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DIVISION: ELECTRICAL PRODUCTS DIVISION TRADE NAME: KIT 72-N3 (SCOTCHCAST 2104) U.P.C. Number: 00-54007-10627-2 ISSUED: August 09, 2001 SUPERSEDES: August 23, 1996 DOCUMENT: 10-5575-5

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: 10-2611-1

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

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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: ELECTRICAL PRODUCTS DIVISION TRADE NAME: SCOTCHCAST BRAND ELECTRICAL INSULATING RESIN 2104 U.P.C. Number: 00-54007-11849-7 00-54007-31187-4 00-54007-31189-8 00-54007-31382-3 00-54007-31383-0 00-54007-50699-7 00-54007-50700-0 ISSUED: August 14, 2001 SUPERSEDES: May 02, 2001 DOCUMENT: 10-2611-1 _____ C.A.S. NO. PERCENT 1. INGREDIENT _____ - 45 - 25 POLYMETHYLENE POLYPHENYLENE ISOCYANATE. 9016-87-9 15 C. L. SOLVENT VELLOW 3 97-56-3 - 25 < 0.015 C.I. SOLVENT YELLOW 3..... 97-56-3

 P,P'-METHYLENEBIS(PHENYL ISOCYANATE)....
 101-68-8
 15

 1,1'-METHYLENEBIS(ISOCYANATOBENZENE)....
 26447-40-5
 1

- 20 - 5 PART B: POLYPROPYLENE GLYCOL GLYCEROL - 65 DIPROPYLENE GLYCOL...... 25265-71-8 5.0 - 10.0 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: POLYMETHYLENE POLYPHENYLENE ISOCYANATE C.I. SOLVENT YELLOW 3 P, P'-METHYLENEBIS (PHENYL ISOCYANATE) _____ 2. PHYSICAL DATA _____ BOILING POINT:..... N/A VAPOR PRESSURE: N/A VAPOR DENSITY: N/A EVAPORATION RATE:.... N/A SOLUBILITY IN WATER:.... Reacts _____ Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: SCOTCHCAST BRAND ELECTRICAL INSULATING RESIN 2104 August 14, 2001 PAGE 2 _____ 2. PHYSICAL DATA (continued) _____ SPECIFIC GRAVITY:..... PRE.:1.05 POL.:1.00 PERCENT VOLATILE:..... 0 pH:..... N/A VISCOSITY:..... PRE.:17p POL.:6p MELTING POINT: N/D APPEARANCE AND ODOR: PREPOLYMER: Green, viscous liquid POLYOL:Amber liquid _____ 3. FIRE AND EXPLOSION HAZARD DATA _____ FLASH POINT:..... Both >270F Closed Cup FLAMMABLE LIMITS - LEL:..... N/D FLAMMABLE LIMITS - UEL:..... N/D 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: See Hazardous Decomposition section for products of combustion. NFPA HAZARD CODES: HEALTH: 2 FIRE: 1 REACTIVITY: 0 UNUSUAL REACTION HAZARD: none _____ 4. REACTIVITY DATA _____ STABILITY: Stable INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID: Amines, Alcohols, Water. Reaction with water, alcohols and amines is not hazardous if container can vent to the atmosphere to prevent pressure buildup. This refers to Part A (prepolymer). HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur. _____ Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: SCOTCHCAST BRAND ELECTRICAL INSULATING RESIN 2104 August 14, 2001 PAGE 3 _____ 4. REACTIVITY DATA (continued) _____ HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Hydrogen Cyanide, Isocyanates, Toxic Vapors, Gases or Particulates, Irritant Vapors or Gases. _____ 5. ENVIRONMENTAL INFORMATION _____ SPILL RESPONSE: Follow precautionary information. PREPOLYMER: Wear an organic vapormask. Pour decontaminant (8% conc. ammonia, 2% liquid detergent, 90% water) over spill and react 10 minutes. If these reagents are not available, use water and allow a longer reaction time. Pour adsorbent over neutralized spill. Collect and drum. Let drum sit with excess decontaminant for 24 hours before sealing. POLYOL: Pour adsorbent over spill. Collect and drum. RECOMMENDED DISPOSAL: PREPOLYMER or POLYOL: Should be buried in a secure landfill or incinerated in accordance with local and state regulations. Cured resin may be buried in a sanitary landfill in accordance with local and state regulations. ENVIRONMENTAL DATA: No data available. **REGULATORY INFORMATION:** Volatile Organic Compounds: N/D. VOC Less H2O & Exempt Solvents: N/D. EPCRA HAZARD CLASS: FIRE HAZARD: NO 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. _____

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MSDS: SCOTCHCAST BRAND ELECTRICAL INSULATING RESIN 2104 August 14, 2001 PAGE 4 _____ 6. SUGGESTED FIRST AID (continued) _____ TNHALATTON: 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. SKIN PROTECTION: Avoid prolonged or repeated skin contact. Wear appropriate gloves when handling this material. **RECOMMENDED VENTILATION:** Use with appropriate local exhaust ventilation. Provide appropriate local exhaust for heat curing. 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 prolonged breathing of vapors. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: half-mask supplied air respirator. PREVENTION OF ACCIDENTAL INGESTION: Wash hands after handling and before eating. RECOMMENDED STORAGE: Not applicable. FIRE AND EXPLOSION AVOIDANCE: Not applicable. EXPOSURE LIMITS VALUE UNIT TYPE AUTH SKIN* INGREDIENT _____ PART A: DITRIDECYL PHTHALATE..... NONE NONE NONE NONE MDI POLYURETHANE PREPOLYMER..... NONE NONE NONE NONE POLYMETHYLENE POLYPHENYLENE NONE NONE NONE NONE ISOCYANATE..... NONE NONE NONE NONE C.I. SOLVENT YELLOW 3..... _____

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EXPOSURE LIMITS	(con	tinued)			
INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
P,P'-METHYLENEBIS(PHENYL					
ISOCYANATE)	0.02	PPM	CEIL	OSHA	
P,P'-METHYLENEBIS(PHENYL ISOCYANATE)	0.005	PPM	TWA	ACGIH	
1,1'-					
METHYLENEBIS(ISOCYANATOBENZENE) 1,1'-	0.005	PPM	TWA	ACGIH	
METHYLENEBIS(ISOCYANATOBENZENE) PART B: POLYPROPYLENE GLYCOL	0.02	PPM	CEIL	OSHA	
GLYCEROL TRIETHER	NONE	NONE	NONE	NONE	
N,N-DI(2-HYDROXYPROPYL)ANILINE	NONE	NONE	NONE	NONE	
DITRIDECYL PHTHALATE	NONE	NONE	NONE	NONE	
DIPROPYLENE GLYCOL	NONE	NONE	NONE	NONE	
<pre>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 - OSHA: Occupational Safety and Health Administration - NONE: None Established</pre>					
8. HEALTH HAZARD DATA					
EYE CONTACT: Mild Eye Irritation: signs/symptoms can include redness, swelling, pain, and tearing. SKIN CONTACT: Mild Skin Irritation (after prolonged or repeated contact):					
signs/symptoms can include redness, sw	velling,	and itchin	ıg.		
Part A (prepolymer) and the mixture of Part A with Part B (polyol) may cause an allergic skin reaction in certain susceptible individuals.					

INHALATION:

PREPOLYMER contains methylene bisphenyl diisocyanate (MDI) which is a respiratory irritant and may cause respiratory sensitization resulting in asthmatic-like symptoms. The low vapor pressure of MDI precludes significant hazard at room temperature.

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