

## MATERIAL SAFETY DATA SHEET

**Company Name:** 3M COMPANY  
**Address:** 10330 PIONEER BL SUITE 280  
**City / State / Zip:** SANTA FE SPRINGS / CA / 90670  
**US-CHEMTREC Phone(I):** (800)424-9300  
**US-CHEMTREC Phone(II):** (703)527-3887  
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**Vendor Update:** 9/11/2012  
**Date Prepared:** 9/11/2012  
**MSDS Number:** 3M4622112 ; 3M462412 ; 491012 ; 491014 ; 491034 ;  
 49451 ; 494512 ; 49452 ; 494534 ;

### I. CHEMICAL PRODUCT IDENTIFICATION

**Product Name:** VHB TAPE  
**HMIS Ratings:**  
**NFPA Ratings:**

Health: Moderate(2)  
 Flammability: Slight(1)  
 Instability/Reactivity: Minimal(0)  
 Personal Protective Equipment: NONE

**Other:** EMERGENCY OVERVIEW: SPECIFIC PHYSICAL FORM: PASTE  
 ODOR, COLOR, GRADE: SLIGHT ACRYLATE ODOR, TOOTH COLORED  
 GENERAL PHYSICAL FORM: SOLID  
 IMMEDIATE HEALTH, PHYSICAL, AND ENVIRONMENTAL HAZARDS: MAY  
 CAUSE ALLERGIC SKIN REACTION. THIS DOCUMENT HAS BEEN PREPARED IN  
 ACCORDANCE WITH THE U.S. OSHA HAZARD COMMUNICATION STANDARD,  
 WHICH REQUIRES THE INCLUSION OF ALL KNOWN HAZARDS OF THE  
 PRODUCT OR INGREDIENTS REGARDLESS OF THE POTENTIAL RISK. THE RISKS  
 OF THE HAZARDS COMMUNICATED IN THIS DOCUMENT MAY VARY  
 DEPENDING ON THE POTENTIAL FOR EXPOSURE.

### II. COMPOSITION, INFORMATION ON INGREDIENTS

Chemical Ingredients	C.A.S. Number	% By Weight	ACGIH TLV TWA/STEL	OSHA PEL TWA/STEL	Other TWA/STEL	LD50	LC50
SILANE TREATED CERAMIC	444758-98-9	60 - 80					
<b>Notes</b>							
SILANE TREATED SILICA	248596-91-0	1- 10					
<b>Notes</b>							
DIURETHANE DIMETHACRYLATE (UDMA)	72869-86-4	1- 10					
<b>Notes</b>							
BISPHENOL A POLYETHYLENE GLYCOL DIETHER DIMETHACRYLATE	41637-38-1	1- 10					
<b>Notes</b>							
BISHPHENOL A DIGLYCIDYL ETHER DIMETHACRYLATE (BISGMA)	1565-94-2	1- 10					
<b>Notes</b>							
SILANE TREATED ZIRCONIA	UNKNOWN	1- 10					
<b>Notes</b>							
POLYETHYLENE GLYCOL DIMETHACRYLATE	25852-47-5						
<b>Notes</b>							
TRIETHYLENE GLYCOL DIMETHACRYLATE (TEGDMA)	109-16-0						

<i>Notes</i>						
2,6 DI-TERT-BUTYL-P-CRESOL(BHT)	128-37-0		INHALABLE FRACTION AND VAPOR 2 MG/M <sup>3</sup>	10 MG/M <sup>3</sup>		
<i>Notes</i>						

### III. HAZARDS IDENTIFICATION PRIMARY ROUTE OF ENTRY

<b>Eyes:</b>	MILD EYE IRRITATION: SIGNS/SYMPTOMS MAY INCLUDE REDNESS, PAIN, AND TEARING.
<b>Skin:</b>	MILD SKIN REACTION: SIGNS/SYMPTOMS MAY INCLUDE LOCALIZED REDNESS, SWELLING, AND ITCHING. ALLERGIC SKIN REACTION (NON-PHOTO INDUCED): SIGNS/SYMPTOMS MAY INCLUDE REDNESS, SWELLING, BLISTERING, AND ITCHING.
<b>Ingestion:</b>	GASTROINTESTINAL IRRITATION: SIGNS/SYMPTOMS MAY INCLUDE ABDOMINAL PAIN, STOMACH UPSET, NAUSEA, VOMITING AND DIARRHEA.
<b>Inhalation:</b>	RESPIRATORY TRACT IRRITATION: SIGNS/SYMPTOMS MAY INCLUDE COUGH, SNEEZING, NASAL DISCHARGE, HEADACHE, HOARSENESS, AND NOSE AND THROAT PAIN.

