

3M General Offices
3M Center
St. Paul, Minnesota 55144-1000
612/733 1110

03-04
3576

Duns No.: 00-617-3082

MATERIAL SAFETY
DATA SHEET



DIVISION: ADHESIVES, COATINGS AND SEALERS

TRADE NAME:

3M Channel Bonding Adhesive PART NO. 08640 (Hardener) (PG)
3M I.D. NUMBER: 62-3591-0309-0

ISSUED: SEPTEMBER 21, 1989

SUPERSEDES: JUNE 19, 1989

DOCUMENT: 10-8288-2

1. INGREDIENT	C.A.S. NO.	PERCENT	EXPOSURE		LIMITS	
			VALUE	UNIT	TYPE	AUTH
mercaptan terminated polymer - Vendor Trade Secret (V.T.S.)	V.T.S.	70.0 - 80.0	NONE	NONE	NONE	NONE
limestone	1317-65-3	10.0 - 20.0	10	mg/m3	TWA	ACGIH
amorphous silica	7631-86-9	1.0 - 10.0	3	mg/m3	TWA	ACGIH
ethylene glycol	107-21-1	1.0 - 10.0	50	NONE	NONE	ACGIH
triethylenediamine	280-57-9	1.0 - 10.0	NONE	NONE	NONE	NONE

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- NONE: None Established

NOTE: This Hardener (Mfg. #PG-3691) used with 3M Channel Bonding Adh (Base)
(PG) PART NO. 08640; (Mfg. #PG-3591 - MSDS DOC #1082874).

THIS PRODUCT CONTAINS THE FOLLOWING TOXIC CHEMICAL OR CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372:
ethylene glycol

2. PHYSICAL DATA

BOILING POINT:..... N/A
VAPOR PRESSURE:..... N/A
VAPOR DENSITY: N/A
EVAPORATION RATE:..... N/A
SOLUBILITY IN WATER: 0.1-1.0 %
SP. GRAVITY:..... 1.270 Water = 1
PERCENT VOLATILE: N/A
(0% By Weight)
VOLATILE ORGANICS: N/A
pH: N/A
VISCOSITY: Non-sag paste
APPEARANCE AND ODOR: Black, paste, pungent odor.

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... N/A
(None)
FLAMMABLE LIMITS - LEL: N/A
FLAMMABLE LIMITS - UEL: N/A
AUTOIGNITION TEMPERATURE: ... N/D
EXTINGUISHING MEDIA:
CO2, foam, dry chemical, water
SPECIAL FIRE FIGHTING PROCEDURES:
Fire fighters should wear self-contained breathing apparatus when
fighting fires involving this material.
UNUSUAL FIRE AND EXPLOSION HAZARDS:
None.

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

Duns No.: 00-617-3082

MATERIAL SAFETY
DATA SHEET



MSDS: 3M Channel Bonding Adhesive PART NO. 08640 (Hardener) (PG)
SEPTEMBER 21, 1989

PAGE: 2 of 3

3. FIRE AND EXPLOSION HAZARD DATA (continued)

NFPA-HAZARD-CODES: HEALTH 1 FIRE 0 REACTIVITY 1
UNUSUAL REACTION HAZARD: NONE

4. REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY - MATERIALS TO AVOID:
N/A
HAZARDOUS POLYMERIZATION: Will Not Occur
HAZARDOUS DECOMPOSITION PRODUCTS:
CO, CO₂, nitrogen oxides and smoke particles when subjected to
excessive heat or flame.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:
Ventilate the area. Observe the precautions from other sections.
Collect spilled materials. Place in a U.S. Department of
Transportation - approved metal container, and seal.

RECOMMENDED DISPOSAL:
Mix Hardener with Base. Completely cure and dispose of fully cured
waste product in a sanitary landfill. Incinerate uncured bulk
product after mixing with flammable material in an industrial or
commercial facility. Disposal should be in accordance with
applicable regulations.

ENVIRONMENTAL DATA:
Volatile Organic Compound (VOC):
Maximum VOC = N/A.
Maximum VOC minus Water minus Exempt Solvents = N/A.

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

6. SUGGESTED FIRST AID

EYE CONTACT:
Immediately flush eyes with plenty of water for at least 10 minutes.
Call a physician.

SKIN CONTACT:
Wash affected area with soap and water.

INHALATION:
Provide fresh air. Call a physician.

IF SWALLOWED:
Do not induce vomiting. Call a physician or poison control center.

OTHER FIRST AID:
NONE

3M General Offices
3M Center
St. Paul, Minnesota 55144-1000
612/733 1110

03-04
3578

Duns No.: 00-617-3082

MATERIAL SAFETY
DATA SHEET



MSDS: 3M Channel Bonding Adhesive PART NO. 08640 (Hardener) (PG)
SEPTEMBER 21, 1989

PAGE: 3 of 3

7. PRECAUTIONARY INFORMATION

This product is a kit consisting of two components. The precautions for each part must be observed when separate or mixed. Observe precautions from all sections. Use only in areas with sufficient ventilation to prevent vapor buildup. Avoid eye contact; wear appropriate eye protection such as safety glasses or chemical goggles. Avoid repeated or prolonged skin contact; wear impervious gloves. Avoid eye contact with or breathing dust from grinding, sanding or cutting on the cured adhesive; wear eye protection and dust mask. Keep out of the reach of children.

ADDITIONAL EXPOSURE LIMITS

INGREDIENTS	---- EXPOSURE		LIMITS -----	
	VALUE	UNIT	TYPE	AUTH
limestone	15	mg/m3	TWA	OSHA
amorphous silica	6	mg/m3	TWA	ACGIH
ethylene glycol	125	mg/m3	CEIL	ACGIH
ethylene glycol	50	NONE	NONE	OSHA
ethylene glycol	125	mg/m3	CEIL	OSHA

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- OSHA: Occupational Safety and Health Administration

8. HEALTH HAZARD DATA

EYE CONTACT: May cause eye irritation. Dust from grinding, sanding or cutting the cured adhesive may be irritating to the eyes.

SKIN CONTACT: May cause skin irritation.

INHALATION: Vapor overexposure may cause respiratory system irritation. Chronic overexposure to ethylene glycol vapors has caused blood changes and kidney and liver damage in laboratory animals.

INGESTION: May cause digestive system irritation. Ingestion of ethylene glycol may cause kidney damage and nervous system damage.

SECTION CHANGE DATES

HEADING	SECTION CHANGED SINCE	JUNE 19, 1989 ISSUE
INGREDIENTS	SECTION CHANGED SINCE	JUNE 19, 1989 ISSUE

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

The information on this Data Sheet represents our current data and best opinion as to the proper use in handling of this material under normal conditions. Any use of the material which is not in conformance with this Data Sheet or which involves using the material in combination with any other material or any other process is the responsibility of the user.