Dear Customer:

In order to comply with the Hazard Communication Law which went into effect November 25, 1985, attached is the material safety data sheet pertaining to our product noted above.

Additional sheets are available upon request. Please feel free to contact us if we can be of further assistance.

Sincerely,

Mager Scientific, Inc.
Customer Service
1 Identification of substance

- **Product details**
  - **Trade name:** Technotherm 3000
  - **Application of the substance / the preparation** Resin for metallographic testing
  - **Manufacturer/Supplier:** Heraeus Kulzer GmbH
    Grüner Weg 11, D-63450 Hanau
    Tel.: 06081 959-365 (Wehrheim)
  - **Informing department:**
    Division Technik
    Tel.: +49 6081 959-367
    Fax: +49 6081 959-398
  - **Emergency information:** Call +49 30 19240 (24 hours).

2 Composition/Data on components:

- **Chemical characterization**
  - **Description:**
  - **Dangerous components:**
    - CAS: 100-97-0
      - EINECS: 202-905-8
      - methenamine
      - Xn, F; R 11-42/43 5-10%
    - CAS: 108-95-2
      - EINECS: 203-632-7
      - phenol
      - T; R 23/24/25-34-48/20/21/22-68 < 1%
  - **Additional information** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

- **Hazard designation:** void
- **Information pertaining to particular dangers for man and environment** void
- **Classification system**
  The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies. Toxicologic tests have proven that the material is not hazardous.

4 First aid measures

- **General information** No special measures required.
- **After skin contact** The product is not skin irritating.
- **After eye contact** Rinse opened eye for several minutes under running water.
- **After swallowing** Initiate vomiting and consult a doctor.

5 Fire fighting measures

- **Suitable extinguishing agents** void
- **Protective equipment:** No special measures required.

6 Accidental release measures

- **Person-related safety precautions:** Not required.
- **Measures for environmental protection:** No special measures required.
- **Measures for cleaning/collecting:** Collect mechanically.
Material Safety Data Sheet
According to 91/155 EEC

Printing date 01.06.2005
Reviewed on 01.06.2005

Trade name: Technotherm 3000

Additional information:
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

7 Handling and storage

- Handling
  - Information for safe handling: No special measures required.
  - Information about protection against explosions and fires: No special measures required.

- Storage
  - Requirements to be met by storerooms and containers: No special requirements.
  - Information about storage in one common storage facility: Not required.
  - Further information about storage conditions: None.

8 Exposure controls and personal protection

- Additional information about design of technical systems: No further data; see item 7.

- Components with critical values that require monitoring at the workplace:
  108-95-2 phenol

  OES (I) Short-term value: 39 mg/m³, 10 ppm
  Long-term value: 20 mg/m³, 5 ppm
  Sk

- Additional information: The lists that were valid during the compilation were used as basis.

- Personal protective equipment
  - General protective and hygienic measures
    The usual precautionary measures should be adhered to in handling the chemicals.
  - Breathing equipment: Not required.
  - Protection of hands: Not required.
    - Material of gloves
      The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
    - Penetration time of glove material
      The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.
  - For the permanent contact in work areas without heightened risk of injury (e.g. Laboratory) gloves made of the following material are suitable:
    - PVC or PE gloves
  - Eye protection: not absolutely necessary
  - Body protection: Light weight protective clothing

9 Physical and chemical properties:

- General Information
  - Form: Granulate
  - Colour: Different according to colour
  - Smell: Nearly odourless

- Change in condition
  - Melting point/Melting range: Not determined
  - Boiling point/Boiling range: Not determined

(Contd. on page 3)
Material Safety Data Sheet
According to 91/155 EEC

Printing date 01.06.2005
Reviewed on 01.06.2005

Trade name: Technotherm 3000

- Flash point: Not applicable
- Self-inflammability: Product is not selfigniting.
- Danger of explosion: Product is not explosive.
- Density at 20°C 1.600 g/cm³
- Solubility in / Miscibility with
  - Water: Unsoluble
- Solvent content:
  - Organic solvents: 0.0 %
- Solids content: 5.0 %

10 Stability and reactivity
- Conditions to be avoided: No decomposition if used and stored according to specifications.
- Dangerous reactions No dangerous reactions known
- Dangerous products of composition: None

11 Toxicological information
- Acute toxicity:
  - Primary irritant effect:
    - on the skin: No irritant effect.
    - on the eye: No irritant effect.
  - Sensitization: No sensitizing effect known.
- Additional toxicological information:
  When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

12 Ecological information:
- General notes:
  Water hazard class 1 (calculated according to VwVwS): slightly hazardous for water.
  Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

13 Disposal considerations
- Product:
  - Recommendation Smaller quantities can be disposed with household garbage.
- European waste catalogue
  11 01 98 other wastes containing dangerous substances
- Uncleaned packagings:
  - Recommendation: Packaging can be reused or recycled after cleaning.

(Contd. on page 4)
14 Transport information

- Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)
  - ADR/RID-GGVS/E Class: -

- Maritime transport IMDG/GGVSea:
  - IMDG/GGVSea Class: -
  - Marine pollutant: No

- Air transport ICAO-TI and IATA-DGR:
  - ICAO/IATA Class: -

15 Regulatory information

- Designation according to EC guidelines:
  Observe the normal safety regulations when handling chemicals
  The product is not subject to identification regulations under EC Directives and the Ordinance on Hazardous Materials (GefStoffV).
  The product is not subject to classification according to the calculation methods of the "General Classification Guideline for Preparations of the EC" as issued in the last version.

- National regulations
  - Technical instructions (air):

<table>
<thead>
<tr>
<th>Class</th>
<th>Share in %</th>
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<tbody>
<tr>
<td>I</td>
<td>5-10</td>
</tr>
</tbody>
</table>

- Water hazard class:
  Water hazard class 1 (calculated according to VwVwS): slightly hazardous for water.

16 Other information:

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Relevant R-phrases
  11 Highly flammable.
  23/24/25 Toxic by inhalation, in contact with skin and if swallowed.
  34 Causes burns.
  42/43 May cause sensitisation by inhalation and skin contact.
  48/20/21/22 Harmful: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed.
  68 Possible risk of irreversible effects.

- Contact:
  Dr. Thiele  Tel.: (+49) 6181 35-3012
  email: ruediger.thiele@heraeus.com

  * Data compared to the previous version altered.