



## Material Safety Data Sheet

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**PRODUCT NAME:** SCOTCH-WELD(TM) Epoxy Potting Compound/Adhesive DP-270, Black  
**MANUFACTURER:** 3M  
**DIVISION:** Engineered Adhesives

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

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

**Issue Date:** 09/19/2002  
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**Document Group:** 11-1417-2

**ID Number(s):**

62-3266-1430-2, 62-3266-1435-1, 62-3266-3530-7, 62-3266-3830-1, FS-9100-0711-1

**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:**

11-1418-0, 11-1419-8

No revision information is available.

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DIVISION: ENGINEERED ADHESIVES  
 TRADE NAME:  
 SCOTCH-WELD(TM) Epoxy Potting Compound/Adhesive DP-270, Black (Part  
 B)  
 ISSUED: May 29, 2001  
 SUPERSEDES: April 17, 2001  
 DOCUMENT: 11-1418-0

1. INGREDIENT	C.A.S. NO.	PERCENT	
EPOXY RESIN.....	25068-38-6	90	- 99
HYDROCARBON RESIN.....	9003-53-6	3	- 7
CARBON BLACK.....	1333-86-4	.5	- 1.5

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.

This Part B (Mfg #PA-3266) used with SCOTCH-WELD DP-270 Part A Black;  
 (Mfg #PA-3366 --- MSDS DOC #1114198).

2. PHYSICAL DATA

BOILING POINT:..... N/A  
 VAPOR PRESSURE:..... N/A  
 VAPOR DENSITY:..... N/A  
 EVAPORATION RATE:..... N/A  
 SOLUBILITY IN WATER:..... nil  
 SPECIFIC GRAVITY:..... 1.150 Water=1  
 PERCENT VOLATILE:..... N/A  
 pH:..... N/A  
 VISCOSITY:..... 13000.0 - 16000.0 centipoise  
 (@ Room Temperature)  
 MELTING POINT:..... N/D

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

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2. PHYSICAL DATA (continued)  
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APPEARANCE AND ODOR:

viscous liquid, black, very mild odor.

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3. FIRE AND EXPLOSION HAZARD DATA  
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FLASH POINT:..... > 370.00 F COC

FLAMMABLE LIMITS - LEL:..... N/A

FLAMMABLE LIMITS - UEL:..... N/A

AUTOIGNITION TEMPERATURE:..... N/D

EXTINGUISHING MEDIA:

Water, Carbon dioxide, Dry chemical, Foam

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:

None known.

NFPA HAZARD CODES: HEALTH: 1 FIRE: 0 REACTIVITY: 0

UNUSUAL REACTION HAZARD: none

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4. REACTIVITY DATA  
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STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

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

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide and Carbon Dioxide, Aldehydes, Ketones, Hydrocarbons, Toxic Vapors, Gases or Particulates.

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Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

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5. ENVIRONMENTAL INFORMATION  
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SPILL RESPONSE:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Cover with absorbent material. Collect spilled material. Place in a U.S. DOT-approved container.

RECOMMENDED DISPOSAL:

Cure product according to product instructions. Incinerate uncured waste in an industrial or commercial incinerator. Dispose of completely cured (or polymerized) material in a sanitary landfill.

ENVIRONMENTAL DATA:

Not determined.

REGULATORY INFORMATION:

Volatile Organic Compounds: N/A.  
VOC Less H2O & Exempt Solvents: N/D.

Since regulations vary, consult applicable regulations or authorities before disposal. U.S. EPA Hazardous Waste Number = None (Not U.S. EPA Hazardous).

EPCRA HAZARD CLASS:

FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: Yes CHRONIC: Yes

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6. SUGGESTED FIRST AID  
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EYE CONTACT:

Immediately flush eyes with large amounts of water. Get immediate medical attention.

SKIN CONTACT:

Immediately wash skin with soap and large amounts of water. Remove contaminated clothing. If signs/symptoms occur, call a physician. Wash contaminated clothing before reuse and dispose of contaminated shoes.

INHALATION:

If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

IF SWALLOWED:

Do not induce vomiting. Drink two glasses of water. Call a physician.

-----  
Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

Avoid eye contact. Wear vented goggles. Wear safety glasses with side shields.

SKIN PROTECTION:

Avoid skin contact. Wear appropriate gloves when handling this material. A pair of gloves made from the following material(s) are recommended: polyethylene/ethylene vinyl alcohol.

RECOMMENDED VENTILATION:

Provide appropriate local exhaust for grinding, cutting or sanding cured material. Curing ovens must be exhausted to outdoors or to a suitable emission control device. Use in a well-ventilated area. If exhaust ventilation is not adequate, use appropriate respiratory protection.

