



MATERIAL SAFETY DATA SHEET

M.S.D.S.#00183
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July 21, 2005

1. Chemical Product and Contact Information

Product Name: Nano-Bond® Adhesive
Material Safety Sheet Number: 00183
Date of Issue: 01/22/02
Revision Date: 07/21/05
Company Identification: Pentron Clinical Technologies, LLC
P.O. Box 724
Wallingford, CT U.S.A. 06492
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Emergency Information Chemtrec: 800-424-9300
Chemtrec International: 202-483-7616

2. Composition/Information on Ingredients

Chemical characteristics: Methacrylate monomers in Acetone
Description: Mixture of PMGDM, a condensation product of PMDA and Glycerol Dimethacrylate HEMA and Dimethacrylates and POSS in ethanol and/or acetone with photo initiator, amine accelerator & stabilizer.
Hazardous components:

Element	CAS #	Exposure Limit mg/m ³	
		OSHA PEL	ACGIH TLV
HEMA	868-77-9	N.E.	N.E.
TMPTMA	3290-92-4	N.E.	N.E.
PMGDM	N.E.	N.E.	N.E.
Photo Initiator System	Various	N.E.	N.E.
Acetone	67-64-1	2400	1188
Ethanol	64-17-5	1900	1880
Poss	01-30-01	N.E.	N.E.

3. Hazard Identification

Those people known to be allergic to methacrylate resins should avoid the use of this product.

4. First Aid Measures

Contact with eyes: Rinse with plenty of water and consult an ophthalmologist.
Contact with skin: Wash with soap and water.
After ingestion: Seek medical attention immediately.

5. Fire Fighting Measures

Extinguishing media: CO₂, water, dry chemical.
Protective equipment: Unknown.

6. Accidental Release Measures

In case of spillage: Absorb with inert material. Collect in closed containers and dispose of as recommended. Avoid skin contact, wear protective equipment.
Waste Disposal: Dispose according to Federal, State, and local regulations in an approved incineration unit, or dispose of in accordance with Federal, State, and local regulations.

7. Handling and Storage

Store below room temperature 74°/75°F, away from direct sunlight, initiators, oxidizing, and/or reducing agents. Over time spontaneous polymerization may occur.

8. Exposure Controls/Personal Protection

Respiratory protection: Face mask recommended for prolonged exposure.
 Eye protection: OSHA approved goggles.
 Protective gloves: Yes.

9. Physical and Chemical Properties

Appearance: Form: Liquid.
 Color: Slight yellow, clear.
 Odor: Acetone

Melting point/melting range: Unknown.
 Boiling point: Unknown.
 Flash point: About 101° C.
 Autoigniton temperature: 360° C.
 Danger of explosion: Unlikely.
 Density: 1.0
 Vapor Pressure: 184.
 Viscosity: Unknown.
 pH: Not applicable.
 Solubility in/miscibility with:
 Water: Yes.
 Content of resin: >60%.
 Organic solvents: >20%.
 Water: ≤ 5%.

10. Stability and Reactivity

Stability: Stable.
 Conditions to avoid: Heat, sparks & open flames.
 Incompatibility: Acids, oxidizing agent, alkalis, amines, ammonia and chlorinated compounds.

11. Toxicological Information

Carcinogenicity: None of the components of this material are listed by IARC, NTP, OSHA, or ACIGH as carcinogens.
 TLV: Oral rat 5.2 ml/kg.
 Primary Routes of entry: Inhalation, skin, and eyes.

12. Ecological Information

Unknown.

13. Disposal Considerations

Dispose of in accordance with Federal, State, and local regulations.

14. Transport Information

Not classified as dangerous goods.

15. Regulatory information

Unknown.

16. Other Information

Revision Summary:

The information and recommendations set forth herein (hereinafter "information") are presented in good faith and believe to be correct as of the date hereof. Pentron Clinical Technologies, LLC, however, makes no representations as to the completeness or accuracy of this information and supplies it on the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will Pentron Clinical Technologies, LLC, be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information.

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