

MATERIAL SAFETY 3M
 DATA SHEET 3M Center
 St. Paul, Minnesota
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DIVISION: MARINE TRADES PROJECT
 TRADE NAME:

3M(TM) Marine Adhesive Sealant Fast Cure 5200 - White, PN 05120, 052
 20, 06519, 06520, 06525, 06531

ID NUMBER/U.P.C.:

60-9800-2078-2 00-51135-06520-4 60-9800-2082-4 00-51135-05220-4
 60-9800-2216-8 00-51135-06525-9 60-9800-2626-8 00-51135-05120-7
 60-9800-2652-4 00-51135-06520-4 60-9800-2653-2 00-51135-06531-0
 60-9800-2982-5 00-51135-06519-8 60-9800-3260-5 00-51131-46801-6
 60-9800-3295-1 00-51135-06520-4 60-9800-3800-8 00-51131-46520-6
 60-9800-4306-5 00-51135-05220-4

ISSUED: May 29, 2001

SUPERSEDES: March 12, 2001

DOCUMENT: 06-3844-5

1. INGREDIENT	C.A.S. NO.	PERCENT	
URETHANE PREPOLYMER.....	51447-37-1	60.0	- 70.0
TITANIUM DIOXIDE.....	13463-67-7	20.0	- 25.0
ZINC OXIDE.....	1314-13-2	1.0	- 5.0
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE.....	112945-52-5	1.0	- 5.0
SILICA.....	7631-86-9	1.0	- 5.0
ALUMINA TRIHYDRATE.....	21645-51-2	1.0	- 5.0
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)....	101-68-8		< 3.0
HEPTANE.....	142-82-5		< 1.0
ACETONE.....	67-64-1		< 0.5

This product contains the following toxic chemical or chemicals subject to
 the reporting requirements of Section 313 of Title III of the Emergency
 Planning and Community Right-To-Know Act of 1986 and 40 CFR Part 372:

ZINC OXIDE
 P,P'-METHYLENEBIS(PHENYL ISOCYANATE)

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

2. PHYSICAL DATA

BOILING POINT:..... N/A
VAPOR PRESSURE:..... N/A
VAPOR DENSITY:..... N/A
EVAPORATION RATE:..... N/A
SOLUBILITY IN WATER:..... nil
SPECIFIC GRAVITY:..... 1.33 Water=1
PERCENT VOLATILE:..... < 2 % by wt
pH:..... N/A
VISCOSITY:..... ca. 100000.0 centipoise
(Thixotropic paste)
MELTING POINT:..... N/D

APPEARANCE AND ODOR:
thixotropic paste, white, very slight odor.

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... 231 F PMCC
ASTM D93
FLAMMABLE LIMITS - LEL:..... N/A
FLAMMABLE LIMITS - UEL:..... N/A
AUTOIGNITION TEMPERATURE:..... N/D

EXTINGUISHING MEDIA:
Water spray, Carbon dioxide, Dry chemical, Foam

SPECIAL FIRE FIGHTING PROCEDURES:
Wear full protective clothing, including helmet, self-contained,
positive pressure or pressure demand breathing apparatus, bunker coat
and pants, bands around arms, waist and legs, face mask, and
protective covering for exposed areas of the head.

UNUSUAL FIRE AND EXPLOSION HAZARDS:
None known.

NFPA HAZARD CODES: HEALTH: 1 FIRE: 0 REACTIVITY: 1
UNUSUAL REACTION HAZARD: none

4. REACTIVITY DATA

STABILITY: Stable

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4. REACTIVITY DATA (continued)

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

Amines, Alcohols, Water. Reaction with water, alcohols and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Hydrogen Cyanide, Isocyanates, Toxic Vapors, Gases or Particulates.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Contain spill. Evacuate unprotected personnel from hazard area. Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Alternatively, pour water on spill and allow to react for more than 30 minutes. Cover with absorbent. Place in an approved drum, but do not seal the drum for 48 hours to avoid possible pressure buildup. Neutralize spill residue with decontaminant solution.

RECOMMENDED DISPOSAL:

Cure product according to product instructions. Incinerate in an industrial or commercial facility in the presence of a combustible material. Dispose of completely cured (or polymerized) material in a sanitary landfill. Dispose of waste product in a facility permitted to accept chemical waste.

ENVIRONMENTAL DATA:

Not determined.

REGULATORY INFORMATION:

Volatile Organic Compounds: 0.1 lb/gal calculated per SCAQMD rule 443.1.
Volatile Organic Compounds: 13 gms/liter calculated per SCAQMD rule 443.1.
VOC Less H2O & Exempt Solvents: 13 gms/liter calculated per SCAQMD rule 443.1.

Since regulations vary, consult applicable regulations or authorities before disposal. U.S. EPA Hazardous Waste Number = None (Not U.S. EPA Hazardous).

EPCRA HAZARD CLASS:

FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: Yes CHRONIC: Yes

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6. SUGGESTED FIRST AID

EYE CONTACT:

Immediately flush eyes with large amounts of water. Get immediate medical attention.

SKIN CONTACT:

Immediately wash skin with soap and large amounts of water. Remove contaminated clothing. If signs/symptoms occur, call a physician. Wash contaminated clothing before reuse and dispose of contaminated shoes.

INHALATION:

Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

IF SWALLOWED:

Do not induce vomiting. Drink two glasses of water. Call a physician.