RESPIRATORY PROTECTION:

Avoid breathing of vapors created during the cure cycle. Avoid breathing of dust created by cutting, sanding or grinding. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: half-mask dust respirator.

PREVENTION OF ACCIDENTAL INGESTION:

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

RECOMMENDED STORAGE:

Store away from heat. Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Keep container tightly closed.

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
EPOXY RESIN.....	NONE	NONE	NONE	NONE	
HYDROCARBON RESIN.....	NONE	NONE	NONE	NONE	
CARBON BLACK.....	3.5	MG/M3	TWA	ACGIH	
CARBON BLACK.....	3.5	MG/M3	TWA	OSHA	
CARBON BLACK.....	0.5	MG/M3	TWA	CMRG	

\* SKIN NOTATION: Listed substances indicated with 'Y' under SKIN 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.

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
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SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- CMRG: Chemical Manufacturer Recommended Exposure Guidelines
- OSHA: Occupational Safety and Health Administration
- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:

Moderate Eye Irritation: signs/symptoms can include redness, swelling, pain, tearing, and hazy vision.

Vapors from heated material may cause eye irritation.

Dust created by cutting, grinding, sanding, or machining may cause eye irritation.

SKIN CONTACT:

Allergic Skin Reaction: signs/symptoms can include redness, swelling, blistering, and itching.

Mild Skin Irritation: signs/symptoms can include redness, swelling, and itching.

INHALATION:

Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

Vapors of heated material may cause respiratory system irritation.

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system.

IF SWALLOWED:

Ingestion may cause:

Irritation of Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, abdominal tenderness, nausea, blood in vomitus, and blood in feces.

CANCER:

CARBON BLACK EXTRACTS are a potential cancer hazard causing injection site, stomach and skin tumors by the subcutaneous, oral and dermal routes of exposure in laboratory animal studies (IARC possible human carcinogen 2B, Calif. Proposition 65).

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

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8. HEALTH HAZARD DATA (continued)  
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OTHER HEALTH HAZARD INFORMATION:

Exposure to this material in normal storage and handling has not been reported to cause significant adverse health effects. However, under normal processing conditions, e.g. grinding or heating, this product may release fumes and vapors of variable composition based on specific process conditions. These process releases may produce irritation or any of the health effects listed above when the emissions are present at elevated concentrations. Use with appropriate local exhaust ventilation.

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SECTION CHANGE DATES  
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HEADING	SECTION CHANGED SINCE April 17, 2001	ISSUE
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Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately  
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DIVISION: ENGINEERED ADHESIVES  
 TRADE NAME:

SCOTCH-WELD(TM) Epoxy Potting Compound/Adhesive DP-270, Black (Part A  
 )

ISSUED: May 29, 2001  
 SUPERSEDES: October 29, 1999  
 DOCUMENT: 11-1419-8

1. INGREDIENT	C.A.S. NO.	PERCENT	
PHENOL, 4-NONYL-, branched.....	84852-15-3	40.0	- 60.0
4,4'-METHYLENEBIS(2-METHYLCYCLOHEXYLAMINE).....	6864-37-5	15.0	- 40.0
BENZYL ALCOHOL.....	100-51-6	7.0	- 13.0

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.

This Part A (Mfg #PA-3366) used with SCOTCH-WELD DP-270 Part B Black;  
 (Mfg #PA-3266 --- MSDS DOC #1114180).

2. PHYSICAL DATA

BOILING POINT:..... 401.00 F  
 @ 760mm Hg (benzyl alcohol)  
 VAPOR PRESSURE:..... 0.1000 mmHg  
 @ 86F (30C); 13.3mm Hg @ 212F (100C).  
 VAPOR DENSITY:..... 3.72 Air=1  
 EVAPORATION RATE:..... N/D  
 SOLUBILITY IN WATER:..... slight  
 SPECIFIC GRAVITY:..... 1.000 Water=1  
 PERCENT VOLATILE:..... N/A  
 pH:..... N/A  
 VISCOSITY:..... 12000.0 - 15000.0 centipoise  
 (@ Room Temperature)  
 MELTING POINT:..... N/D

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately



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2. PHYSICAL DATA (continued)  
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APPEARANCE AND ODOR:  
viscous liquid, clear, very mild pungent odor.

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3. FIRE AND EXPLOSION HAZARD DATA  
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FLASH POINT:..... > 259.00 F Setaflash  
FLAMMABLE LIMITS - LEL:..... N/A  
FLAMMABLE LIMITS - UEL:..... N/A  
AUTOIGNITION TEMPERATURE:..... N/D

EXTINGUISHING MEDIA:  
Water, Carbon dioxide, Dry chemical, Foam

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:  
None known.

