

Material Safety Data Sheet

Copyright, 2009, 3M Company. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

PRODUCT NAME: 3MTM AutomixTM Panel Bonding Adhesive, P.N. 08115

MANUFACTURER: 3M

DIVISION: Automotive Aftermarket

ADDRESS: 3M Center

St. Paul, MN 55144-1000

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

Issue Date: 03/27/09 **Supercedes Date:** 02/20/09

Document Group: 07-1664-7

ID Number(s):

60-9800-3093-0, 60-9800-3246-4, 60-9800-4450-1, 60-9801-0532-8

This product is a kit or a multipart product which consists of multiple, independently packaged components. An MSDS for each of these components is included. Please do not separate the component MSDSs from this cover page. The document numbers of the MSDSs for components of this product are:

06-6873-1, 09-3599-9

Revision Changes:

Kit: Component document group number(s) was modified.

Page Heading: Product name was modified.

Kit: Product name was modified.

DISCLAIMER: The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

MATERIAL SAFETY DATA SHEET 3MTM AutomixTM Panel Bonding Adhesive, P.N. 08115 03/27/09

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M.



Material Safety Data Sheet

Copyright, 2010, 3M Company. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3MTM AutomixTM Panel Bonding Adhesive, Part B (P.N. 08115)

MANUFACTURER: 3M

DIVISION: Automotive Aftermarket

ADDRESS: 3M Center

St. Paul, MN 55144-1000

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

Issue Date: 02/12/10 **Supercedes Date:** 07/28/09

Document Group: 06-6873-1

Product Use:

Intended Use: Automotive

Specific Use: Use with Part A, MSDS 09-3599-9

SECTION 2: INGREDIENTS

Ingredient	C.A.S. No.	<u>% by Wt</u>
4,4'-ISOPROPYLIDENEDIPHENOL-EPICHLOROHYDRIN POLYMER	25068-38-6	30 - 60
GLASS BEADS	65997-17-3	10 - 30
FUSED SILICA	60676-86-0	7 - 13
1,4-BIS[(2,3-EPOXYPROPOXY)METHYL]CYCLOHEXANE	14228-73-0	7 - 13
METHYL METHACRYLATE-BUTADIENE-STYRENE POLYMER	25053-09-2	5 - 10
SILICA	7631-86-9	1 - 5
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	67762-90-7	0.5 - 1.5
3-(TRIMETHOXYSILYL)PROPYL GLYCIDYL ETHER	2530-83-8	0.5 - 1.5
CARBON BLACK	1333-86-4	<= 0.47
2,6-DI-TERT-BUTYL-P-CRESOL	128-37-0	<= 0.1786
OUARTZ SILICA	14808-60-7	<= 0.01

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

MATERIAL SAFETY DATA SHEET 3MTM AutomixTM Panel Bonding Adhesive, Part B (P.N. 08115) 02/12/10

Specific Physical Form: Viscous

Odor, Color, Grade: Black, Viscous liquid.

General Physical Form: Liquid

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

effects. 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.

Skin Contact:

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

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.

Ingestion:

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

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

<u>Ingredient</u>	C.A.S. No.	Class Description	Regulation
CARBON BLACK	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
QUARTZ SILICA	14808-60-7	Grp. 1: Carcinogenic to	International Agency for Research on Cancer
		humans	
QUARTZ SILICA	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens

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

Page 2 of 8

MATERIAL SAFETY DATA SHEET 3MTM AutomixTM Panel Bonding Adhesive, Part B (P.N. 08115) 02/12/10

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. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature No Data Available

Flash Point > 104 °C [Test Method: Closed Cup]

Flammable Limits - LEL

No Data Available

Flammable Limits - UEL

No Data Available

OSHA Flammability Classification: Class IIIB Combustible Liquid

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). Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

Unusual Fire and Explosion Hazards: Non-flammable: ordinary combustible material.

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures:

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Dispose of collected material as soon as possible.

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and MSDS.

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

For industrial or professional use only. Avoid eye contact with vapors, mists, or spray. Avoid skin contact. Avoid breathing of

Page 3 of 8

vapors, mists or spray. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment.

7.2 STORAGE

Store away from heat. Keep container tightly closed.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eve contact.

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

8.2.2 Skin Protection

Avoid 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: Neoprene, Nitrile Rubber.

