

# **Material Safety Data Sheet**

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# **SECTION 1: PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT NAME:** 3M(TM) Marine Adhesive Sealant Fast Cure 5200 - White; PN 06520, 05220, 06534,

06535

**MANUFACTURER:** 3M

**DIVISION:** Marine & Specialty Vehicle

**ADDRESS:** 3M Center

St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

**Issue Date:** 08/08/2007 **Supercedes Date:** 07/18/2007

**Document Group:** 16-5850-9

**Product Use:** 

Specific Use: Adhesive Sealant for fiberglass and wood.

Intended Use: Sealant

# **SECTION 2: INGREDIENTS**

Ingredient	<b>C.A.S. No.</b>	% by Wt
URETHANE PREPOLYMER	51447-37-1	40 - 70
TITANIUM DIOXIDE	13463-67-7	10 - 30
DIETHYLENE GLYCOL MONOETHYL ETHER ACETATE	112-15-2	1 - 5
SILICA	7631-86-9	< 2.5
1,1'-METHYLENEBIS(ISOCYANATOBENZENE)	26447-40-5	< 2.5
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	101-68-8	< 2.5
ZINC OXIDE	1314-13-2	< 2.3
ALKYL ISOCYANATE SILANE	85702-90-5	< 2
TOLUENE	108-88-3	< 0.05
ETHYLBENZENE	100-41-4	< 0.02
HEXAMETHYLENE DIISOCYANATE	822-06-0	< 0.02

# **SECTION 3: HAZARDS IDENTIFICATION**

## 3.1 EMERGENCY OVERVIEW

**Specific Physical Form:** Paste

 $3M\ MATERIAL\ SAFETY\ DATA\ SHEET\ \ 3M(TM)\ Marine\ Adhesive\ Sealant\ Fast\ Cure\ 5200\ -\ White;\ PN\ 06520\ ,\ 05220\ ,\ 06534\ ,\ 06535\ 08/08/2007$ 

Odor, Color, Grade: White thixotropic paste, slight odor

General Physical Form: Solid

Immediate health, physical, and environmental hazards: May cause allergic skin reaction. May cause allergic

respiratory reaction. Contains a chemical or chemicals which can cause cancer.

# 3.2 POTENTIAL HEALTH EFFECTS

### **Eye Contact:**

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Vapors released during curing may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Dust created by cutting, grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

### **Skin Contact:**

Moderate Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Prolonged or repeated exposure may cause:

Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

#### **Inhalation:**

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Prolonged or repeated exposure may cause:

Allergic Respiratory Reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

#### **Ingestion:**

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

#### **Target Organ Effects:**

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

## **Carcinogenicity:**

Contains a chemical or chemicals which can cause cancer.

<u>Ingredient</u> <u>C.A.S. No.</u> <u>Class Description</u> <u>Regulation</u>

ETHYLBENZENE 100-41-4 Group 2B International Agency for Research on Cancer

## **SECTION 4: FIRST AID MEASURES**

#### 4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

**Skin Contact:** Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

**Inhalation:** Remove person to fresh air. If signs/symptoms develop, get medical attention.

**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.

## **SECTION 5: FIRE FIGHTING MEASURES**

### 5.1 FLAMMABLE PROPERTIES

Autoignition temperatureNo Data AvailableFlash PointNot ApplicableFlammable Limits - LELNot ApplicableFlammable Limits - UELNot Applicable

## 5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

#### 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Not applicable.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

# SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. Avoid contact with water. Pour isocyanate decontaminant solution (90%)

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water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. Place in a container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. Collect as much of the spilled material as possible. Collect the resulting residue containing solution. Place in a closed container approved for transportation by appropriate authorities.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

# **SECTION 7: HANDLING AND STORAGE**

#### 7.1 HANDLING

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children. Avoid breathing of dust created by cutting, sanding, grinding or machining. Do not breathe vapors. Avoid eye contact with dust or airborne particles.

### 7.2 STORAGE

Store in a cool place. Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area. Keep container tightly closed.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

## 8.1 ENGINEERING CONTROLS

Use with appropriate local exhaust ventilation. Provide appropriate local exhaust for cutting, grinding, sanding or machining. Do not use in a confined area or areas with little or no air movement. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control dust, fume, or airborne particles. If ventilation is not adequate, use respiratory protection equipment.