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

Avoid eye contact. Wear vented goggles. Wear safety glasses with side shields.

SKIN PROTECTION:

Avoid skin contact. Wear appropriate gloves when handling this material.

RECOMMENDED VENTILATION:

Use in a well-ventilated area. Provide sufficient ventilation to maintain emissions below recommended exposure limits. If exhaust ventilation is not adequate, use appropriate respiratory protection.

RESPIRATORY PROTECTION:

Avoid breathing of vapors. Avoid breathing of dust created by cutting, sanding or grinding. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: full-face supplied air respirator

When grinding or sanding the cured material, use half-mask dust respirator.

 7. PRECAUTIONARY INFORMATION (continued)

PREVENTION OF ACCIDENTAL INGESTION:

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Do not ingest.

RECOMMENDED STORAGE:

Keep container dry. Keep container closed when not in use. Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Keep container tightly closed. Keep away from heat, sparks, open flame, and other sources of ignition.

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
URETHANE PREPOLYMER.....	NONE	NONE	NONE	NONE	
TITANIUM DIOXIDE.....	10	MG/M3	TWA	ACGIH	
TITANIUM DIOXIDE.....	10	MG/M3	TWA	OSHA	
		AS DUST			
		OSHA VACATED PEL			
TITANIUM DIOXIDE.....	15	MG/M3	TWA	OSHA	
		AS TOTAL DUST			
TITANIUM DIOXIDE.....	5	MG/M3	TWA	CMRG	
		AS RESPIRABLE DUST			
ZINC OXIDE.....	10	MG/M3	TWA	ACGIH	
		AS DUST			
ZINC OXIDE.....	10	MG/M3	TWA	OSHA	
		AS DUST			
		OSHA VACATED PEL			
ZINC OXIDE.....	5	MG/M3	TWA	ACGIH	
		as fume			
ZINC OXIDE.....	10	MG/M3	STEL	ACGIH	
		as fume			
ZINC OXIDE.....	5	MG/M3	TWA	OSHA	
		as fume			
ZINC OXIDE.....	10	MG/M3	STEL	OSHA	
		as fume			
		OSHA VACATED PEL			
ZINC OXIDE.....	15	MG/M3	TWA	OSHA	
		AS TOTAL DUST			
ZINC OXIDE.....	5	MG/M3	TWA	OSHA	
		RESPIRABLE			
SYNTHETIC AMORPHOUS SILICA, FUMED, CRYSTALLINE FREE.....	NONE	NONE	NONE	NONE	
SILICA.....	3	MG/M3	TWA	CMRG	
		AS RESPIRABLE DUST			
ALUMINA TRIHYDRATE.....	NONE	NONE	NONE	NONE	

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EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
P,P'-METHYLENEBIS(PHENYL ISOCYANATE).....	0.02	PPM	CEIL	OSHA	
P,P'-METHYLENEBIS(PHENYL ISOCYANATE).....	0.005	PPM	TWA	ACGIH	
HEPTANE.....	400	PPM	TWA	ACGIH	
HEPTANE.....	500	PPM	STEL	ACGIH	
HEPTANE.....	400	PPM	TWA	OSHAV	
			OSHA VACATED PEL		
HEPTANE.....	500	PPM	STEL	OSHAV	
			OSHA VACATED PEL		
HEPTANE.....	500	PPM	TWA	OSHA	
ACETONE.....	500	PPM	TWA	ACGIH	
ACETONE.....	750	PPM	STEL	ACGIH	
ACETONE.....	750	PPM	TWA	OSHAV	
			OSHA VACATED PEL		
ACETONE.....	1000	PPM	STEL	OSHAV	
			OSHA VACATED PEL		
ACETONE.....	1000	PPM	TWA	OSHA	

* SKIN NOTATION: Listed substances indicated with 'Y' under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- CMRG: Chemical Manufacturer Recommended Exposure Guidelines
- OSHA: Occupational Safety and Health Administration
- OSHAV: Occupational Safety and Health Administration Vacated PEL. Vacated Permissible Exposure Limits (PEL) are enforced as the OSHA PEL in some states. Check with your local regulatory authority.
- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:

Moderate Eye Irritation: signs/symptoms can include redness, swelling, pain, tearing, and hazy vision.

SKIN CONTACT:

Mild Skin Irritation: signs/symptoms can include redness, swelling, and itching.

Prolonged or repeated exposure may cause:

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8. HEALTH HAZARD DATA (continued)

Allergic Skin Reaction: signs/symptoms can include redness, swelling, blistering, and itching.

INHALATION:

Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

Prolonged or repeated exposure may cause:

Allergic Respiratory Reaction: signs/symptoms can include difficulty breathing, wheezing, tightness of chest, and respiratory failure.

IF SWALLOWED:

Ingestion may cause:

Irritation of Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, abdominal tenderness, nausea, blood in vomitus, and blood in feces.

OTHER HEALTH HAZARD INFORMATION:

P,P'-METHYLENEBIS(PHENYL ISOCYANATE) (101-68-8): Persons previously sensitized to an isocyanate, or persons with a preexisting, non-specific bronchial hyperreactivity, can respond to concentrations below the TLV. These symptoms, which can include chest tightness, wheezing, cough, shortness of breath, or asthma attack, could be immediate or delayed (up to several hours after exposure).

SECTION CHANGE DATES

HEADING	SECTION CHANGED SINCE March 12, 2001	ISSUE
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