SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier
   - **Product Name**: M-Bond 200 Catalyst C
   - **Chemical Name**: Mixture
   - **CAS No.**: Mixture
   - **EINECS No.**: Mixture
   - **REACH Registration No.**: None assigned.

1.2 Relevant identified uses of the substance or mixture and uses advised against
   - **Identified Use(s)**: Adhesives.
   - **Uses Advised Against**: None known.

1.3 Details of the supplier of the safety data sheet
   - **Company Identification**: VISHAY MEASUREMENTS GROUP, INC.
     - Post Office Box 27777
     - Raleigh, NC 27611
     - USA
   - **Telephone**: 919-365-3800
   - **Fax**: 919-365-3945
   - **E-Mail (competent person)**: mm.us@vishaypg.com

1.4 Emergency telephone number
   - **Emergency telephone number**: 1-800-424-9300
   - **CHEMTREC**

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
   - **GHS Classification**:
     - Flam. Liq. 2; H225
     - Eye Irrit. 2; H319
     - STOT SE 3; H336

2.2 Label elements
   - **GHS Classification**:
     - **Product Name**: M-Bond 200 Catalyst C
   - **Hazard Pictogram(s)**:
     - Flammable liquid and vapour (Flam. Liq. 2; H225)
     - Eye Irrit. 2; H319
     - STOT SE 3; H336

   - **Signal Word(s)**: Danger
   - **Contains**: Propan-2-ol
   - **Hazard Statement(s)**:
     - H225: Highly flammable liquid and vapour.
     - H319: Causes serious eye irritation.
     - H336: May cause drowsiness or dizziness.
   - **Precautionary Statement(s)**:
     - P210: Keep away from heat/sparks/open flames/hot surfaces. – No smoking.
     - P261: Avoid breathing vapours.
     - P280: Wear protective gloves/protective clothing/eye protection/face protection.
     - P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
     - P337+P313: If eye irritation persists: Get medical advice/attention.
     - P308+P311: IF exposed or concerned: Call a POISON CENTER/doctor.

   - **OSHA Defined Hazards**: None.

2.3 Other hazards
   - **Other hazards**: None.
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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances  Not applicable.

3.2 Mixtures

<table>
<thead>
<tr>
<th>Chemical identity of the substance</th>
<th>%W/W</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>REACH Registration No.</th>
<th>Hazard classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propan-2-ol</td>
<td>98</td>
<td>67-63-0</td>
<td>200-661-7</td>
<td>None assigned</td>
<td>Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336</td>
</tr>
<tr>
<td>n-Phenyldiethanolamine</td>
<td>2</td>
<td>120-07-0</td>
<td>204-368-5</td>
<td>None assigned</td>
<td>Acute Tox. 4; H302 Skin Irrit. 2; H315 Eye Dam. 1; H318 STOT RE 2; H373</td>
</tr>
</tbody>
</table>

For full text of H/P Statements see section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

   **Inhalation**
   If INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

   **Skin Contact**
   If ON SKIN: Wash with plenty of water. Take off contaminated clothing and wash before reuse. If skin irritation occurs, get medical advice/attention.

   **Eye Contact**
   If IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

   **Ingestion**
   If swallowed, rinse mouth with water (only if the person is conscious). Do not induce vomiting. Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

   Causes serious eye irritation. May cause drowsiness or dizziness. May cause nausea/vomiting.

4.3 Indication of any immediate medical attention and special treatment needed

   Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

   **Suitable Extinguishing Media**
   Extinguish with carbon dioxide, dry chemical, foam or waterspray.

   **Unsuitable extinguishing Media**
   Do not use water jet.

5.2 Special hazards arising from the substance or mixture

   Highly flammable liquid and vapour. May decompose in a fire giving off toxic fumes. Carbon monoxide, Carbon dioxide. The vapour may be invisible, heavier than air and spread along ground. Prevent liquid entering sewers, basements and workpits; vapour may create explosive atmosphere.

5.3 Advice for fire-fighters

   Fire fighters should wear complete protective clothing including self-contained breathing apparatus. Do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Avoid run off to waterways and sewers.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

   Ensure adequate ventilation. Stop leak if safe to do so. Highly flammable liquid and vapour. Eliminate all ignition sources if safe to do so. Avoid breathing vapours. Avoid contact with skin, eyes or clothing. Wear suitable respiratory protection. Use personal protective equipment as required. See Section: 8.
Wash contaminated clothing before reuse. The vapour is heavier than air; beware of pits and confined spaces.

