Section 1 - Product and Company Information

Product Name: ZetaMax™ base
Product Number: T6066
Brand: Sigma Chemical
Company: Sigma-Aldrich
Street Address: 3000 Spruce Street
City, State, Zip, Country: SAINT LOUIS, MO 63103 US
Technical Phone: 800-355-9332
Fax: 900-325-9522
Emergency Phone: 314-779-8555

Section 2 - Composition/Information on Ingredient

Substance Name: TRIZMA® BASE BIOTECHNOLOGY PERFORMANCE CERTIFIED
CAS #: 77-86-1
SARA 313: No
EC No: 201-004-4

Section 3 - Hazards Identification

Emergency Overview
In case of contact, immediately wash skin with soap and copious amounts of water.
In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.

Section 5 - Fire Fighting Measures

Autoignition Temp: N/A
Extinguishing Media: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

Section 6 - Accidental Release Measures

Procedure to be Followed in Case of Leak or Spill
Sweep together the wetted material carefully and fill into masked, sealed containers.

Section 7 - Handling and Storage

Handling
Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

Storage
Incompatible Materials: Zinc, Aluminum, Copper, Copper alloys, Galvanized iron.

Section 8 - Exposure Controls / PPE

Engineering Controls
Safety shower and eye bath. Mechanical exhaust required.

Personal Protective Equipment
Respiratory
Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator.

Personal Protective Equipment
Eye
Compatible chemical-resistant gloves.

Sigma Chemical - T6066
Page 2
General Hygiene Measures
Wash thoroughly after handling.

Section 9 - Physical/Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
<th>At Temperature or Pressure</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Molecular Weight</td>
<td>121.14 AMU</td>
<td></td>
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</tr>
<tr>
<td>pH</td>
<td>10.4</td>
<td>20 °C</td>
<td></td>
</tr>
<tr>
<td>BP/VP Range</td>
<td>219 - 220 °C</td>
<td>10 mmHg</td>
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<tr>
<td>MP/VP Range</td>
<td>171.2 - 172.3 °C</td>
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<tr>
<td>Freezing Point</td>
<td>N/A</td>
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<tr>
<td>Vapor Pressure</td>
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</tr>
<tr>
<td>Vapor Density</td>
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<tr>
<td>Saturated Vapor Conc.</td>
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<tr>
<td>SG/Density</td>
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</tr>
<tr>
<td>Bulk Density</td>
<td>0.8 kg/l</td>
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<tr>
<td>Odor Threshold</td>
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<td></td>
</tr>
<tr>
<td>Viscosity</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Water Content</td>
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</tr>
<tr>
<td>Solvent Content</td>
<td>N/A</td>
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<td></td>
</tr>
<tr>
<td>Evaporation Rate</td>
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<tr>
<td>Partition Coefficient</td>
<td>Log Kow -2.31</td>
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<tr>
<td>Decomposition Temp.</td>
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<tr>
<td>Flash Point °F</td>
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</tr>
<tr>
<td>Flash Point °C</td>
<td>N/A</td>
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<tr>
<td>Explosion Limits</td>
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</tr>
<tr>
<td>Flammability</td>
<td>N/A</td>
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<td></td>
</tr>
<tr>
<td>Autoignition Temp</td>
<td>N/A</td>
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<td></td>
</tr>
<tr>
<td>Solubility</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Solubility in Water</td>
<td>4 M in H2O, 20°C</td>
<td></td>
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<tr>
<td>Solvent: complete, colorless</td>
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<tr>
<td>N/A = not available</td>
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</tr>
</tbody>
</table>

Section 10 - Stability and Reactivity

Stability
Stable
Conditions to Avoid
Moisture
Materials to Avoid
Strong oxidizing agents.

Hazardous Decomposition Products
Hazardous Decomposition Products
Carbon monoxide, Carbon dioxide, Nitrogen oxides.

Section 11 - Toxicological Information

Hazardous Polymerization
Hazardous Polymerization
Will not occur.

Route of Exposure
Skin Contact
Causes skin irritation.
Skin Absorption
May be harmful if absorbed through the skin.
Eye Contact
Causes eye irritation.
Inhalation
Material is irritating to mucous membranes and upper respiratory tract. May be harmful if inhaled.
Ingestion
May be harmful if swallowed.

Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

RTECS Number: TY260100
Toxicity Data
Oral - Rat: 5900 mg/kg (LD50)
Intravenous - Rat: 1800 M6/kg (LD50)
Intravenous - Mouse: 1210 M6/kg (LD50)

Section 12 - Ecological Information

No data available.

Section 13 - Disposal Considerations

Appropriate Method of Disposal of Substance or Preparation
Disposal or mix the material with a combustible solvent, and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe at federal, state, and local environmental regulations.

Section 14 - Transport Information

DOT
Proper Shipping Name: None
Non-Hazardous for Transport: This substance is considered to be non-hazardous for transport.

IATA
Non-Hazardous for Air Transport: Non-hazardous for air transport.

Section 15 - Regulatory Information

EU Additional Classification
Symbol of Danger: XI
Indication of Danger
Inhaling
Risk Statements
R: 36/37/38
Inhalation to eyes, respiratory system and skin.
Safety Statements
S: 29 36
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

Sigma Chemical - T6066
Page 3
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Sigma Chemical - T6066
Page 4
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US Classification and Label Text

Indicator of Danger
- Initial
- Risk Statements
  - Irritating to eyes, respiratory system and skin.
- Safety Statements
  - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

United States Regulatory Information
- SARA Listed: No
- TSCA Inventory Item: Yes

Canada Regulatory Information
- W/H/MS Classification
  - This product has been classified in accordance with the hazard criteria of the CPR, and the MSDS contains all the information required by the CPR.
- DSL: Yes
- NDSL: No

Section 16 - Other Information

Disclaimer
For R&D or manufacturing use. Not for prescription compound or other uses.

Warranty
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to this product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2006 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.