

# MATERIAL SAFETY DATA SHEET

## SECTION I – Product/Company Identification

**1.1 Product Trade Name:** PRIME & BOND<sup>®</sup> NT<sup>™</sup> including Unit Dose Package  
Nano – Technology Light Cured Dental Adhesive  
**1.2 Part (Item) Number:** 634350 – 634359 All Package Configurations  
**1.3 Division Name:** DENTSPLY Caulk  
**1.4 Address:** 38 West Clarke Avenue  
Milford DE 19963-0359  
**City State Zip:**  
**Internet Address:** <http://www.caulk.com>  
**1.5 Emergency Telephone Number:** (800) 424-9300 (Chemtrec)  
**1.6 Telephone Number for Information:** (302) 422-4511 (8:00 AM – 4:30 PM Eastern Time)  
**1.7 Date Prepared:** 07/24/00 **Date Revised:** 07/24/03

## SECTION II – Hazardous Ingredients/Identity Information

<u>Hazardous Components</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>	<u>CAS #</u>	<u>Percent</u>
Acetone	500 ppm	500 mg/m <sup>3</sup>	67-64-1	< 70 %
Urethane dimethacrylate resin	N. E.	N. E.	105883-40-7	< 20 %
Dipentaerythritol pentaacrylate phosphate	N. E.	N. E.	87699-25-0	< 10 %
Polymerizable dimethacrylate resins	N. E.	N. E.	2358-84-1	< 10 %
Polymerizable trimethacrylate resins	N. E.	N. E.	3290-92-4	< 10 %

## SECTION III - Physical/Chemical Characteristics

**3.1 Boiling point:** 56°C (133°F) **3.6 Specific Gravity:** approximately 0.9 g/cm<sup>3</sup>  
**3.2 Vapor pressure:** 233 mbar @ 20°C **3.7 Melting Point:** -95°C (-139°F)  
**3.3 Vapor density:** N. E. **3.8 Evaporation rate:** N. E.  
**3.4 Solubility in water:** Partially  
**3.5 Appearance and odor:** Light yellow liquid with acetone odor.

## SECTION IV - Fire and Explosion Hazard Data

**4.1 Flash point (method used):** -19°C (-2°F) Closed Cup  
**4.2 Flammability (explosive limits):** LEL: 2.5 vol % UEL: 13 vol %  
**4.3 Extinguishing media:** Carbon dioxide, dry chemical, water fog, and foam.  
**4.4 Special fire fighting procedures:** Firefighters should wear full protective clothing including a self-contained breathing apparatus.  
**4.5 Unusual fire and explosion hazards:** During a fire irritating gases from the decomposition of the resins may be present.

## SECTION V – Reactivity Data

**5.1 Stability:** Unstable: Stable: X  
**5.2 Conditions to avoid (stability):** Visible light, high temperatures, humidity.  
**5.3 Incompatibility (materials to avoid):** Strong oxidants, alkali metals, and halogens.  
**5.4 Hazardous decomposition or byproducts:** Methacrylates, acrylates, and irritating gases.  
**5.5 Hazardous polymerization:** May occur: Will not occur: X  
**5.6 Conditions to avoid (polymerization):** Strong visible lights and elevated temperatures.

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## SECTION VI - Health Hazard Data

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<b>6.1 Route(s) of entry:</b>	<b>Inhalation?:</b> Yes <b>Skin?:</b> Yes <b>Ingestion?:</b> Possible
<b>6.2 Health hazards (acute and chronic):</b>	<b>Eye Contact:</b> Material may cause irritation and possible corneal damage. Avoid contact with eyes. <b>Skin:</b> Material may be an irritant. Susceptible persons with known allergies to methacrylates and acrylates may develop allergic response.
<b>6.3 Carcinogenicity:</b>	<b>NTP?:</b> Not listed <b>IARC monographs?:</b> Not listed <b>OSHA regulated?:</b> No All components of this product are in compliance with the inventory listing requirements of the U. S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
<b>6.4 Signs and symptoms of exposure:</b>	Dermal redness or irritation. Severe allergic response may result in breathing difficulties.
<b>6.5 Medical conditions generally aggravated by exposure:</b>	Open sores and wounds of the skin. Individuals with known sensitivity to methacrylates, acrylates, or urethane dimethacrylates.
<b>6.6 Emergency first aid procedures:</b>	<b>Eyes:</b> In case of eye contact, flush with flowing water for 15 minutes, including under the eyelids. Get prompt medical attention. <b>Skin:</b> Wash skin with soap and water. If irritation persists, call physician. <b>Ingestion:</b> If swallowed give 2 glasses of water to drink. See a physician. <b>Inhalation:</b> Move to fresh air. Call physician if discomfort persists or if amount was large.

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## SECTION VII - Precautions for Safe Handling and Use

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<b>7.1 Steps to be taken in case material is released or spilled:</b>	Absorb spilled material with inert material such as sand or vermiculite. Scoop up and dispose of in accordance with Federal, State and Local environmental regulations.
<b>7.2 Waste disposal methods:</b>	Dispose of in accordance with Federal, State and Local environmental regulations.
<b>7.3 Precautions to be taken in handling and storage:</b>	Store at ambient temperatures, avoid prolonged exposure to temperatures above 37°C(100°F). Store away from oxidizing agents.
<b>7.4 Other precautions:</b>	Store away from food and beverages. Observe normal warehouse handling procedures.

Handling of this product should be by trained dental healthcare professionals only.

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## SECTION VIII - Control Measures / Personal Protection

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- 8.1 Respiratory protection:**None required during normal use of this product. In large quantities use a self-contained breathing apparatus.
- 8.2 Ventilation:** Local exhaust is recommended. Mechanical ventilation using explosion-proof motors is acceptable.
- 8.3 Protective gloves:**Latex or rubber gloves.
- 8.4 Eye protection:**Close fitting protective goggles.
- 8.5 Other protective clothing or equipment:**Rubber apron. Eye wash, safety shower.
- 8.6 Work/Hygienic practices:** Observe normal care when working with chemicals. Handling of this product should be by trained dental healthcare professionals only.

NFPA HAZARD CLASSIFICATIONS	
Health	1
Flammability	3
Reactivity	0
Specific Hazard	N. A.

NFPA - National Fire Protection Association  
N.A. - Not Applicable  
N.E. - Not Established

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