8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges and P95 particulate prefilters. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

8.2.4 Prevention of Swallowing

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

8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	Authority	Type	<u>Limit</u>	Additional Information
2,6-DI-TERT-BUTYL-P-CRESOL	ACGIH	TWA, inhalable	2 mg/m3	
		fraction and vapor		
3-(TRIMETHOXYSILYL)PROPYL	CMRG	TWA	5 ppm	
GLYCIDYL ETHER				
CARBON BLACK	ACGIH	TWA	3.5 mg/m3	
CARBON BLACK	CMRG	TWA	0.5 mg/m3	
CARBON BLACK	OSHA	TWA	3.5 mg/m3	
DIMETHYL SILOXANE, REACTION	CMRG	CEIL	5 mg/m3	
PRODUCT WITH SILICA				
GLASS BEADS	3M	TWA, as dust	10 mg/m3	
QUARTZ SILICA	ACGIH	TWA, respirable	0.025 mg/m	
		fraction		
QUARTZ SILICA	OSHA	TWA concentration,	0.1 mg/m3	
		respirable		
QUARTZ SILICA	OSHA	TWA concentration,	0.3 mg/m3	
		as total dust		
SILICA	CMRG	TWA, as respirable	3 mg/m3	

dust

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

Specific Physical Form: Viscous

Odor, Color, Grade: Black, Viscous liquid.

General Physical Form: Liquid

Autoignition temperature No Data Available

Flash Point > 104 °C [Test Method: Closed Cup]

Flammable Limits - LEL No Data Available
Flammable Limits - UEL No Data Available

Boiling point >=35 °C

Density 8.2 lb/gal

Vapor Density No Data Available

Vapor Pressure < 5 mmHg [@ 20 °C]

Specific Gravity Approximately 1.2 [Ref Std: WATER=1]

pH Not Applicable
Melting point Not Applicable

Solubility In Water

Solubility in Water

No Data Available
Negligible

Evaporation rate <1 [Ref Std: BUOAC=1]

Hazardous Air Pollutants 0.00003 lb HAPS/gal [Test Method: Calculated] [Details: HAPS

total reflects maximum amount of 1,3-Butadiene (CAS 106-99-0); Epichlorohydrin (106-89-8) & Methyl Methacrylate (80-62-6) that

may be present as impurities.]

Volatile Organic Compounds 17.89 g/l [Test Method: calculated SCAQMD rule 443.1]

Volatile Organic Compounds1.49 % weightVolatile Organic Compounds0.15 lb/galKow - Oct/Water partition coefNo Data Available

Percent volatile Negligible

VOC Less H2O & Exempt Solvents 17.89 g/l [Test Method: calculated SCAQMD rule 443.1]

Viscosity Approximately 200 centistoke

Solids Content 98.51 % weight

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid Sparks and/or flames 10.2 Materials to avoid

None known

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance Condition

Aldehydes During Combustion
Carbon monoxide During Combustion
Carbon dioxide During 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

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste 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.

Combustion products will include HCl. Facility must be capable of handling halogenated materials.

EPA Hazardous Waste Number (RCRA): Not regulated

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

SECTION 14:TRANSPORT INFORMATION

LB-K100-0010-5

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 - No Immediate Hazard - Yes Delayed Hazard - Yes

STATE REGULATIONS

Contact 3M for more information.

CALIFORNIA PROPOSITION 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	Classification
SILICA, CRYSTALLINE (AIRBORNE	SEQ677	**Carcinogen
PARTICLES OF RESPIRABLE SIZE)		
CARBON BLACK	1333-86-4	**Carcinogen

^{**} WARNING: contains a chemical which can cause cancer.

CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

The components of this product are listed on the Canadian Domestic Substances List.

The components of this product are listed on the Australian Inventory of Chemical Substances.

The components of this material are in compliance with the new chemical notification requirements for the Korean Existing Chemicals Inventory.

The components of this product are in compliance with notification requirements in the Philippines.

All the components of this product are listed on China's Inventory of Chemical Substances.

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: 1 Reactivity: 0 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:

Copyright was modified.

Section 9: Property description for optional properties was modified.

Section 2: Ingredient table was modified.

Section 8: Exposure guidelines ingredient information was modified.

Section 3: Carcinogenicity table was modified.

Section 15: California proposition 65 ingredient information was modified.

Section 10.1 Conditions to avoid was added.

Section 10.2 Materials to avoid was added.

Section 6: Release measures information was added.

Section 6: Release measures information was added.

Section 6: Release measures information was added.

Section 10: Materials to avoid physical property was added.

Section 10: Conditions to avoid physical property was added.

Section 6: Release measures information was deleted.

Section 10: Materials and conditions to avoid physical property was deleted.

DISCLAIMER: The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M.

