

# **Material Safety Data Sheet**

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**PRODUCT NAME:**3M(TM) Scotch-Weld(TM) Toughened Epoxy Adhesive LSB60NS, Gray**MANUFACTURER:**3M**DIVISION:**Industrial Adhesives and Tapes Division

ADDRESS: 3M Center, St. Paul, MN 55144-1000

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

Issue Date: 02/02/12 Supercedes Date: Initial Issue

Document Group: 30-3496-4

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

62-3562-3532-5, 62-3562-3537-4

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:

30-3492-3, 30-3487-3

#### No revision information is available.

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

**PRODUCT NAME:**3M(TM) Scotch-Weld(TM) Toughened Epoxy Adhesive LSB60NS, Gray , Part A**MANUFACTURER:**3M**DIVISION:**Industrial Adhesives and Tapes Division

ADDRESS: 3M Center, St. Paul, MN 55144-1000

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

| Issue Date:      | 08/08/12 |
|------------------|----------|
| Supercedes Date: | 06/29/12 |

Document Group: 30-3487-3

### **Product Use:**

Intended Use:

Adhesive

## **SECTION 2: INGREDIENTS**

#### Ingredient

| ingreuent  | C.A.S. NO.   | 70 Dy WVL |
|--|--------------|-----------|
| Poly(oxypropylene)diamine                          | 9046-10-0    | 20 - 40   |
| Fillers - N.J.T.S. Reg. No. 04499600-6886          | Trade Secret | 20 - 40   |
| Acrylate Polymer - N.J.T.S. Reg. No. 04499600-6887 | Trade Secret | 1 - 20    |
| Aliphatic Polymer Diamine                          | 68911-25-1   | 1 - 20    |
| Benzoate Ester - N.J.T.S. Reg. No. 04499600-6888   | Trade Secret | 1 - 20    |
| bis(3-aminopropyl)ether of diethylene glycol       | 4246-51-9    | 0.5 - 5   |
| Calcium Nitrate                                    | 10124-37-5   | 1 - 5     |
| 2,4,6-Tris((dimethylamino)methyl)phenol            | 90-72-2      | 0.5 - 5   |
| Toluene  | 108-88-3     | < 0.2     |
| Quartz Silica                                      | 14808-60-7   | < 0.2     |
|  |              |           |

CAS No

# **SECTION 3: HAZARDS IDENTIFICATION**

### **3.1 EMERGENCY OVERVIEW**

Specific Physical Form: Viscous Odor, Color, Grade: White, amine odor General Physical Form: Liquid % hv Wt

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

### **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:**

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.

May be absorbed following inhalation and cause target organ effects.

#### 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.

May be absorbed following ingestion and cause target organ effects.

### **Target Organ Effects:**

Prolonged or repeated exposure may cause:

Methemoglobinemia: Signs/symptoms may include headache, dizziness, nausea, difficulty breathing, and generalized weakness.

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.

# **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 Flash Point Flammable Limits(LEL) Flammable Limits(UEL) OSHA Flammability Classification:

No Data Available >=240 °F [Test Method: Closed Cup] Not Applicable Not Applicable 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: 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**

#### 6.1. Personal precautions, protective equipment and emergency procedures

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.

#### **6.2.** Environmental precautions

For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

#### **Clean-up methods**

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

Avoid eye contact. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Avoid skin contact. Avoid breathing of dust created by cutting, sanding, grinding or machining. For industrial or professional use only. Avoid contact with oxidizing agents.

### 7.2 STORAGE

Store away from acids. Store away from oxidizing agents.

# SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

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 mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment. Provide ventilated enclosure for heat curing.

### 8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

### 8.2.1 Eye/Face Protection

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

Polymer laminate

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### 8.2.3 Respiratory Protection

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

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

#### 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

| Ingredient                                | <u>Authority</u> | Type               | <u>Limit</u> | Additional Information |
|---|------------------|--------------------|--------------|------------------------|
| Fillers - N.J.T.S. Reg. No. 04499600-6886 | OSHA             | TWA, respirable    | 5 mg/m3      |                        |
|   |                  | fraction           |              |                        |
| Fillers - N.J.T.S. Reg. No. 04499600-6886 | OSHA             | TWA, as total dust | 15 mg/m3     |                        |
| Quartz Silica                             | ACGIH            | TWA, respirable    | 0.025 mg/m3  |                        |
|   |                  | fraction           |              |                        |
| Quartz Silica                             | OSHA             | TWA concentration, | 0.1 mg/m3    |                        |
|   |                  | respirable         |              |                        |
| 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      |                        |
|   |                  |                    |              |                        |

