

Material Safety Data Sheet

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PRODUCT NAME:3M(TM) Scotch-Weld(TM) Epoxy Potting Compound/Adhesive DP-270, Clear**MANUFACTURER:**3M**DIVISION:**Industrial Adhesives and Tapes

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

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

Issue Date: 11/15/2005 **Supercedes Date:** 02/02/2004

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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:

11-2356-1, 11-2357-9

Revision Changes: Copyright was modified.

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Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:3M™ Scotch-Weld™ Epoxy Potting Compound/Adhesive DP-270, Clear (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:	08/08/12
Supercedes Date:	12/05/08

Document Group: 11-2356-1

Product Use:

Specific Use: Intended Use: part B of 2 part adhesive Structural adhesive

SECTION 2: INGREDIENTS

Ingredient EPOXY RESIN HYDROCARBON RESIN <u>C.A.S. No.</u> 25068-38-6 9003-53-6 <u>% by Wt</u> 93 - 97 3 - 7

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: clear, very mild odor. General Physical Form: Liquid Immediate health, physical, and environmental hazards: May cause allergic skin reaction. chemicals which can cause birth defects or other reproductive harm.

Contains a chemical or

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.

May be absorbed following ingestion and cause target organ effects.

Target Organ Effects:

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: 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 >=300 °F [Test Method: Closed Cup] No Data Available No Data Available

5.2 EXTINGUISHING MEDIA

Material will not burn. 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

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

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. Avoid skin contact with hot material. Avoid eye contact with vapors, mists, or spray. 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. Provide appropriate local exhaust when product is heated.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

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. Avoid skin contact with hot material. Wear heat insulating gloves 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. Gloves made from the following material(s) are recommended: Polymer laminate

8.2.3 Respiratory Protection

Avoid breathing of vapors. 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 mask R95 particulate respirator

Half mask or full facepiece air-purifying respirator with N100 particulate filters

Half facepiece or full facepiece air-purifying respirator suitable for 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

None Established

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

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 clear, very mild odor. Liquid No Data Available >=300 °F [Test Method: Closed Cup] No Data Available No Data Available >=300 °F 1.15 g/ml Not Applicable

<=650 mmHg [@ 131 °F]

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

Nil Not Applicable 0 % weight [*Test Method:* Calculated] <=0 g/l [*Test Method:* calculated SCAQMD rule 443.1] No Data Available <=0.1 % < 10 g/l [*Test Method:* tested per EPA method 24] [*Details:* when used as intended with Part A]

Viscosity

13000.0 - 16000.0 centipoise [*Details:* CONDITIONS: (@ Room Temperature)]

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

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

<u>Substance</u>	Condition	
Aldehydes	During Combustion	
Hydrocarbons	During Combustion	
Carbon monoxide	During Combustion	
Carbon dioxide	During Combustion	
Ketones	During Combustion	
Toxic Vapor, Gas, Particulate	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

CHEMICAL FATE INFORMATION

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.

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

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 - Yes

STATE REGULATIONS

Contact 3M for more information.

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 Australian Inventory of Chemical Substances.

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

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

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

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

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: 0 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.

HMIS Hazard Classification Health: 2 Flammability: 0 Reactivity: 0 Protection: X - See PPE section.

Hazardous Material Identification System (HMIS®) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint and Coatings Association (NPCA).

Revision Changes:

- Section 1: Product name was modified.
- Section 1: Product use information was modified.

Section 16: Disclaimer (second paragraph) was modified.

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

Section 3: Potential effects from inhalation information was modified.

Section 3: Potential effects from ingestion information was modified.

Section 7: Handling information was modified.

Section 8: Eye/face protection phrase was modified.

Section 8: Skin protection phrase was modified.

Section 8: Respiratory protection information was modified.

Section 10: Hazardous decomposition or by-products table was modified.

Section 13: Waste disposal method information was modified.

Section 8: Eye/face protection information was modified.

Section 8: Skin protection - recommended gloves information was modified.

Section 8: Respiratory protection - recommended respirators information was modified.

Section 4: First aid for inhalation - termination of exposure - was modified.

Section 4: First aid for inhalation - medical assistance - was modified.

Section 8: Respiratory protection - recommended respirators was modified.

Section 14: Transportation legal text was modified.

Section 16: HMIS explanation was modified.

Page Heading: Product name was modified.

Section 15: 311/312 Delayed Hazard score was modified.

Section 15: Inventories information was modified.

Section 9: Vapor density value was modified.

Section 9: Vapor pressure value was modified.

Section 9: Boiling point information was modified.

Section 5: Flammable limits (UE) information was modified.

Section 5: Flammable limits (LEL) information was modified.

Section 5: Autoignition temperature information was modified.

Section 5: Flash point information was modified.

Section 9: Property description for optional properties was modified.

Section 9: Specific gravity information was modified.

Section 9: pH information was modified.

Section 9: Melting point information was modified.

Section 9: Solubility in water text was modified.

Section 8: Respiratory protection - recommended respirators guide was modified.

Section 9: Flash point information was modified.