## 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

### 8.2.1 Eye/Face Protection

Avoid eye contact with vapors, mists, or spray.

The following eye protection(s) are recommended: Safety Glasses with side shields.

#### 8.2.2 Skin Protection

Avoid prolonged or repeated skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials. Gloves made from the following material(s) are recommended: Butyl Rubber, Nitrile Rubber.

### 8.2.3 Respiratory Protection

Avoid breathing of dust created by cutting, sanding, grinding or machining. Do not breathe vapors.

## 8.2.4 Prevention of Swallowing

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

## 8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	Additional Information
1.1'-	ACGIH	TWA	0.005 ppm	

METHYLENEBIS(ISOCYANATOBENZENE				
)				
1,1'-	OSHA	CEIL	0.02 ppm	Table Z-1
METHYLENEBIS(ISOCYANATOBENZENE	i.			
)				
ETHYLBENZENE	ACGIH	TWA	100 ppm	Table A3
ETHYLBENZENE	ACGIH	STEL	125 ppm	Table A3
ETHYLBENZENE	OSHA	TWA	100 ppm	Table Z-1A
ETHYLBENZENE	OSHA	STEL	125 ppm	Table Z-1A
FREE ISOCYANATES	3M	TWA	0.005 ppm	
FREE ISOCYANATES	3M	STEL	0.02 ppm	
HEXAMETHYLENE DIISOCYANATE	ACGIH	TWA	0.005 ppm	
P,P'-METHYLENEBIS(PHENYL	ACGIH	TWA	0.005 ppm	
ISOCYANATE)				
P,P'-METHYLENEBIS(PHENYL	OSHA	CEIL	0.02 ppm	Table Z-1
ISOCYANATE)				
SILICA	CMRG	TWA, as respirable	3 mg/m3	
		dust	· ·	
TIN, ORGANIC COMPOUNDS	ACGIH	TWA, as Sn	0.1  mg/m3	Skin Notation*; Table A4
TIN, ORGANIC COMPOUNDS	ACGIH	STEL, as Sn	0.2  mg/m3	Skin Notation*
TIN, ORGANIC COMPOUNDS	OSHA	TWA, as Sn	0.1 mg/m3	Skin Notation*; Table Z-1A
TITANIUM DIOXIDE	ACGIH	TWA	10 mg/m3	Table A4
TITANIUM DIOXIDE	CMRG	TWA, as respirable	5 mg/m3	
		dust	U	
TITANIUM DIOXIDE	OSHA	TWA, Vacated, as	10 mg/m3	
		dust		
TITANIUM DIOXIDE	OSHA	TWA, as total dust	15 mg/m3	Table Z-1
TOLUENE	ACGIH	TWA	20 ppm	Table A4
TOLUENE	CMRG	STEL	75 ppm	Skin Notation*
TOLUENE	OSHA	TWA, Vacated	100 ppm	
TOLUENE	OSHA	STEL, Vacated	150 ppm	
TOLUENE	OSHA	TWA	200 ppm	Table Z-2
TOLUENE	OSHA	CEIL	300 ppm	Table Z-2
ZINC OXIDE	ACGIH	TWA, respirable	2 mg/m3	14010 2. 2
ZINC OXIDE	ACGIH	STEL STEL	10 mg/m3	
ZINC OXIDE	OSHA	TWA, as fume	5 mg/m3	Table Z-1
ZINC OXIDE	OSHA	TWA, respirable	5 mg/m3	Table Z-1
ZINC OXIDE	OSHA	STEL, Vacated, as	10 mg/m3	14010 2-1
ZINC OAIDE	OSHA	fume	10 Hig/III3	
ZINC OXIDE	OSHA	TWA, Vacated, as	10 mg/m3	
ZINC OMDE	OSHA	dust	10 111g/1113	
ZINC OXIDE	OSHA	TWA, as total dust	15 mg/m3	Table Z-1
ZINC OMDE	OSHA	i wa, as wai dust	ra mg/ma	Taule Z-1

<sup>\*</sup> Substance(s) 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.

VAC Vacated PEL: Vacated Permissible Exposure Limits [PEL] are enforced as the OSHA PEL in some states. Check with your local regulatory agency.

## SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

# **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

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Specific Physical Form: Paste

Odor, Color, Grade: White thixotropic paste, slight odor

General Physical Form: Sol

Autoignition temperatureNo Data AvailableFlash PointNot ApplicableFlammable Limits - LELNot ApplicableFlammable Limits - UELNot ApplicableBoiling pointNot Applicable

Vapor Density No Data Available

Vapor Pressure No Data Available

Specific Gravity 1.3 [Ref Std: WATER=1]

pH Not Applicable

Melting point Not Applicable

Solubility in Water Nil

**Evaporation rate**Hazardous Air Pollutants
No Data Available
0.024 lb HAPS/lb solids

**Volatile Organic Compounds** 40 g/l [*Test Method:* tested per EPA method 24]

Percent volatile 2.94 % weight

VOC Less H2O & Exempt Solvents 40 g/l [Test Method: tested per EPA method 24]

Viscosity 100000 - 500000 centipoise

# **SECTION 10: STABILITY AND REACTIVITY**

Stability: Stable.

Materials and Conditions to Avoid: Amines; Alcohols; Water

Hazardous Polymerization: Hazardous polymerization will not occur.

## **Hazardous Decomposition or By-Products**

<u>Substance</u> <u>Condition</u>

IsocyanatesDuring CombustionCarbon monoxideDuring CombustionCarbon dioxideDuring CombustionHydrogen CyanideDuring CombustionOxides of NitrogenDuring CombustionToxic Vapor, Gas, ParticulateDuring Combustion

## **SECTION 11: TOXICOLOGICAL INFORMATION**

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

# **SECTION 12: ECOLOGICAL INFORMATION**

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### ECOTOXICOLOGICAL INFORMATION

Not determined.

### CHEMICAL FATE INFORMATION

Not determined.

# **SECTION 13: DISPOSAL CONSIDERATIONS**

Waste Disposal Method: Cure (harden, set, or react) the product according to product instructions.

Dispose of waste product in a sanitary landfill. Dispose of completely cured (or polymerized) wastes in a sanitary landfill. Incinerate in a permitted hazardous waste incinerator in the presence of a combustible material. As a disposal alternative, incinerate in an industrial or commercial facility in the presence of a combustible material. As a disposal alternative, incinerate uncured product in an industrial or commercial incinerator. As a disposal alternative, incinerate uncured product in an industrial or commercial incinerator in the presence of a combustible material.

Since regulations vary, consult applicable regulations or authorities before disposal.

## **SECTION 14:TRANSPORT INFORMATION**

#### **ID** Number(s):

60-9800-4557-3, 60-9800-4558-1, 60-9800-4562-3, 60-9801-0557-5, 62-5239-0330-0, 62-5239-0334-2, FS-9100-3615-1, FS-9100-3648-2, LB-T000-0007-0

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

# **SECTION 15: REGULATORY INFORMATION**

## US FEDERAL REGULATIONS

Contact 3M for more information.

#### 311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - Yes Immediate Hazard - Yes Delayed Hazard - Yes

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

IngredientC.A.S. No% by WP,P'-METHYLENEBIS(PHENYL)101-68-8< 2.5</td>

ISOCYANATE) (Diisocyanates (EPCRA 313))

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ZINC OXIDE (ZINC COMPOUNDS)	1314-13-2	< 2.3
DIETHYLENE GLYCOL MONOETHYL	112-15-2	1 - 5
ETHER ACETATE (GLYCOL ETHERS)		
HEXAMETHYLENE DIISOCYANATE	822-06-0	< 0.02
(Diisocvanates (EPCRA 313))		

## STATE REGULATIONS

Contact 3M for more information.

### **CALIFORNIA PROPOSITION 65**

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
ETHYLBENZENE	100-41-4	**Carcinogen
TOLUENE	108-88-3	*Developmental Toxin

<sup>\*</sup> WARNING: contains a chemical or chemicals which can cause birth defects or other reproductive harm.

### CHEMICAL INVENTORIES

Contact 3M for more information.

### INTERNATIONAL REGULATIONS

Contact 3M for more information.

WHMIS: Hazardous

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

# **SECTION 16: OTHER INFORMATION**

#### **NFPA Hazard Classification**

Health: 2 Flammability: 0 Reactivity: 1 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

**Revision Changes:** 

Section 1: Product name was modified. Page Heading: Product name was modified.

<sup>\*\*</sup> WARNING: contains a chemical which can cause cancer.

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