

# **Material Safety Data Sheet**

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**PRODUCT NAME:** 3M(tm) Structural Adhesive Kit 5045 (2/1)(B/A)

**MANUFACTURER:** 3M

**DIVISION:** Automotive Division

**ADDRESS:** 3M Center

St. Paul, MN 55144-1000

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

**Issue Date:** 07/09/2003 **Supercedes Date:** 03/15/2000

**Document Group:** 06-8431-6

**ID Number(s):** 70-0705-7437-4

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:

06-8415-9, 06-8417-5

No revision information is available.

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## SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** 3M(tm) Structural Adhesive 5045 Part A

**MANUFACTURER:** 3M

**DIVISION:** Automotive Division

**ADDRESS:** 3M Center

St. Paul, MN 55144-1000

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

**Issue Date:** 10/21/2005 **Supercedes Date:** 07/07/2003

**Document Group:** 06-8415-9

**Product Use:** 

Specific Use: Automotive Structural Adhesive

# **SECTION 2: INGREDIENTS**

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
ALIPHATIC POLYMER DIAMINE	68911-25-1	35 - 70
BUTADIENE ACRYLONITRILE POLYMER	68683-29-4	10 - 30
SILICA (1)	60676-86-0	10 - 30
TRIS(2,4,6-DIMETHYLAMINOMONOMETHYL)PHENOL	90-72-2	4 - 10
BIS(3-AMINOPROPYL) ETHER OF DIETHYLENE GLYCOL	4246-51-9	4 - 10
IMIDAZOLE	288-32-4	1 - 9
SILICA (2)	67762-90-7	1 - 9
INORGANIC NITRATE (NJTSRN 04499600-5975P)	Trade Secret	< 4
N-AMINOETHYLPIPERAZINE	140-31-8	< 1

# **SECTION 3: HAZARDS IDENTIFICATION**

### 3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: Minor Amine Odor, Tan

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 target organ effects.

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## 3.2 POTENTIAL HEALTH EFFECTS

#### **Eye 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:**

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

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

#### **Inhalation:**

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

### **Ingestion:**

May be harmful if swallowed.

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

May be absorbed following ingestion and cause target organ effects.

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

Prolonged or repeated exposure may cause:

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness and tremors.

## **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: 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.

**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 > 230 °F [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

Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam).

## 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:** 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: Observe precautions from other sections. 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. 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 an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. For large spills, if necessary, get assistance from professional spill clean up team. For small spills, carefully neutralize spill by adding appropriate dilute acid such as vinegar. Work slowly to avoid boiling or spattering. Continue to add neutralizing agent until reaction stops. Let cool before collecting. Or use a commercially available caustic (alkaline or basic) spill clean-up kit. Follow kit directions exactly. 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. Read and follow safety precautions on the solvent label and MSDS. Place in an approved metal container. Dispose of collected material as soon as possible.

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 breathing of vapors, mists or spray. Avoid skin contact with hot material. Avoid eye contact with vapors, mists, or spray. For industrial or professional use only. Avoid contact with oxidizing agents. 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 in a cool place. Store away from acids. Keep container in well-ventilated area. Store away from areas where product may

come into contact with food or pharmaceuticals. Store away from flammable and combustible materials. 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 ventilation on open containers. Provide appropriate local exhaust when product is heated.

## 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

### 8.2.1 Eye/Face Protection

Avoid eye contact. Avoid eye contact with vapors, mists, or spray.

The following eye protection(s) are recommended: Indirect Vented Goggles.

#### 8.2.2 Skin Protection

Avoid skin contact. Avoid skin contact with hot material. Wear appropriate gloves, such as Nomex, when handling this material to prevent thermal burns. 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.