NFPA HAZARD CODES: HEALTH: 1 FIRE: 1 REACTIVITY: 0  
UNUSUAL REACTION HAZARD: none

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4. REACTIVITY DATA  
-----

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/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 (exotherm) with production of intense heat and smoke.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:  
Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Amine Compounds, Toxic Vapors, Gases or Particulates.

-----  
Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

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5. ENVIRONMENTAL INFORMATION  
-----

SPILL RESPONSE:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Cover with absorbent material. Collect spilled material. Place in a U.S. DOT-approved container.

RECOMMENDED DISPOSAL:

Cure product according to product instructions. Incinerate uncured waste in an industrial or commercial incinerator. Dispose of completely cured (or polymerized) material in a sanitary landfill.

ENVIRONMENTAL DATA:

Not determined.

REGULATORY INFORMATION:

Volatile Organic Compounds: N/D.  
VOC Less H2O & Exempt Solvents: N/D.

Since regulations vary, consult applicable regulations or authorities before disposal. U.S. EPA Hazardous Waste Number = None (Not U.S. EPA Hazardous).

EPCRA HAZARD CLASS:

FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: Yes CHRONIC: Yes

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6. SUGGESTED FIRST AID  
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EYE CONTACT:

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

SKIN CONTACT:

Immediately flush skin with large amounts of water for at least 15 minutes in a chemical safety shower while removing contaminated clothing and shoes. Get immediate medical attention. Wash contaminated clothing before reuse.

INHALATION:

If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

IF SWALLOWED:

Do not induce vomiting. Drink two glasses of water. Call a physician.

-----  
Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

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7. PRECAUTIONARY INFORMATION  
-----

EYE PROTECTION:

Avoid eye contact. Wear vented goggles. Wear safety glasses with side shields.

SKIN PROTECTION:

Avoid skin contact. Wear appropriate gloves when handling this material. A pair of gloves made from the following material(s) are recommended: polyethylene/ethylene vinyl alcohol.

RECOMMENDED VENTILATION:

Provide appropriate local exhaust for grinding, cutting or sanding cured material. Curing ovens must be exhausted to outdoors or to a suitable emission control device. Use in a well-ventilated area. If exhaust ventilation is not adequate, use appropriate respiratory protection.

RESPIRATORY PROTECTION:

Avoid breathing of vapors. Avoid breathing of dust created by cutting, sanding or grinding. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: half-mask dust respirator.

PREVENTION OF ACCIDENTAL INGESTION:

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

RECOMMENDED STORAGE:

Store away from heat. Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Keep container tightly closed.

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
PHENOL, 4-NONYL-, branched.....	NONE	NONE	NONE	NONE	
4,4'-METHYLENEBIS(2-METHYLCYCLOHEXYLAMINE).....	NONE	NONE	NONE	NONE	
BENZYL ALCOHOL.....	10	PPM	TWA	AIHA	

\* SKIN NOTATION: Listed substances indicated with 'Y' under SKIN 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:

-----  
Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
- AIHA: American Industrial Hygiene Assoc. Workplace Environmental Exposure Level Guideline					
- NONE: None Established					

8. HEALTH HAZARD DATA

EYE CONTACT:

Chemical Related Eye Burns (chemical corrosivity): signs/symptoms can include cloudy appearance of the cornea, chemical burns, pain, tearing, ulcers, impaired vision or loss of vision.

Vapors from heated material may cause eye irritation.

Dust created by cutting, grinding, sanding, or machining may cause eye irritation.

SKIN CONTACT:

Skin Burns (chemical corrosivity): signs/symptoms can include redness, swelling, itching, pain, blistering, ulceration, sloughing, and scar formation.

May be absorbed through the skin and produce effects similiar to those caused by inhalation and/or ingestion.

INHALATION:

Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

Vapors of heated material may cause respiratory system irritation.

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system.

IF SWALLOWED:

Ingestion may cause:

Irritation of Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, abdominal tenderness, nausea, blood in vomitus, and blood in feces.

OTHER HEALTH HAZARD INFORMATION:

Exposure to this material in normal storage and handling has not been reported to cause significant adverse health effects. However, under normal processing conditions, e.g. grinding or heating, this product may release fumes and vapors of variable composition based on specific process conditions. These process releases may produce

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

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8. HEALTH HAZARD DATA (continued)  
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irritation or any of the health effects listed above when the emissions are present at elevated concentrations. Use with appropriate local exhaust ventilation.

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SECTION CHANGE DATES  
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HEADING SECTION CHANGED SINCE October 29, 1999 ISSUE

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