### IV. FIRST AID MEASURES

<b>Eyes:</b>	FLUSH EYES WITH LARGE AMOUNTS OF WATER. IF SIGNS/SYMPTOMS PERSIST, GET MEDICAL ATTENTION.
<b>Skin:</b>	REMOVE CONTAMINATED CLOTHING AND SHOES. IMMEDIATELY FLUSH SKIN WITH LARGE AMOUNTS OF WATER. GET MEDICAL ATTENTION. WASH CONTAMINATED CLOTHING AND CLEAN SHOES BEFORE USE.
<b>Ingestion:</b>	IF SWALLOWED: DO NOT INDUCE VOMITING UNLESS INSTRUCTED TO DO SO BY MEDICAL PERSONNEL. GIVE VICTIM TWO GLASSES OF WATER. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION.
<b>Inhalation:</b>	REMOVE PERSON TO FRESH AIR. IF SIGNS/SYMPTOMS DEVELOP, GET MEDICAL ATTENTION.

### V. FIRE FIGHTING MEASURES

<b>Flash Point:</b>	NOT APPLICABLE
<b>Lower Flammability Limit:</b>	NOT APPLICABLE
<b>Upper Flammability Limit:</b>	NOT APPLICABLE
<b>Extinguishing Agents:</b>	ORDINARY COMBUSTIBLE MATERIAL. USE FIRE EXTINGUISHERS WITH CLASS A EXTINGUISHING AGENTS (E.G. WATER, FOAM).
<b>Unusual Fire or Explosion Hazards:</b>	NO UNUSUAL FIRE OR EXPLOSION HAZARDS ARE ANTICIPATED.
<b>Fire Fighting Procedures:</b>	WEAR FULL PROTECTIVE EQUIPMENT (BUNKER GEAR) AND A SELF-CONTAINED BREATHING APPARATUS (SCBA).
<b>Other:</b>	AUTOIGNITION TEMPERATURE: NO DATA AVAILABLE.

**VI. ACCIDENTAL RELEASE MEASURES**

**Containment/Cleanup:** VENTILATE THE AREA WITH FRESH AIR. FOR LARGE SPILL, OR SPILLS IN CONFINED SPACES, PROVIDE MECHANICAL VENTILATION TO DISPERSE OR EXHAUST VAPORS, IN ACCORDANCE WITH GOOD INDUSTRIAL HYGIENE PRACTICE. WARNING! A MOTOR COULD BE A IGNITION SOURCE AND COULD CAUSE FLAMMABLE GASES OR VAPORS IN THE SPILL AREA TO BURN OR EXPLODE.  
COLLECT AS MUCH OF THE SPILLED MATERIAL AS POSSIBLE. CLEAN UP RESIDUE.

**VII. HANDLING AND STORAGE**

**Other:** HANDLING:  
AVOID EYE CONTACT. AVOID SKIN CONTACT. A NO-TOUCH TECHNIQUE IS RECOMMENDED. IF SKIN CONTACT OCCURS, WASH SKIN WITH SOAP AND WATER. ACRYLATES MAY PENETRATE COMMONLY-USED GLOVES. IF PRODUCT CONTACTS GLOVE, REMOVE AND DISCARD GLOVE, WASH HANDS IMMEDIATELY WITH SOAP AND WATER AND THE RE-GLOVE. WASH HANDS AFTER HANDLING AND BEFORE EATING.  
STORAGE:  
STORE IN A COOL, DRY PLACE.

**VIII. EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Eyes:** AVOID EYE CONTACT.  
THE FOLLOWING EYE PROTECTION(S) ARE RECOMMENDED: SAFETY GLASSES WITH SIDE SHIELDS.

**Skin:** AVOID SKIN CONTACT.

**Respiratory:** UNDER NORMAL USE CONDITIONS, AIRBORNE EXPOSURES ARE NOT EXPECTED TO BE SIGNIFICANT ENOUGH TO REQUIRE RESPIRATORY PROTECTION.