### 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 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>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	Additional Information
SILICA (2)	CMRG	CEIL	5 mg/m3	
FIBROUS GLASS DUST	ACGIH	TWA, as dust	10 mg/m3	
SILICA (1)	ACGIH	TWA, respirable	0.1 mg/m3	
SILICA (1)	OSHA	TWA, respirable	0.1 mg/m3	Table Z-1A
TRIS(2,4,6-	CMRG	TWA	5 ppm	
DIMETHYLAMINOMONOMETHYL)PHE	N			
OL				

### 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**

Odor, Color, Grade: Minor Amine Odor, Tan

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#### 3M MATERIAL SAFETY DATA SHEET 3M(tm) Structural Adhesive 5045 Part A 10/21/2005

General Physical Form: Liquid

**Autoignition temperature** No Data Available

Flash Point > 230 °F [Test Method: Closed Cup]

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

Vapor Density No Data Available

Vapor Pressure No Data Available

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

pHNo Data AvailableMelting pointNo Data AvailableSolubility In WaterNo Data Available

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

**Volatile Organic Compounds**No Data Available

Percent volatile Negligible

VOC Less H2O & Exempt Solvents

No Data Available

> 200 centistoke

# **SECTION 10: STABILITY AND REACTIVITY**

Stability: Stable.

Materials and Conditions 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

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Not determined.

## **SECTION 13: DISPOSAL CONSIDERATIONS**

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

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.

EPA Hazardous Waste Number (RCRA): Not regulated

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

## **SECTION 14:TRANSPORT INFORMATION**

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

70-0705-7387-1, 70-0705-7388-9, 70-0708-5034-5

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

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

## STATE REGULATIONS

Contact 3M for more information.

## **CHEMICAL INVENTORIES**

#### 3M MATERIAL SAFETY DATA SHEET 3M(tm) Structural Adhesive 5045 Part A 10/21/2005

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.

Contact 3M for more information.

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

### INTERNATIONAL REGULATIONS

Contact 3M for more information.

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

Corrosive: Yes

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 16: NFPA hazard classification heading was modified.

Section 3: Other potential health effects heading was modified.

Copyright was modified.

Section 8: Exposure guidelines data source legend was modified.

Section 3: Immediate skin hazard(s) was modified.

Section 3: Potential effects from skin contact information was modified.

Section 3: Potential effects from ingestion information was modified.

Section 5: Fire fighting procedures information was modified.

Section 6: Release measures information was modified.

Section 7: Handling information was modified.

Section 7: Storage information was modified.

Section 8: Engineering controls information was modified.

Section 8: Eye/face protection phrase was modified.

Section 13: Waste disposal method information was modified.

Section 13: EPA hazardous waste number (RCRA) information was modified.

Section 15: 311/312 hazard categories heading was modified.

Section 15: International regulations information was modified.

Section 15: State regulations information was modified.

Section 15: US federal regulations information was modified.

#### 3M MATERIAL SAFETY DATA SHEET 3M(tm) Structural Adhesive 5045 Part A 10/21/2005

- Section 10: Hazardous polymerization heading was modified.
- Section 3: Other health effects information was modified.
- Section 16: NFPA explanation was modified.
- Section 15: Inventories information was modified.
- Section 15: EPCRA 313 text was modified.
- Section 12: Ecotoxicological information heading was modified.
- Section 12: Chemical fate information heading was modified.
- Section 8: Exposure guidelines ingredient information was modified.
- Section 16: NFPA hazard classification for special hazards was modified.
- Section 12: Ecotoxicological phrase was modified.
- Section 12: Chemical Fate phrase was modified.
- Section 2: Ingredient phrase was added.

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

**PRODUCT NAME:** 3M(tm) Structural Adhesive 5045 Part B

**MANUFACTURER:** 3M

**DIVISION:** Automotive Division

**ADDRESS:** 3M Center

St. Paul, MN 55144-1000

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

**Issue Date:** 06/25/2003 **Supercedes Date:** 06/12/2003

**Document Group:** 06-8417-5

**Product Use:** 

Specific Use: Automotive Structural Adhesive

## **SECTION 2: INGREDIENTS**

<u>Ingredient</u>	<b>C.A.S. No.</b>	% by Wt
EPOXY RESIN (1)	25068-38-6	30 - 60
GLASS	65997-17-3	10 - 20
EPOXY RESIN (2)	14228-73-0	5 - 20
SILICA (1)	60676-86-0	10 - 15
POLYMERIC RESIN	25053-09-2	7 - 13
SILICA (2)	7631-86-9	1 - 5
SILICA (3)	67762-90-7	0.5 - 3
SILANE	2530-83-8	0.5 - 3
CARBON BLACK	1333-86-4	0.1 - 1

## **SECTION 3: HAZARDS IDENTIFICATION**

## 3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: White, viscous General Physical Form: Liquid

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

May cause target organ effects.