Page 8 of 8



Material Safety Data Sheet

Copyright, 2010, 3M Company. All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3MTM AutomixTM Panel Bonding Adhesive, Part A (P.N. 08115)

MANUFACTURER: 3M

DIVISION: Automotive Aftermarket

ADDRESS: 3M Center

St. Paul, MN 55144-1000

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

Issue Date: 02/12/10 **Supercedes Date:** 01/26/10

Document Group: 09-3599-9

Product Use:

Intended Use: Automotive

Specific Use: Use with Part B, MSDS 06-6873-1

SECTION 2: INGREDIENTS

Ingredient	<u>C.A.S. No.</u>	<u>% by Wt</u>
POLYMERIC DIAMIDE	68911-25-1	15 - 40
BUTADIENE ACRYLONITRILE COPOLYMER	68683-29-4	10 - 30
FUSED SILICA	60676-86-0	10 - 30
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GLYCOL	4246-51-9	7 - 13
TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL	90-72-2	5 - 10
INORGANIC SALT - NJTSRN 04499600-6317	Trade Secret	1 - 5
AMINE EPOXY CURING AGENT	288-32-4	1 - 5
DIMETHYL SILOXANE, REACTION PRODUCT WITH SILICA	67762-90-7	1 - 5
N-AMINOETHYLPIPERAZINE	140-31-8	0.1 - 1.0
TOLUENE	108-88-3	<= 0.411
OUARTZ SILICA	14808-60-7	<= 0.1

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

MATERIAL SAFETY DATA SHEET 3MTM AutomixTM Panel Bonding Adhesive, Part A (P.N. 08115) 02/12/10

Specific Physical Form: Viscous liquid

Odor, Color, Grade: Tan liquid, slight amine odor.

General Physical Form: Liquid

Immediate health, physical, and environmental hazards: May cause chemical eye burns. May cause allergic skin reaction. May cause chemical skin burns. May cause chemical gastrointestinal burns. Contains a chemical or chemicals which can cause birth defects or other reproductive harm. Contains a chemical or chemicals which can cause cancer.

3.2 POTENTIAL HEALTH EFFECTS

Eve Contact:

Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

Skin Contact:

Corrosive (Skin Burns): Signs/symptoms may include localized redness, swelling, itching, intense pain, blistering, ulceration, and tissue destruction.

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.

Ingestion:

Gastrointestinal Corrosion: Signs/symptoms may include severe mouth, throat and abdominal pain; nausea; vomiting; and diarrhea; blood in the feces and/or vomitus may also be seen.

Target Organ Effects:

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

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

<u>Ingredient</u>	<u>C.A.S. No.</u>	Class Description	Regulation
QUARTZ SILICA	14808-60-7	Grp. 1: Carcinogenic to	International Agency for Research on Cancer
		humans	
QUARTZ SILICA	14808-60-7	Known human carcinogen	National Toxicology Program Carcinogens

SECTION 4: FIRST AID MEASURES

Page 2 of 9

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: Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water for at least 15 minutes. Get immediate medical attention. Wash contaminated clothing and clean shoes before reuse.

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

Do not induce vomiting. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get immediate medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

No Data Available **Autoignition temperature**

Flash Point 110 °C [Test Method: Closed Cup]

No Data Available Flammable Limits - LEL No Data Available Flammable Limits - UEL

OSHA Flammability Classification: Class IIIB Combustible Liquid

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). Water or foam may cause frothing.

Unusual Fire and Explosion Hazards: No unusual fire or explosion hazards are anticipated.

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures:

Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Ventilate the area with fresh air. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard. Read and follow safety precautions on the solvent label and MSDS.

Place in a metal container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible. 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. Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Collect as much of the spilled material as possible. Clean up residue with an appropriate organic solvent.

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. Contents may be under pressure, open carefully. Avoid breathing of vapors, mists or spray. 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. For industrial or professional use only. Avoid contact with oxidizing agents. Avoid eye contact. Avoid skin contact. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment.

7.2 STORAGE

Store away from acids. Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area. Store away from oxidizing agents.

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. Use in a well-ventilated area. If exhaust ventilation is not available, use appropriate respiratory protection. For additional health and precautionary information, including air monitoring methodology, contact 3M. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. 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. Avoid eye contact.

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

8.2.2 Skin Protection

Avoid 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: Polyethylene/Ethylene Vinyl Alcohol.

8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray. Avoid breathing of vapors. Avoid breathing of dust created by cutting, sanding, grinding or machining.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half facepiece or fullface air-purifying respirator with organic vapor cartridges and P95 particulate prefilters. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

8.2.4 Prevention of Swallowing

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

8.3 EXPOSURE GUIDELINES

Ingredient	Authority	Type	Limit	Additional Information
DIMETHYL SILOXANE, REACTION	CMRG	CEIL	5 mg/m3	
PRODUCT WITH SILICA			_	
QUARTZ SILICA	ACGIH	TWA, respirable fraction	0.025 mg/m3	
QUARTZ SILICA	OSHA	TWA concentration, respirable	0.1 mg/m3	
QUARTZ SILICA	OSHA	TWA concentration,	0.3 mg/m3	
		as total dust		
TOLUENE	ACGIH	TWA	20 ppm	
TOLUENE	CMRG	STEL	75 ppm	Skin Notation*
TOLUENE	OSHA	TWA	200 ppm	
TOLUENE	OSHA	CEIL	300 ppm	
TRIS(2,4,6-	CMRG	TWA	5 ppm	
DIMETHYLAMINOMONOMETHYL)PHEN				
OL				

^{*} 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.

