

MATERIAL SAFETY 3M
DATA SHEET 3M Center
 St. Paul, Minnesota
 55144-1000
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DIVISION: ENGINEERED ADHESIVES

TRADE NAME:

Scotch-Weld (TM) EPX (TM) Applicator and Duo-Pak Adhesives Starter
Pack Part A & B

ID NUMBER/U.P.C.:

62-9740-9939-2 00-21200-85862-8

ISSUED: May 30, 2001

SUPERSEDES: August 28, 1996

DOCUMENT: 11-6520-8

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:

11-6518-2

11-6519-0

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

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DIVISION: ENGINEERED ADHESIVES
 TRADE NAME:
 Scotch-Weld (TM) EPX (TM) Applicator and Duo-Pak Adhesives Starter
 Pack (Part B)
 ISSUED: May 30, 2001
 SUPERSEDES: October 25, 2000
 DOCUMENT: 11-6518-2

1. INGREDIENT	C.A.S. NO.	PERCENT
SCOTCH-WELD (TM) DP-100 CLEAR EPOXY		
ADHESIVE PART B CONTAINS:.....	None	Unknown
EPOXY RESIN.....	25068-38-6	100.0
SCOTCH-WELD (TM) DP-190 GRAY EPOXY		
ADHESIVE PART B CONTAINS:.....	None	Unknown
EPOXY RESIN.....	25068-38-6	70.0 - 80.0
KAOLIN.....	1332-58-7	20.0 - 30.0
SCOTCH-WELD (TM) DP-420 OFF-WHITE EPOXY		
ADHESIVE PART B CONTAINS:.....	None	Unknown
EPOXY RESIN.....	25068-38-6	80.0 - 90.0
ACRYLIC POLYMER - N.J. TRADE SECRET (T.S.) REGISTRY #04499600-5018P.....	TradeSecret	10.0 - 20.0

MSDS's for individual products DP-100 Part B, DP-190 Part B and
 DP-420 Part B are available upon request.

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:.....	1.140 - 1.330 Water=1
PERCENT VOLATILE:.....	0.00 % by wt
pH:.....	N/A
VISCOSITY:.....	N/A
MELTING POINT:.....	N/D

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

2. PHYSICAL DATA (continued)

APPEARANCE AND ODOR:

medium syrup, DP-100 straw colored, DP-190 & DP-420 white, very mild odor.

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... > 340.00 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: 1

UNUSUAL REACTION HAZARD: none

4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

Strong Acids, Strong Oxidizing Agents, Heat. 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.

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

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: 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.

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.

OTHER PRECAUTIONARY INFORMATION:

Do not cure up a mass of combined material larger than 50 grams to prevent the possibility of exotherm.

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
SCOTCH-WELD (TM) DP-100 CLEAR					
EPOXY ADHESIVE PART B CONTAINS:....	NONE	NONE	NONE	NONE	
EPOXY RESIN.....	NONE	NONE	NONE	NONE	
SCOTCH-WELD (TM) DP-190 GRAY EPOXY					
ADHESIVE PART B CONTAINS:.....	NONE	NONE	NONE	NONE	
EPOXY RESIN.....	NONE	NONE	NONE	NONE	
KAOLIN.....	2	MG/M3	TWA	ACGIH	

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

8. HEALTH HAZARD DATA (continued)

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 October 25, 2000 ISSUE

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DIVISION: ENGINEERED ADHESIVES
 TRADE NAME:
 Scotch-Weld (TM) EPX (TM) Applicator and Duo-Pak Adhesives Starter
 Pack (Part A)
 ISSUED: May 30, 2001
 SUPERSEDES: April 23, 2001
 DOCUMENT: 11-6519-0

1. INGREDIENT	C.A.S. NO.	PERCENT
SCOTCH-WELD (TM) DP-100 CLEAR EPOXY ADHESIVE PART A CONTAINS:.....	None	Unknown
MERCAPTAN TERMINATED POLYMER N.J. TRADE SECRET REGISTRY NO. 679485-5016P.....	TradeSecret	87.0 - 93.0
2,4,6-TRIS (DIMETHYLAMINO)METHYL PHENOL. SCOTCH-WELD (TM) DP-190 GRAY EPOXY ADHESIVE PART A CONTAINS:.....	90-72-2	7.0 - 13.0
POLYMERIC DIAMINE.....	None	Unknown
KAOLIN.....	68541-13-9	55.0 - 70.0
CARBON BLACK.....	1332-58-7	30.0 - 45.0
SCOTCH-WELD (TM) DP-420 OFF-WHITE EPOXY ADHESIVE PART A CONTAINS:.....	1333-86-4	< 0.1
GLYCOL AMINE - N.J. TRADE SECRET (T.S.) REGISTRY #04499600-5019P.....	None	Unknown
MODIFIED DIGLYCIDYL ETHER OF BISPHENOL A - N.J. TRADE SECRET (T.S.) REGISTRY #04499600-5023P.....	TradeSecret	50.0 - 60.0
EPOXY RESIN.....	TradeSecret	20.0 - 30.0
AMORPHOUS SILICA.....	25068-38-6	1.0 - 10.0
2,4,6- TRIS((DIMETHYLAMINO)METHYL)PHENOL....	7631-86-9	1.0 - 10.0
SULFONIC ACID SALT - N.J. TRADE SECRET (T.S.) REGISTRY #04499600-5022P.....	90-72-2	1.0 - 10.0

MSDS's for individual product DP-100 Part A, DP-190 Part A and DP-420
 Part A are available upon request.

