<th>Suitable</th>
<th>Not suitable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use dry chemical, CO₂, water spray (fog) or foam.</td>
<td>Do not use water jet.</td>
</tr>
</tbody>
</table>

**Special exposure hazards**
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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Hazardous combustion products**
No specific data.

**Special protective equipment for fire-fighters**
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

**Personal precautions**
Eliminate all ignition sources. Use personal protective equipment as required.

**Environmental precautions**
No special recommendations.

**Methods for cleaning up**
Place spilled material in an appropriate container for disposal.

**Small spill**
Place spilled material in an appropriate container for disposal.

Section 7. Handling and storage

**Handling**
Keep away from sources of ignition.

**Storage**
Avoid all possible sources of ignition (spark or flame).

Section 8. Exposure controls/personal protection

**Consult local authorities for acceptable exposure limits.**

**Recommended monitoring procedures**
Product does not contain relevant quantities of materials with exposure values that have to be monitored.

**Engineering measures**
No special ventilation requirements.

**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**

<table>
<thead>
<tr>
<th>Respiratory</th>
<th>Hands</th>
<th>Eyes</th>
<th>Skin</th>
<th>Environmental exposure controls</th>
</tr>
</thead>
<tbody>
<tr>
<td>A respirator is not needed under normal and intended conditions of product use.</td>
<td>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.</td>
<td>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.</td>
<td>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.</td>
<td>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.</td>
</tr>
</tbody>
</table>
Section 9. Physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Solid</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>&gt;160°C (&gt;320°F)</td>
</tr>
<tr>
<td>Odor</td>
<td>Odorless</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>0 kPa (0 mm Hg)</td>
</tr>
<tr>
<td>Volatility</td>
<td>0% (w/w)</td>
</tr>
<tr>
<td>VOC</td>
<td>0 (g/l)</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Dynamic: Not applicable</td>
</tr>
<tr>
<td></td>
<td>Kinematic: Not applicable</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in the following materials: cold water.</td>
</tr>
</tbody>
</table>

Section 10. Stability and reactivity

Stability: The product is stable.

Conditions to avoid: Avoid all possible sources of ignition (spark or flame).

Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Hazardous polymerization: Under normal conditions of storage and use, hazardous polymerization will not occur. Not considered to be a product presenting a risk of explosion.

Section 11. Toxicological information

Acute toxicity:

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>Result</th>
<th>Species</th>
<th>Dose</th>
<th>Exposure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td></td>
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</tbody>
</table>

Conclusion/Summary: Not toxic.

Classification:

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>EPA</th>
<th>NIOSH</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not available.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

Remarks: This product fulfills SP122 in IATA-DGR and is therefore not considered Dangerous Goods.
Section 15. Regulatory information

**WHMIS (Canada)**

- **Class B-4: Flammable solid.**

**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**

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**

**Risk phrases**

- R11- Highly flammable.

**Safety phrases**

- S16- Keep away from sources of ignition - No smoking.
- S33- Take precautionary measures against static discharges.
- S37/39- Wear suitable gloves and eye/face protection.

**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.

**History**

<table>
<thead>
<tr>
<th>Date of printing</th>
<th>Date of previous issue</th>
</tr>
</thead>
<tbody>
<tr>
<td>11 June 2009</td>
<td>01 February 2009</td>
</tr>
</tbody>
</table>

**Notice to reader**

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.