

MATERIAL SAFETY 3M  
 DATA SHEET 3M Center  
 St. Paul, Minnesota  
 55144-1000  
 1-800-364-3577 or (651) 737-6501 (24 hours)

Copyright, 2001, Minnesota Mining and Manufacturing Company.  
 All rights reserved. Copying and/or downloading of this  
 information for the purpose of properly utilizing 3M products  
 is allowed provided that:

- 1) the information is copied in full with no changes unless  
 prior agreement is obtained from 3M, and
- 2) neither the copy nor the original is resold or otherwise  
 distributed with the intention of earning a profit thereon.

DIVISION: ENGINEERED ADHESIVES

TRADE NAME:

SCOTCH-WELD (TM) 2214 Regular Epoxy Adhesive

ID NUMBER/U.P.C.:

62-2214-2930-1 00-21200-20344-2 62-2214-2932-7 00-21200-39214-6  
 62-2214-2935-0 00-21200-87971-5 62-2214-6530-5 00-21200-20345-9  
 62-2214-7530-4 00-21200-20346-6 62-2214-8530-3 00-21200-20347-3

ISSUED: August 03, 2001

SUPERSEDES: May 24, 2001

DOCUMENT:10-2666-5

1. INGREDIENT	C.A.S. NO.	PERCENT	
EPOXY RESIN.....	25068-38-6	40.0	- 50.0
ALUMINUM PIGMENTS.....	7429-90-5	30.0	- 40.0
SYNTHETIC ELASTOMER - N.J. TRADE SECRET (T.S.) REGISTRY NO. 04499600-5706P....	TradeSecret	7.0	- 13.0
EPOXY RESIN.....	9072-62-2	3.0	- 7.0
DICYANDIAMIDE.....	461-58-5	3.0	- 7.0
AMORPHOUS SILICA.....	7631-86-9	1.0	- 5.0
PARA-CHLOROPHENYL-DIMETHYLUREA.....	150-68-5	1.0	- 5.0

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

This product contains the following toxic chemical or chemicals subject to  
 the reporting requirements of Section 313 of Title III of the Emergency  
 Planning and Community Right-To-Know Act of 1986 and 40 CFR Part 372:

ALUMINUM PIGMENTS  
 PARA-CHLOROPHENYL-DIMETHYLUREA

2. PHYSICAL DATA

BOILING POINT:..... N/A  
 VAPOR PRESSURE:..... N/A  
 VAPOR DENSITY:..... N/A  
 EVAPORATION RATE:..... N/A  
 SOLUBILITY IN WATER:..... Very slight

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

-----  
2. PHYSICAL DATA (continued)  
-----

SPECIFIC GRAVITY:..... 1.440 Water=1  
PERCENT VOLATILE:..... 0.00 % by wt  
pH:..... N/A  
VISCOSITY:..... 710.0 - 826.0 centistoke  
MELTING POINT:..... N/D

APPEARANCE AND ODOR:  
viscous paste, gray

-----  
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:  
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:  
Closed containers exposed to heat from fire may build pressure and  
explode.

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

-----  
4. REACTIVITY DATA  
-----

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:  
Strong Oxidizing Agents, Heat.

HAZARDOUS POLYMERIZATION: Hazardous polymerization may occur.  
Avoid heat sources which cause premature reaction (exotherm) with  
production of intense heat and smoke.

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

-----  
4. REACTIVITY DATA (continued)  
-----

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Hydrogen Cyanide.

-----  
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 inorganic 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/A.

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: Yes PRESSURE: No REACTIVITY: Yes 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.

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

-----  
6. SUGGESTED FIRST AID (continued)  
-----

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: butyl rubber, polyethylene/ethylene vinyl alcohol, polytetrafluoroethylene (Teflon), fluoroelastomer (Viton). Use one or more of the following personal protection items as necessary to prevent skin contact: apron, coveralls.

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. Provide sufficient ventilation to maintain emissions below recommended exposure limits. 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 ingest.

RECOMMENDED STORAGE:

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

FIRE AND EXPLOSION AVOIDANCE:

Avoid heat conditions which can cause premature reaction (exotherm) with production of intense heat and smoke.

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

-----  
7. PRECAUTIONARY INFORMATION (continued)  
-----

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
EPOXY RESIN.....	NONE	NONE	NONE	NONE	
ALUMINUM PIGMENTS.....	10	MG/M3	TWA	ACGIH	
ALUMINUM PIGMENTS.....	15	MG/M3	TWA	OSHA	
		AS TOTAL DUST			
ALUMINUM PIGMENTS.....	5	MG/M3	TWA	OSHA	
		RESPIRABLE			
SYNTHETIC ELASTOMER - N.J. TRADE SECRET (T.S.) REGISTRY NO. 04499600-5706P.....	NONE	NONE	NONE	NONE	
EPOXY RESIN.....	NONE	NONE	NONE	NONE	
DICYANDIAMIDE.....	NONE	NONE	NONE	NONE	
AMORPHOUS SILICA.....	3	MG/M3	TWA	CMRG	
		AS RESPIRABLE DUST			
PARA-CHLOROPHENYL-DIMETHYLUREA.....	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
  
- NONE: None Established

-----  
8. HEALTH HAZARD DATA  
-----

EYE CONTACT:

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

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.

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

-----  
8. HEALTH HAZARD DATA (continued)  
-----

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.

-----  
SECTION CHANGE DATES  
-----

HEALTH HAZARD DATA SECTION CHANGED SINCE May 24, 2001 ISSUE

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

The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M.