2,4,6-Tris((dimethylamino)methyl)phenol CMRG TWA 5 ppm

\* 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:

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: Odor, Color, Grade: General Physical Form: Autoignition temperature Flash Point Flammable Limits(LEL) Flammable Limits(UEL) Boiling Point Density Vapor Density

Vapor Pressure

Specific Gravity pH Melting point

Evaporation rate Hazardous Air Pollutants Volatile Organic Compounds

Kow - Oct/Water partition coef Percent volatile VOC Less H2O & Exempt Solvents VOC Less H2O & Exempt Solvents

Viscosity

Viscous White, amine odor Liquid No Data Available >=240 °F [Test Method: Closed Cup] Not Applicable Not Applicable 1.17 g/ml Not Applicable

<=0.03 mmHg [@ 20 °C]

1.17 [*Ref Std:* WATER=1] *Not Applicable No Data Available* 

Not Applicable < 0.2 % weight [*Test Method:* Calculated] 28.1 g/l [*Test Method:* calculated per EPA method 24] [*Details:* EU VOC content] No Data Available 2.4 % weight 28.1 g/l [*Test Method:* calculated per EPA method 24] 19.5 g/l [*Test Method:* calculated per EPA method 24] [*Details:* when used as intended with Part B] 90000 - 100000 centipoise

## SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

#### Materials and Conditions to Avoid:

#### 10.1 Conditions to avoid

Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature reaction (exothem) with production of intense heat and smoke.

#### **10.2 Materials to avoid**

Strong acids

Strong oxidizing agents Amines

Hazardous Polymerization: Hazardous polymerization will not occur.

### Hazardous Decomposition or By-Products

Substance Aldehydes Hydrocarbons Carbon monoxide Carbon dioxide Ketones <u>Condition</u> During Combustion During Combustion During Combustion 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.

### EPA Hazardous Waste Number (RCRA): Not regulated

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

# SECTION 14:TRANSPORT INFORMATION

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

62-3662-8532-8, 62-3662-9532-7

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

## **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):

| Ingredient                         | C.A.S. No  | % by Wt |
|------------------------------------|------------|---------|
| Calcium Nitrate (NITRATE COMPOUNDS | 10124-37-5 | 1 - 5   |
| (WATER DISSOCIABLE; REPORTABLE     |            |         |
| ONLY WHEN IN AQUEOUS SOLUTION))    |            |         |

### STATE REGULATIONS

Contact 3M for more information.

#### CALIFORNIA PROPOSITION 65

| <u>Ingredient</u> | <u>C.A.S. No.</u> | <u>Classification</u>      |
|-------------------|-------------------|----------------------------|
| Toluene           | 108-88-3          | *Female reproductive toxin |
| 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. 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: 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 3: Other health effects information was modified.

Section 2: Ingredient table was modified.

Section 8: Exposure guidelines ingredient information was modified.

Section 3: Carcinogenicity phrase was deleted.

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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.

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

**PRODUCT NAME:**3M(TM) Scotch-Weld(TM) Toughened Epoxy Adhesive LSB60NS, Gray , Part B**MANUFACTURER:**3M**DIVISION:**Industrial Adhesives and Tapes Division

ADDRESS: 3M Center, St. Paul, MN 55144-1000

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

 Issue Date:
 06/04/12

 Supercedes Date:
 06/04/12

Document Group: 30-3492-3

### Product Use:

Intended Use:

Adhesive

### **SECTION 2: INGREDIENTS**

### **Ingredient**

Epoxy Resin Fillers - N.J.T.S. Reg. No. 04499600-6886 3-(Trimethoxysilyl)propyl Glycidyl Ether <u>C.A.S. No.</u> 25068-38-6 Trade Secret 2530-83-8 <u>% by Wt</u> 80 - 95 1 - 15 0.1 - 1

## **SECTION 3: HAZARDS IDENTIFICATION**

### **3.1 EMERGENCY OVERVIEW**

Specific Physical Form: Paste Odor, Color, Grade: Black, epoxy odor General Physical Form: Liquid Immediate health, physical, and environmental hazards: May cause allergic skin reaction.