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

2. PHYSICAL DATA

BOILING POINT:..... N/A
VAPOR PRESSURE:..... N/A
VAPOR DENSITY:..... 3.72 Air=1
EVAPORATION RATE:..... N/A
SOLUBILITY IN WATER:..... slight
SPECIFIC GRAVITY:..... 1.120 - 1.260 Water=1
PERCENT VOLATILE:..... 0.00 % by wt
pH:..... N/A
VISCOSITY:..... N/A
MELTING POINT:..... N/D

APPEARANCE AND ODOR:

dp-100 medium liquid, dp-190 paste, dp-420 viscous liquid, DP-100
dark amber, DP-190 gray, DP-420 amber, DP-100 mercaptan odor,

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... > 340.00 F TCC
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: 1
UNUSUAL REACTION HAZARD: none

4. REACTIVITY DATA

STABILITY: Stable

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

4. REACTIVITY DATA (continued)

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:

Strong Oxidizing Agents, Heat. 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, Oxides of Sulfur, 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.

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

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

6. SUGGESTED FIRST AID

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.

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.

 7. PRECAUTIONARY INFORMATION (continued)

RECOMMENDED STORAGE:

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

FIRE AND EXPLOSION AVOIDANCE:

Keep container tightly closed.

OTHER PRECAUTIONARY INFORMATION:

Do not cure up a mass of combined material larger than 50 grams to prevent the possibility of exotherm.

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
SCOTCH-WELD (TM) DP-100 CLEAR					
EPOXY ADHESIVE PART A CONTAINS:....	NONE	NONE	NONE	NONE	
MERCAPTAN TERMINATED POLYMER N.J.					
TRADE SECRET REGISTRY NO. 679485-5016P.....	NONE	NONE	NONE	NONE	
2,4,6-TRIS (DIMETHYLAMINO)METHYL PHENOL.....	5	PPM	TWA	CMRG	
SCOTCH-WELD (TM) DP-190 GRAY EPOXY					
ADHESIVE PART A CONTAINS:.....	NONE	NONE	NONE	NONE	
POLYMERIC DIAMINE.....	NONE	NONE	NONE	NONE	
KAOLIN.....	2	MG/M3	TWA	ACGIH	
		RESPIRABLE			
KAOLIN.....	10	MG/M3	TWA	OSHAV	
		AS DUST			
		OSHA VACATED PEL			
KAOLIN.....	15	MG/M3	TWA	OSHA	
		AS TOTAL DUST			
KAOLIN.....	5	MG/M3	TWA	OSHA	
		RESPIRABLE			
CARBON BLACK.....	3.5	MG/M3	TWA	ACGIH	
CARBON BLACK.....	3.5	MG/M3	TWA	OSHA	
CARBON BLACK.....	0.5	MG/M3	TWA	CMRG	
SCOTCH-WELD (TM) DP-420 OFF-WHITE					
EPOXY ADHESIVE PART A CONTAINS:....	NONE	NONE	NONE	NONE	
GLYCOL AMINE - N.J. TRADE SECRET					
(T.S.) REGISTRY #04499600-5019P....	NONE	NONE	NONE	NONE	
MODIFIED DIGLYCIDYL ETHER OF					
BISPHENOL A - N.J. TRADE SECRET					
(T.S.) REGISTRY #04499600-5023P....	NONE	NONE	NONE	NONE	
EPOXY RESIN.....	NONE	NONE	NONE	NONE	
AMORPHOUS SILICA.....	3	MG/M3	TWA	CMRG	
		AS RESPIRABLE DUST			
2,4,6-					
TRIS((DIMETHYLAMINO)METHYL))PHENOL.	5	PPM	TWA	CMRG	

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

EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
SULFONIC ACID SALT - N.J. TRADE SECRET (T.S.) REGISTRY #04499600-5022P.....	NONE	NONE	NONE	NONE	

* 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:

- ACGIH: American Conference of Governmental Industrial Hygienists
- CMRG: Chemical Manufacturer Recommended Exposure Guidelines
- OSHA: Occupational Safety and Health Administration
- OSHAV: Occupational Safety and Health Administration Vacated PEL. Vacated Permissible Exposure Limits (PEL) are enforced as the OSHA PEL in some states. Check with your local regulatory authority.
- 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:

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

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

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

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

8. HEALTH HAZARD DATA (continued)

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	ISSUE
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