



Material Safety Data Sheet

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PRODUCT NAME: Scotch-Weld(TM) Epoxy Adhesive DP-100 Plus, 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: 08/08/2003
Supersedes Date: 08/07/2003

Document Group: 05-6638-0

ID Number(s):
62-3272-1430-0, 62-3272-1435-9, 62-3272-3530-5, 62-3272-3830-9

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:

05-6631-5, 05-6630-7

Revision Changes:

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

Section 1: Product name was modified.

Kit: Product name was modified.

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M(TM) Scotch-Weld(TM) Epoxy Adhesive DP-100 Plus, Clear (Part A)
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: 01/12/2004
Supersedes Date: 01/02/2004

Document Group: 05-6630-7

Product Use:

Specific Use: Accelerator for two-part epoxy adhesive.

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
MERCAPTAN TERMINATED POLYMER - N.J.T.S. REGISTRY NO. 679485-5016P	Trade Secret	80 - 90
MERCAPTAN TERMINATED POLYMER BLEND-N.J.T.S. REGISTRY NO. 679485-5320, 5321, 5322, 5323P	Trade Secret	10 - 20
BIS(DIMETHYLAMINOETHYL) ETHER	3033-62-3	0.1 - 1

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Viscous

Odor, Color, Grade: clear, mercaptan odor

General Physical Form: Liquid

Immediate health, physical, and environmental hazards:

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Vapors from heated material may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

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

Inhalation:

Vapors from heated material may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Ingestion:

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

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. 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	≥ 115 °C [Test Method: Estimated]
Flammable Limits - LEL	Not Applicable
Flammable Limits - UEL	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

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. Contain spill. Collect as much of the spilled material as possible. 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

Avoid breathing of dust created by cutting, sanding, grinding or machining. 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. Keep out of the reach of children.

7.2 STORAGE

Store away from heat.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Use in a well-ventilated area. Provide appropriate local exhaust for cutting, grinding, sanding or machining. 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: Safety Glasses with side shields, Indirect Vented Goggles.

8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Polyethylene/Ethylene Vinyl Alcohol.

8.2.3 Respiratory Protection

Avoid breathing of dust created by cutting, sanding, grinding or machining. 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 P100 particulate filters, Half facepiece or fullface air-purifying respirator with P95 particulate filters, Half facepiece or fullface air-purifying respirator with N95 particulate filters. 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>	<u>Additional Information</u>
BIS(DIMETHYLAMINOETHYL) ETHER	ACGIH	TWA	0.05 ppm	Skin Notation*
BIS(DIMETHYLAMINOETHYL) ETHER	ACGIH	STEL	0.15 ppm	Skin Notation*

* 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:	Viscous
Odor, Color, Grade:	clear, mercaptan odor
General Physical Form:	Liquid
Autoignition temperature	<i>No Data Available</i>
Flash Point	>=115 °C [<i>Test Method: Estimated</i>]
Flammable Limits - LEL	<i>Not Applicable</i>
Flammable Limits - UEL	<i>Not Applicable</i>

Boiling point	<i>Not Applicable</i>
Density	1.15 g/ml
Vapor Density	<i>Not Applicable</i>
Vapor Pressure	<=0.01 mmHg [@ 20 °C]
Specific Gravity	1.15
pH	<i>Not Applicable</i>
Melting point	<i>Not Applicable</i>
Solubility in Water	Negligible
Evaporation rate	<i>Not Applicable</i>
Volatile Organic Compounds	0 g/l
VOC Less H2O & Exempt Solvents	0 g/l
Viscosity	19,400 centipoise [@ 20 °C]

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and 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 or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Sulfide	During Combustion
Oxides of Sulfur	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

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 - No

STATE REGULATIONS

Contact 3M for more information.

CHEMICAL INVENTORIES

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 name was modified.
Section 2: Ingredient table was modified.
Page Heading: Product name was modified.
Section 8: Exposure guidelines data source legend was added.
Section 8: Exposure guidelines ingredient information was added.
Section 8: Exposure guideline note was added.
Section 15: Ingredient comment heading was deleted.
Section 14: ID Number(s) was deleted.
Section 8: Exposure guidelines information - none - was deleted.
Section 15: Inventories comment was deleted.

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MATERIAL SAFETY 3M
 DATA SHEET 3M Center
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DIVISION: ENGINEERED ADHESIVES
 TRADE NAME:
 Scotch-Weld(TM) Epoxy Adhesive DP-100 Plus, Clear (Part B)
 ISSUED: May 16, 2001
 SUPERSEDES: July 30, 1999
 DOCUMENT: 05-6631-5

1. INGREDIENT	C.A.S. NO.	PERCENT	
EPOXY RESIN.....	25068-38-6	98.5	- 99.5
ORGANOSILANE.....	2530-83-8	.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 Base (Mfg. #EC-3272) used with Scotch-Weld DP-100 Plus Part A
 Clear Epoxy Adh,; (Mfg. #EC-3372 - MSDS DOC #05-6630-7).

2. PHYSICAL DATA

BOILING POINT:..... N/A
 VAPOR PRESSURE:..... N/A
 VAPOR DENSITY:..... N/A
 EVAPORATION RATE:..... N/A
 SOLUBILITY IN WATER:..... Not soluble
 SPECIFIC GRAVITY:..... 1.17
 PERCENT VOLATILE:..... 0% By Weight
 pH:..... N/A
 VISCOSITY:..... 10,000-30,000 cps
 MELTING POINT:..... N/D

APPEARANCE AND ODOR:
 medium syrup, light straw colored, epoxy odor

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

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... N/A
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:

No unusual fire or explosion hazards are anticipated.

NFPA HAZARD CODES: HEALTH: 2 FIRE: 1 REACTIVITY: 0
UNUSUAL REACTION HAZARD: none

4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

Strong Acids, Strong Oxidizing Agents, Amines. 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.

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.

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

5. ENVIRONMENTAL INFORMATION (continued)

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: 0 gms/liter.
VOC Less H2O & Exempt Solvents: 0 gms/liter.

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

6. SUGGESTED FIRST AID

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.

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

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

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

7. PRECAUTIONARY INFORMATION (continued)

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	
ORGANOSILANE.....	5	PPM	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.

SOURCE OF EXPOSURE LIMIT DATA:

- CMRG: Chemical Manufacturer Recommended Exposure Guidelines
- NONE: None Established

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

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.

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.

SECTION CHANGE DATES

HEADING	SECTION CHANGED SINCE July 30, 1999	ISSUE
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