### **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.

## **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 temperature Flash Point Flammable Limits(LEL) Flammable Limits(UEL) No Data Available > 250 °F [Test Method: Closed Cup] Not Applicable Not Applicable

### 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:** Water may be used to blanket the fire. 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

#### 6.1. Personal precautions, protective equipment and emergency procedures

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.

#### **6.2.** Environmental precautions

Place in a closed container approved for transportation by appropriate authorities. Dispose of collected material as soon as possible.

#### **Clean-up methods**

Observe precautions from other sections. Call 3M- HELPS line (1-800-364-3577) for more information on handling and managing the spill. 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

Avoid skin contact. Avoid breathing of vapors. Avoid breathing of dust created by cutting, sanding, grinding or machining. For industrial or professional use only. Avoid contact with oxidizing agents.

### 7.2 STORAGE

Store away from acids. Store away from oxidizing agents.

### **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

### 8.1 ENGINEERING CONTROLS

Provide appropriate local exhaust for cutting, grinding, sanding or machining. Use in a well-ventilated area. 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. 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 Polymer laminate

#### 8.2.3 Respiratory Protection

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 full facepiece air-purifying respirator suitable for organic vapors and particulates . Select and use respiratory protection to prevent an inhalation exposure based on the results of an exposure assessment. Consult with your respirator manufacturer for selection of appropriate types of respirators.

#### 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> | Type                     | <u>Limit</u> | <b>Additional Information</b> |
|---|------------------|--------------------------|--------------|-------------------------------|
| 3-(Trimethoxysilyl)propyl Glycidyl Ether  | CMRG             | TWA                      | 5 ppm        |                               |
| Fillers - N.J.T.S. Reg. No. 04499600-6886 | OSHA             | TWA, respirable fraction | 5 mg/m3      |                               |
| Fillers - N.J.T.S. Reg. No. 04499600-6886 | OSHA             | TWA, as total dust       | 15 mg/m3     |                               |

### 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: Odor, Color, Grade: General Physical Form: Autoignition temperature Flash Point Flammable Limits(LEL) Flammable Limits(UEL) Boiling Point Density Vapor Density

**Vapor Pressure** 

Specific Gravity pH Melting point

Solubility in Water Evaporation rate Hazardous Air Pollutants Volatile Organic Compounds

Kow - Oct/Water partition coef Percent volatile VOC Less H2O & Exempt Solvents VOC Less H2O & Exempt Solvents

Viscosity

Paste Black, epoxy odor Liquid *No Data Available* > 250 °F [*Test Method:* Closed Cup] *Not Applicable Not Applicable Not Applicable 1.21 g/ml Not Applicable* 

<=0.03 mmHg [@ 77 °C]

1.21 [*Ref Std:* WATER=1] *Not Applicable No Data Available* 

Nil Not Applicable 0 % weight [*Test Method:* Calculated] 10.8 g/l [*Test Method:* calculated per EPA method 24] [*Details:* EU VOC content] No Data Available 0.9 % weight 10.8 g/l [*Test Method:* calculated per EPA method 24] 19.5 g/l [*Test Method:* calculated per EPA method 24] [*Details:* when used as intended with Part A] 24000 - 25000 centipoise

# **SECTION 10: STABILITY AND REACTIVITY**

### Stability: Stable.

### Materials and Conditions to Avoid:

#### **10.1 Conditions to avoid**

Heat is generated during cure. Do not cure a mass larger than 50 grams in a confined space to prevent a premature reaction (exothem) with production of intense heat and smoke.

#### **10.2 Materials to avoid** Strong acids Strong oxidizing agents Amines

Hazardous Polymerization: Hazardous polymerization will not occur.

### Hazardous Decomposition or By-Products

Substance Aldehydes Carbon monoxide Carbon dioxide <u>Condition</u> During Combustion During Combustion 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**

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

62-3562-8532-0, 62-3562-9532-9

Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and <u>not</u> the packaging, labeling, or marking requirements. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

# **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 - No

### **STATE REGULATIONS**

Contact 3M for more information.

### **CHEMICAL INVENTORIES**

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: 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 14: ID Number(s) Template 1 was modified. Section 8: Respiratory protection - recommended respirators information was modified.

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