Avoid release to the environment. Prevent liquid entering sewers, basements and workpits; vapour may create explosive atmosphere.

Ensure suitable personal protection (including respiratory protection) during removal of spillages. Use non-sparking equipment when picking up flammable spill. Adsorb spillages onto sand, earth or any suitable absorbent material. Do not adsorb onto sawdust or other combustible materials. Transfer to a lidded container for disposal or recovery. Ventilate the area and wash spill site after material pick-up is complete. Dispose of this material and its container as hazardous waste.

See Section: 8, 13

Ensure adequate ventilation. Avoid breathing vapours. Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. In case of inadequate ventilation wear respiratory protection. Use personal protective equipment as required. See Section: 8. Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Highly flammable liquid and vapour. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Ground/bond container and receiving equipment. Store in a well-ventilated place. Keep container tightly closed. Keep away from heat, sources of ignition and direct sunlight.

Ambient. 5 - 25°C

Stable under normal conditions.

Keep away from: Strong oxidising agents, Acids (Nitric acid and Sulphuric acid), Halogens and halogenated compounds.

Adhesives.

Note: OSHA PELs 1910.1000 TABLE Z-1 / NIOSH RELs / ACGIH TLVs

*15 minutes average value

The other components listed in Section 3 do not have assigned occupational exposure limits.

Source: BEI: Biological Exposure Indices (ACGIH).
Notes (See Section 16 for full definition):
B: Background
Ns: Nonspecific

The other components listed in Section 3 do not have assigned Biological Exposure Indices.
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8.2 Exposure controls
8.2.1 Appropriate engineering controls
Ensure adequate ventilation or use appropriate containment. Atmospheric levels should be controlled in compliance with the occupational exposure limit.

8.2.2 Individual protection measures, such as personal protective equipment (PPE)
General hygiene measures for the handling of chemicals are applicable. Avoid breathing vapours. Avoid contact with skin, eyes or clothing. Wash hands before breaks and after work. Keep work clothes separately. Wash contaminated clothing before reuse. Do not eat, drink or smoke at the work place.

Eye/face protection
Wear protective eye glasses for protection against liquid splashes. Wear eye protection with side protection.

Skin protection
Wear impervious gloves. Nitrile rubber, Butyl rubber. Breakthrough time of the glove material: refer to the information provided by the gloves’ producer. Unsuitable gloves materials: Natural rubber / PVC.

Respiratory protection
Use only in well-ventilated areas. In case of inadequate ventilation wear respiratory protection. For large quantities - Wear suitable respiratory protective equipment.

Thermal hazards
Not applicable.

8.2.3 Environmental Exposure Controls
Avoid release to the environment.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties
Physico-chemical properties of substance Propan-2-ol.
Appearance: Blue Coloured liquid.
Odour: Alcohol-like Odour
Odour Threshold: Not available.
pH: Not established.
Melting Point/Freezing Point: -88.5°C
Initial boiling point and boiling range: 82.3°C (Mixture)
Flash point: 11.7 °C
Evaporation Rate: 2.83 (BuAc = 1)
Flammability (solid, gas): Not applicable - Liquid
Upper/lower flammability or explosive limits: Not available.
Vapour pressure: 6.02 kPa at 25°C
Vapour density: 2.1 (Air = 1)
Relative density: 0.78 (H2O = 1)
Solubility(ies): 98% (Water)
Partition coefficient: n-octanol/water: 0.05 log Pow (25 °C)
Auto-ignition temperature: 399 °C
Decomposition Temperature: Not available.
Viscosity: 2.038 mPa s (dynamic) 25 °C
Explosive properties: Not available.
Oxidising properties: Not oxidising.

9.2 Other information
None.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity
Stable under normal conditions.

10.2 Chemical stability
Stable under normal conditions.
10.3 Possibility of hazardous reactions
Highly flammable liquid and vapour. The vapour may be invisible, heavier than air and spread along ground.

10.4 Conditions to avoid
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5 Incompatible materials
Keep away from: Strong oxidising agents, Acids (Nitric acid and Sulphuric acid), Halogens and halogenated compounds.