**Engineering:** NOT APPLICABLE.

**Other:** PREVENTION OF SWALLOWING: DO NOT INGEST. WASH HANDS AFTER HANDLING AND BEFORE EATING.

**IX. PHYSICAL AND CHEMICAL PROPERTIES**

**Appearance:** TOOTH COLORED

**Boiling Point:** NOT APPLICABLE

**pH:** NOT APPLICABLE

**Solubility in Water:** NO DATA AVAILABLE

**Specific Gravity:** 1.9 [REF STD: WATER=1]

**Vapor Pressure:** NOT APPLICABLE

**Vapor Density:** NOT APPLICABLE

**Physical State:** PASTE; GENERAL PHYSICAL FORM: SOLID

**Other:** DENSITY: 1.9 G/CM<sup>3</sup>  
MELTING POINT: NO DATA AVAILABLE  
EVAPORATION RATE: NOT APPLICABLE  
KOW- OCT/WATER PARTITION COEF: NOT APPLICABLE  
VISCOSITY: NO DATA AVAILABLE.

**X. STABILITY AND REACTIVITY**

**Stability:** STABLE.

HAZARDOUS POLYMERIZATION WILL NOT OCCUR.

**Hazardous Polymerization:**

**Hazardous Decomposition** SUBSTANCE/CONDITION  
**Products:** CARBON MONOXIDE/DURING COMBUSTION  
 CARBON DIOXIDE/DURING COMBUSTION.

**Incompatible Products:** STRONG OXIDIZING AGENTS.

**Conditions To Avoid:** HEAT.

### XI. TOXICOLOGICAL INFORMATION

### XII. ECOLOGICAL INFORMATION

**Environmental Fate and Distribution:** NOT DETERMINED.

### XIII. DISPOSAL CONSIDERATIONS

**Disposal Method:** DISPOSE OF COMPLETELY CURED (OR POLYMERIZED) WASTES IN A SANITARY LANDFILL. AS A DISPOSAL ALTERNATIVE, INCINERATE UNCURED PRODUCT IN AN INDUSTRIAL OR COMMERCIAL INCINERATOR IN THE PRESENCE OF A COMBUSTIBLE MATERIAL.

**RCRA Class:** NOT REGULATED

### XIV. TRANSPORT INFORMATION

**Other:** ID NUMBER(S):  
 70-2010-5783-6, 70-2010-5867-7, 70-2010-5868-5, 70-2010-5869-3,  
 70-2010-5870-1, 70-2010-5871-9, 70-2010-5872-7, 70-2010-5873-5,  
 70-2010-5874-3, 70-2010-5875-0, 70-2010-5876-8, 70-2010-5877-6,  
 70-2010-5878-4, 70-2010-5879-2, 70-2010-5880-0, 70-2010-5881-8,  
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 70-2010-5886-7, 70-2010-5887-5, 70-2010-5888-3, 70-2010-5889-1,  
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 70-2010-5940-2, 70-2010-7627-3, 70-2010-7628-1, 70-2010-7629-9,  
 70-2010-7630-7, 70-2010-7631-5, 70-2010-7632-3, 70-2010-7633-1,  
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 70-2010-7642-2, 70-2010-7643-0, 70-2010-7644-8, 70-2010-7645-5,  
 70-2010-7646-3, 70-2010-7647-1, 70-2010-7648-9, 70-2010-7649-7,  
 70-2010-7650-5, 70-2010-7651-3, 70-2010-7652-1, 70-2010-7653-9,  
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70-2010-7697-6, 70-2010-7698-4, 70-2010-7699-2, 70-2010-7700-8,  
70-2010-7701-6, 70-2010-7702-4, 70-2010-7703-2, 70-2010-7704-0

#### XV. REGULATORY INFORMATION

**TSCA Status:** THIS MATERIAL CONTAINS ONE OR MORE SUBSTANCES NOT LISTED ON THE TSCA INVENTORY. COMMERCIAL USE OF THIS MATERIAL IS REGULATED BY THE FDA.

**EPA Sara Title III Chemical** 311/312 HAZARD CATEGORIES:

**Listings:** FIRE HAZARD – NO  
PRESSURE HAZARD – NO  
REACTIVITY HAZARD – NO  
IMMEDIATE HAZARD – YES  
DELAYED HAZARD – NO

#### XVI. OTHER INFORMATION

##### WARRANTY INFORMATION

THIS INFORMATION IS OFFERED IN GOOD FAITH AS TYPICAL VALUES AND NOT AS A PRODUCT SPECIFICATION. NO WARRANTY, EXPRESSED OR IMPLIED, IS HEREBY MADE. THE RECOMMENDED INDUSTRIAL HYGIENE AND SAFE HANDLING PROCEDURES ARE BELIEVED TO BE GENERALLY APPLICABLE. HOWEVER, EACH USER SHOULD REVIEW THESE RECOMMENDATIONS IN THE SPECIFIC CONTEXT OF THE INTENDED USE AND DETERMINE WHETHER THEY ARE APPROPRIATE.