SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: M-Bond 200 Catalyst C

Vishay Micro-Measurements
Post Office Box 27777
Raleigh, NC 27611

919-365-3800

CHEMTREC 1-800-424-9300 (U.S.)
703-527-3887 (Outside U.S.)

NOTE: CHEMTREC numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.

SECTION 2: HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

<table>
<thead>
<tr>
<th>CAS NUMBER</th>
<th>CHEMICAL IDENTITY</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0</td>
<td>2-Propanol</td>
<td>98.0</td>
</tr>
<tr>
<td>120-07-0</td>
<td>n-Phenyl diethanolamine</td>
<td>2.0</td>
</tr>
</tbody>
</table>

SECTION 3: HEALTH HAZARD DATA

Routes of Entry:

Inhalation: YES  Skin: YES  Ingestion: Accidental

Health Hazards (Acute and Chronic): Skin contact over-exposure may cause dermatitis.

Carcinogenicity: NTP: Not listed
IARC Monographs: Not listed
OSHA Regulated: Not listed

Signs and Symptoms of Exposure:

INHALATION: May cause irritation of nose and throat, headache, nausea, vomiting, dizziness, drowsiness, irritation of upper respiratory tract, unconsciousness.

EYE CONTACT: May cause irritation. May cause temporary corneal damage.
SKIN CONTACT: May cause irritation. Prolonged contact may cause dermatitis.

INGESTION: May cause headache, nausea, vomiting, dizziness, gastrointestinal irritation.

Conditions Generally Aggravated by Exposure: None known.

SECTION 4: EMERGENCY AND FIRST AID PROCEDURES

INHALATION: If inhaled, remove victim to fresh air and provide oxygen if breathing is difficult. If not breathing, give artificial respiration. Contact a physician.

EYE CONTACT: In case of eye contact, immediately flush with plenty of water for at least fifteen minutes. Contact a physician.

SKIN CONTACT: Wash affected area immediately with large amounts of soap and water. Remove and wash contaminated clothing before reuse. Contact a physician if irritation occurs.

INGESTION: CALL A PHYSICIAN. If swallowed, if conscious, give large amounts of water. Induce vomiting.

SECTION 5: FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): 53°F (11°C) Closed Cup

Flammable limits: LEL: 2.0 UEL: 12.0

Extinguishing Media: Alcohol foam, dry chemical, carbon dioxide.

Special Firefighting Procedures: Firefighters should wear proper protective clothing and self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: Closed containers may explode if exposed to high heat.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Steps to be taken if material is released or spilled: Wear suitable protective clothing. Shut off ignition sources; no flares, smoking, or flames in area. Stop leak if you can do so without risk. Use water spray to reduce vapors. Take up with sand or other non-combustible absorbent material and place into container for later disposal. Flush area with water.

SECTION 7: EXPOSURE CONTROLS -- PERSONAL PROTECTION

Respiratory Protection: Respiratory protection required if airborne concentration exceeds TLV. At concentrations up to 1000 ppm, a chemical cartridge respirator with organic vapor cartridge is recommended. Above this level, a self-contained breathing apparatus is recommended.
Ventilation: Use general or local exhaust ventilation to meet TLV requirements.

Local Exhaust: Keep below TLV
Mechanical: Keep below TLV
Special: N/A
Other: N/A

Protective Gloves: Butyl rubber gloves are recommended.

Eye Protection: Safety goggles are recommended.

Other Protective Clothing or Equipment: Protective apron is recommended.


SECTION 8: HANDLING AND STORAGE

Precautions to be taken in handling and storing: Keep container tightly closed. Store in a cool, dry, well-ventilated, flammable liquid storage area.

Other Precautions: Bond and ground containers when transferring liquid.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point: 181°F (83°C)
Vapor Pressure (mmHg): 33 @ 68°F (20°C)
Vapor Density (Air = 1): 2.1
Specific Gravity (H₂O = 1): 0.78
Melting Point: -128°F (-89°C)
Evaporation Rate (BuAc = 1): 2.83
Volatile Organic Compounds: 98%
Solubility in Water: 98%

Appearance and Odor: Blue liquid; alcohol odor.

SECTION 10: STABILITY AND REACTIVITY DATA

Stability: Stable.

Conditions to Avoid: Heat, flame, other sources of ignition.

Incompatibility (Materials to Avoid): Strong oxidizing agents, strong acids, nitric acid, sulfuric acid, halogens, active halogen compounds.

Hazardous Decomposition or By-products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.
SECTION 11: TOXICOLOGICAL INFORMATION

2-Propanol

OSHA PEL: 400 ppm
ACGIH TLV: 400 ppm
OTHER:
LD_{50} ORAL (RAT) 5840 mg/kg
LD_{50} INTRAPERITONEAL (MOUSE) 933 mg/kg
LD_{50} ORAL (DOG) 6150 mg/kg
LD_{50} SKIN (RABBIT) 12.8 g/kg

n-Phenyldiethanolamine

OSHA PEL: Not established
ACGIH TLV: Not established
OTHER: Not available

SECTION 12: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of in accordance with local, state, and federal environmental regulations.

SECTION 13: TRANSPORTATION INFORMATION

<table>
<thead>
<tr>
<th>SHIPPING NAME</th>
<th>CLASS</th>
<th>PACKING GROUP</th>
<th>UN NUMBER</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isopropanol</td>
<td>3</td>
<td>II</td>
<td>1219</td>
</tr>
<tr>
<td>(Isopropyl Alcohol)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Flammable Liquid</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION 14: REGULATORY INFORMATION

SECTION 313 SUPPLIER NOTIFICATION:

This product contains a toxic chemical or chemicals (as listed below) subject to the reporting requirements of Section 313 Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR Part 372.

<table>
<thead>
<tr>
<th>CAS NUMBER</th>
<th>CHEMICAL NAME</th>
<th>% BY WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>67-63-0</td>
<td>2-Propanol</td>
<td>98.0</td>
</tr>
</tbody>
</table>

TSCA NOTIFICATION:

All components of this product are listed in the Toxic Substance Control Act Chemical Substance Inventory (TSCA).
SECTION 15: OTHER INFORMATION

To the best of our knowledge, the information provided above meets the requirements of the United States Occupational Safety and Health Act and regulations established under 29 CFR 1910.1200 (g)(2)(c)(1)-(4) for a mixture of hazardous chemicals which has not been tested as a whole. The data provided on this Material Safety Data Sheet is from manufacturers of the original components. Vishay Micro-Measurements specifically disclaims any and all form of liability and/or responsibility for the application of this product.