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### 3.2 POTENTIAL HEALTH EFFECTS

### **Eye Contact:**

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

#### **Skin Contact:**

Delayed Dermal Irritation: Signs/symptoms may include localized redness, swelling, itching, and pain. These effects may not appear immediately following exposure.

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

May be absorbed through skin and cause target organ effects.

#### **Inhalation:**

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

May be absorbed following inhalation and cause target organ effects.

#### **Ingestion:**

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

May be absorbed following ingestion and cause target organ effects.

### **Target Organ Effects:**

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

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

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

#### 3M MATERIAL SAFETY DATA SHEET 3M(tm) Structural Adhesive 5045 Part B 06/25/2003

#### 5.1 FLAMMABLE PROPERTIES

**Autoignition temperature** No Data Available

Flash Point > 220 °F [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

Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam).

### 5.3 PROTECTION OF FIRE FIGHTERS

**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: 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: Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. 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 an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. 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. Read and follow safety precautions on the solvent label and MSDS. 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

Keep container closed when not in use. Avoid eye contact with vapors, mists, or spray. Avoid breathing of vapors, mists or spray. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. For industrial or professional use only. 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 in a cool place. Store away from heat. Keep container in well-ventilated area.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Provide appropriate local exhaust ventilation on open containers. Use with appropriate local exhaust ventilation.

## 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: 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. Use one or more of the following personal protection items as necessary to present skin contact: apron, coveralls. Protective garments (other than gloves) should be made of either of the following materials: 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. 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>	<b>Authority</b>	<b>Type</b>	<u>Limit</u>	<b>Additional Information</b>
SILANE	CMRG	TWA	5 ppm	
CARBON BLACK CARBON BLACK	ACGIH CMRG	TWA TWA	3.5 mg/m3 0.5 mg/m3	Table A4
CARBON BLACK SILICA (3)	OSHA CMRG	TWA CEIL	3.5 mg/m3 5 mg/m3	Table Z-1
FIBROUS GLASS DUST	ACGIH	TWA - as dust	10 mg/m3	
SILICA (1)	ACGIH	TWA - respirable	0.1 mg/m3	
SILICA (1)	OSHA	TWA - respirable	0.1 mg/m3	Table Z-1A
GLASS	3M	TWA - as dust	10 mg/m3	
SILICA (2)	CMRG	TWA - specific form	3 mg/m3	as respirable 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**

#### 3M MATERIAL SAFETY DATA SHEET 3M(tm) Structural Adhesive 5045 Part B 06/25/2003

Odor, Color, Grade: White, viscous

General Physical Form: Liquid

**Autoignition temperature**No Data Available

Flash Point > 220 °F [Test Method: Closed Cup]

Flammable Limits - LEL

Flammable Limits - UEL

No Data Available

No Data Available

No Data Available

No Data Available

Vapor Density

No Data Available

Vapor Pressure

No Data Available

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

pH No Data Available
Melting point No Data Available
Solubility In Water No Data Available
Evaporation rate <1 [Ref Std: BUOAC=1]

Volatile Organic Compounds

No Data Available

Percent volatile Negligible

VOC Less H2O & Exempt Solvents No Data Available

Viscosity Approximately 200 centistoke

## **SECTION 10: STABILITY AND REACTIVITY**

Stability: Stable.

Materials and Conditions to Avoid: None known

Hazardous Polymerization: Hazardous polymerization will not occur.

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

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

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

#### 3M MATERIAL SAFETY DATA SHEET 3M(tm) Structural Adhesive 5045 Part B 06/25/2003

Not determined.

## SECTION 13: DISPOSAL CONSIDERATIONS

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

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.

EPA Hazardous Waste Number (RCRA): Not regulated

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

## **SECTION 14:TRANSPORT INFORMATION**

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

70-0705-7385-5, 70-0705-7386-3, 70-0708-5033-7

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.

## **CHEMICAL INVENTORIES**

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

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 in compliance with the chemical notification requirements of TSCA.

Contact 3M for more information.

## INTERNATIONAL REGULATIONS

Contact 3M for more information.

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:** 

Section 1: Product use information was modified. Section 7: Handling information was modified.

Section 8: Engineering controls information was modified.

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