SOURCE OF EXPOSURE LIMIT DATA:

Volatile Organic Compounds

Volatile Organic Compounds

Volatile Organic Compounds

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

Specific Physical Form: Viscous liquid

Odor, Color, Grade: Tan liquid, slight amine odor.

General Physical Form: Liquid

Autoignition temperature No Data Available

Flash Point 110 °C [Test Method: Closed Cup]

Flammable Limits - LEL No Data Available
Flammable Limits - UEL No Data Available

Boiling point > 110 °C

Vapor Density No Data Available

Vapor Pressure < 200 mmHg [@ 20 °C]

Specific Gravity Approximately 1.2 [*Ref Std*: WATER=1]

pH Not Applicable
Melting point Not Applicable
Solubility In Water No Data Available

Evaporation rate <1 [Ref Std: BUOAC=1]

Hazardous Air Pollutants 0.041 lb HAPS/gal [Test Method: Calculated] [Details: HAPS total

reflects maximum amount of Benzene (CAS 71-43-2) and Toluene

(CAS 108-88-3) that may be present as impurities.]
4.92 g/l [*Test Method:* calculated SCAQMD rule 443.1]
0.041 lb/gal [*Test Method:* calculated SCAQMD rule 443.1]
0.41 % [*Test Method:* calculated SCAQMD rule 443.1]

Page 5 of 9

MATERIAL SAFETY DATA SHEET 3MTM AutomixTM Panel Bonding Adhesive, Part A (P.N. 08115) 02/12/10

Kow - Oct/Water partition coef Percent volatileNo Data Available
Negligible

VOC Less H2O & Exempt Solvents 4.94 g/l [Test Method: calculated SCAQMD rule 443.1]

Viscosity > 200 centistoke

Materials to avoid Strong oxidizing agents

Solids Content 44.5 % weight [*Details:* Non-Volatile Organic Compounds weight

content is 99.59%.]

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

None known

10.2 Materials to avoid

Strong oxidizing agents

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

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

Carbon monoxide During Combustion
Carbon dioxide During 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

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate uncured product in a permitted hazardous waste incinerator in the presence of a combustible material.

MATERIAL SAFETY DATA SHEET 3MTM AutomixTM Panel Bonding Adhesive, Part A (P.N. 08115) 02/12/10

As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

EPA Hazardous Waste Number (RCRA): D018 (Benzene)

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

SECTION 14:TRANSPORT INFORMATION

LB-K100-0010-6

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 - No Immediate Hazard - Yes Delayed Hazard - Yes

STATE REGULATIONS

Contact 3M for more information.

CALIFORNIA PROPOSITION 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
SILICA, CRYSTALLINE (AIRBORNE	SEQ677	**Carcinogen
PARTICLES OF RESPIRABLE SIZE)		
TOLUENE	108-88-3	*Developmental Toxin

^{*} WARNING: contains a chemical or chemicals which can cause birth defects or other reproductive harm.

CHEMICAL INVENTORIES

The components of this product are in compliance with the chemical notification requirements of TSCA.

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

The components of this product are listed on the Canadian Domestic Substances List.

The components of this product are listed on the Australian Inventory of Chemical Substances.

^{**} WARNING: contains a chemical which can cause cancer.

All the components of this product are listed on China's Inventory of Chemical Substances.

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: 3 Flammability: 1 Reactivity: 0 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 4: First aid for inhalation - medical assistance - was modified.

Section 2: Ingredient table was modified.

Section 8: Exposure guidelines ingredient information was modified.

Section 15: California proposition 65 ingredient information was modified.

Section 3: Carcinogenicity phrase was added.

Section 3: Carcinogenicity table was added.

Section 3: Carcinogenicity heading was added.

Section 15: California proposition 65 cancer warning was added.

Section 15: EPCRA 313 information was deleted.

Section 15: EPCRA 313 text was deleted.

Section 8: Exposure guidelines legend was deleted.

DISCLAIMER: The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

Page 8 of 9

MATERIAL SAFETY DATA SHEET 3MTM AutomixTM Panel Bonding Adhesive, Part A (P.N. 08115) 02/12/10

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M.