10.6 Hazardous decomposition product(s)
May decompose in a fire giving off toxic fumes. Carbon monoxide, Carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects (Substances in preparations / mixtures)

Acute toxicity
Based upon the available data, the classification criteria are not met.
Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 2000 mg/kg bw/day.

Inhalation
Based upon the available data, the classification criteria are not met.
Acute Toxicity Estimate Mixture Calculation: Estimated LC50 > 20 mg/l.

Ingestion
Based upon the available data, the classification criteria are not met.

Skin Contact
Based upon the available data, the classification criteria are not met.

Skin corrosion/irritation
Based upon the available data, the classification criteria are not met.

Serious eye damage/irritation
Eye Irrit. 2: Causes serious eye irritation.

Respiratory or skin sensitization
Based upon the available data, the classification criteria are not met.

Germ cell mutagenicity
Based upon the available data, the classification criteria are not met.

Carcinogenicity
Based upon the available data, the classification criteria are not met.

Reproductive toxicity
Based upon the available data, the classification criteria are not met.

STOT - single exposure
STOT SE 3: May cause drowsiness and dizziness.

STOT - repeated exposure
Based upon the available data, the classification criteria are not met.

Aspiration hazard
Based upon the available data, the classification criteria are not met.

11.2 Other information

Likely Routes of Exposure
Inhalation
Yes
Ingestion
Accidental
Skin Contact
Yes

Carcinogenicity Information
NTP Report on Carcinogens
None of the components are listed.
IARC Monographs
None of the components are listed.
Regulated by OSHA as a Carcinogen
None of the components are listed.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity
Based upon the available data, the classification criteria are not met.
Estimated Mixture LC50 >100 mg/l (Fish)

12.2 Persistence and degradability
Readily biodegradable.

12.3 Bioaccumulative potential
The product has low potential for bioaccumulation.

12.4 Mobility in soil
The product is predicted to have high mobility in soil. Water Soluble.

12.5 Other adverse effects
Not classified as PBT or vPvB.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
This material and its container must be disposed of as hazardous waste.
Dispose of wastes in an approved waste disposal facility. Dispose of contents in accordance with local, state or national legislation.
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SECTION 14: TRANSPORT INFORMATION

14.1 UN number ADR/RID / IMDG / IATA
UN 1219
14.2 UN proper shipping name ISOPROPANOL (ISOPROPYL ALCOHOL)
14.3 Transport hazard class(es) 3
14.4 Packing group II
14.5 Environmental hazards Not classified as a Marine Pollutant. / Environmentally hazardous substance
14.6 Special precautions for user See Section: 2
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.
14.8 Additional Information None.

SECTION 15: REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
15.1.1 U.S. Federal Regulations All components are listed in the Toxic Substance Control Act Chemical Substance Inventory (TSCA).
TSCA Inventory Status
15.1.2 US State Regulations None known.
15.1.1 European regulations Substance(s) of Very High Concern (SVHCs) None.
Authorisations and/or Restrictions On Use None.
Wassergefährdungsklasse (Germany) Water hazard class: 1
15.2 Chemical Safety Assessment Not available.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.
Version 2.0
Revision date 28.10.15

References: Existing Safety Data Sheet (SDS), Existing ECHA registration(s) for Propan-2-ol (CAS# 1330-20-7) and the Classification and Labelling Inventory for n-Phenyldiethanolamine (CAS# 120-07-0).

GHS Classification of the substance or mixture Classification Procedure
Flam. Liq. 2; H225 Flash Point Test Result/ Boiling Point (°C) Test Result
Eye Irrit. 2; H319 Threshold Calculation
STOT SE 3; H336 Threshold Calculation

LEGEND
LTLE: Long Term Exposure Limit
STEL: Short Term Exposure Limit
DNEL: Derived No Effect Level
PNEC: Predicted No Effect Concentration
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative

Hazard Statement(s)
H225: Highly flammable liquid and vapour.
H302: Harmful if swallowed.
H315: Causes skin irritation.
H318: Causes serious eye damage.
H319: Causes serious eye irritation.
H336: May cause drowsiness or dizziness.
H372: Causes damage to organs through prolonged or repeated exposure.

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

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Annex to the extended Safety Data Sheet (eSDS)

No information available.