Section 9: Flammable limits (LEL) information was modified. Section 9: Flammable limits (UEL) information was modified. Section 9: Autoignition temperature information was modified. Section 2: Ingredient table was modified. Section 3: Other potential health effects heading was added. Section 3: Immediate other hazard(s) was added. Section 9: Density information was added. Section 3: Other health effects information (reproductive hazards) was added. Section 6: 6.2. Environmental precautions heading was added. Section 6: 6.1. Personal precautions, protective equipment and emergency procedures heading was added. Section 10.1 Conditions to avoid heading was added. Section 10.2 Materials to avoid heading was added. Section 16: Web address was added. Section 6: Personal precautions information was added. Section 6: Environmental procedures information was added. Section 6: Methods for cleaning up information was added. Section 10: Materials to avoid physical property was added. Section 10: Conditions to avoid physical property was added. Section 8: Hand protection information was added. Section 1: Address was added. Copyright was added. Company logo was added. Section 6: Clean-up methods heading was added. Telephone header was added. Company Telephone was added. Section 1: Emergency phone information was added. Section 1: Emergency phone information was deleted. Company Logo was deleted. Copyright was deleted. Section 16: Web address heading was deleted. Section 6: Release measures information was deleted. Section 6: Release measures heading was deleted. Section 10: Materials and conditions to avoid physical property was deleted. Section 1: Address line 1 was deleted. Section 1: Address line 2 was deleted. Section 8: Respiratory protection - recommended respirators punctuation was deleted. Section 12: Ecotoxicological phrase was deleted. Section 12: Chemical Fate phrase was deleted.

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME:3M™ Scotch-Weld™ Epoxy Potting Compound/Adhesive DP-270, Clear (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:	07/05/12
Supercedes Date:	09/14/11

Document Group: 11-2357-9

Product Use:

Specific Use: Intended Use: part A of 2 part Adhesive Structural adhesive

SECTION 2: INGREDIENTS

<u>Ingredient</u>

4-NONYLPHENOL, branched with isomers 4,4'-METHYLENEBIS(2-METHYLCYCLOHEXYLAMINE) BENZYL ALCOHOL <u>C.A.S. No.</u> 84852-15-3 6864-37-5 100-51-6 <u>% by Wt</u> 40 - 60 15 - 40 7 - 13

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: clear, very mild pungent odor.

General Physical Form: Liquid

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

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

Skin Contact:

May be harmful or fatal if absorbed through skin.

Severe Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain.

Inhalation:

May be harmful if inhaled.

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:

May be harmful if swallowed.

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

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.

Prolonged or repeated exposure may cause:

Cardiac Effects: Signs/symptoms may include irregular heartbeat (arrhythmia), changes in heart rate, damage to heart muscle, heart attack, and may be fatal.

Hematopoietic Effects: Signs/symptoms may include generalized weakness, fatigue and alterations in numbers of circulating blood cells.

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

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. 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	No Data Available
Flash Point	> 240 °F [Test Method: Closed Cup]
Flammable Limits(LEL)	No Data Available
Flammable Limits(UEL)	No Data Available

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: 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. Remember, adding an absorbent material does not remove a toxic, corrosivity or flammability hazard.

6.2. Environmental precautions

Place in a container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Place in a metal container approved for use in transportation by appropriate authorities. The container must be lined with polyethylene plastic or contain a plastic drum liner made of polyethylene. Dispose of collected material as soon as possible.

Clean-up methods

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. Cover spill area with a fire-extinguishing foam. An aqueous film forming foam (AFFF) is recommended. 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 vapors. Keep out of the reach of children. Keep container closed when not in use. 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 areas where product may come into contact with food or pharmaceuticals. 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. Provide appropriate local exhaust when product is heated.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

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. Avoid skin contact with hot material. Wear heat insulating gloves 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. Gloves made from the following material(s) are recommended: Polymer laminate

8.2.3 Respiratory Protection

Avoid breathing of vapors. 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

<u>Ingredient</u>	<u>Authority</u>	Type	<u>Limit</u>	Additional Information
BENZYL ALCOHOL	AIHA	TWA	44 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

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

clear, very mild pungent odor. Liquid No Data Available > 240 °F [Test Method: Closed Cup] No Data Available No Data Available 401 °F [Details: CONDITIONS: @ 760mm Hg (benzyl alcohol)] 1.0 g/ml 3.72 [Ref Std: AIR=1]

0.1 mmHg [*Details:* CONDITIONS: @ 86F (30C); 13.3mm Hg @ 212F (100C).]

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

Slight (less than 10%) No Data Available >=0 % weight [Test Method: Calculated] < 10 g/l [Details: EU VOC content, when used as intended with Part B] No Data Available 7 - 9 % weight [Test Method: Estimated] < 90 g/l [Test Method: calculated SCAQMD rule 443.1] < 10 g/l [Test Method: tested per EPA method 24] [Details: when used as intended with Part B] 12000.0 - 15000.0 centipoise [Details: CONDITIONS: (@ Room Temperature)]

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

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

<u>Substance</u>

Amine Compounds Carbon monoxide Carbon dioxide Oxides of Nitrogen Toxic Vapor, Gas, Particulate <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

CHEMICAL FATE INFORMATION

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. Incinerate uncured product in a permitted hazardous waste incinerator in the presence of a combustible material.

EPA Hazardous Waste Number (RCRA): D002 (Corrosive)

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

SECTION 14:TRANSPORT INFORMATION

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

STATE REGULATIONS

Contact 3M for more information.

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 Australian Inventory of Chemical Substances.

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

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

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

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

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 3: Potential effects from inhalation information was modified.

Section 8: Engineering controls information was modified.

Section 13: Waste disposal method information was modified.

Section 8: Respiratory protection - recommended respirators information was modified.

Section 8: Respiratory protection - recommended respirators was modified.

Section 8: Respiratory protection - recommended respirators guide was modified.

Section 6: Personal precautions information was modified.

Section 6: Environmental procedures information was modified.

Section 6: Methods for cleaning up information was modified.

Copyright was modified.

Section 8: Respiratory protection - recommended respirators punctuation was deleted.

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