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 2100 U.P.C. Number: 00-54007-34530-5 00-54007-34531-2 ISSUED: August 14, 2001 SUPERSEDES: December 01, 1997 DOCUMENT: 10-2610-3 _____ PERCENT 1. INGREDIENT C.A.S. NO. _____ PART A: DIPHENYL METHANE DIISOCYANATE... 101-68-8 35.0 - 45.0 3648-20-2 35.0 - 40.0 DIUNDECYL PHTHALATE..... - 10.0 20.0 - 25.0 - 5.0 CASTOR OIL..... 8001-79-4 1.0 - 5.0 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: PART A: DIPHENYL METHANE DIISOCYANATE _____ 2. PHYSICAL DATA _____ BOILING POINT: N/A VAPOR PRESSURE:..... N/A VAPOR DENSITY: N/A EVAPORATION RATE:.... N/A SOLUBILITY IN WATER:.... Reacts SPECIFIC GRAVITY:..... PRE.:1.05 POL.:0.97 PERCENT VOLATILE:.....0 pH:.....N/A _____ Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: SCOTCHCAST BRAND ELECTRICAL INSULATING RESIN 2100 August 14, 2001 PAGE 2 _____ 2. PHYSICAL DATA (continued) _____ VISCOSITY:..... PRE.:10p POL.:20p MELTING POINT:..... N/D APPEARANCE AND ODOR: PREPOLYMER: Dark viscous liquid POLYOL: Opaque viscous liquid _____ 3. FIRE AND EXPLOSION HAZARD DATA _____ FLASH POINT: Both>320F 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. HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Hydrogen Cyanide, Isocyanates, Toxic Vapors, Gases or Particulates, Irritant Vapors or Gases. _____ Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: SCOTCHCAST BRAND ELECTRICAL INSULATING RESIN 2100 August 14, 2001 PAGE 3 _____ 4. REACTIVITY DATA (continued) _____ 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. Pour isocyanate decontaminant solution (90% water,8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Alternatively, pour water on spill and allow to react for more than 30 minutes. Cover with absorbent. Place in an approved drum, but do not seal the drum for 48 hours to avoid possible pressure buildup. Neutralize spill residue with decontaminant solution. RECOMMENDED DISPOSAL: Incinerate in an industrial or commercial facility. Dispose of completely cured (or polymerized) material in a sanitary landfill. ENVIRONMENTAL DATA: No data available. **REGULATORY INFORMATION:** Volatile Organic Compounds: N/D. VOC Less H2O & Exempt Solvents: N/D. Since regulations vary, consult applicable regulations or authorities before disposal. 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: Flush skin with large amounts of water. If irritation persists, get medical attention. INHALATION: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention. _____ Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: SCOTCHCAST BRAND ELECTRICAL INSULATING RESIN 2100 August 14, 2001 PAGE 4 _____ 6. SUGGESTED FIRST AID (continued) _____ TE SWALLOWED: Do not induce vomiting. Drink two glasses of water. Call a physician. _____ 7. PRECAUTIONARY INFORMATION _____ EYE PROTECTION: Avoid eye contact. Wear safety glasses with side shields. SKIN PROTECTION: Avoid prolonged or repeated skin contact. Wear appropriate gloves when handling this material. RECOMMENDED VENTILATION: 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. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: half-mask organic vapor respirator. PREVENTION OF ACCIDENTAL INGESTION: Do not ingest. RECOMMENDED STORAGE: Keep container in well-ventilated area. Keep out of the reach of children. FIRE AND EXPLOSION AVOIDANCE: Keep container tightly closed. Do not heat under confinement. EXPOSURE LIMITS VALUE UNIT TYPE AUTH SKIN* INGREDIENT _____ PART A: DIPHENYL METHANE 0.02 PPM DIISOCYANATE..... CEIL OSHA PART A: DIPHENYL METHANE DIISOCYANATE..... 0.005 PPM TWA ACGIH NONE DIUNDECYL PHTHALATE..... NONE NONE NONE MONE NONE NONE MG/M3 TWA POLYBUTADIENE..... NONE NONE GLYCOLS, POLYPROPYLENE..... 10 AS PARTICULATE NONENONENONENONENONENONENONENONE PART B: POLYBUTADIENE..... DIUNDECYL PHTHALATE..... NONE NONE _____

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MSDS: SCOTCHCAST BRAND ELECTRICAL INSULATING RESIN 2100 August 14, 2001

PAGE 5

EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
GLYCOLS, POLYPROPYLENE		MG/M3 PARTICULATE	TWA	AIHA	
N,N-DI(2-HYDROXYPROPYL)ANILINE	NONE	NONE	NONE	NONE	
DIPROPYLENE GLYCOL	NONE	NONE	NONE	NONE	
ZEOLITES	NONE	NONE	NONE	NONE	
CASTOR OIL	10	MG/M3	TWA	OSHA	
	AS MIST				

* 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 - AIHA: American Industrial Hygiene Assoc. Workplace Environmental Exposure Level Guideline - OSHA: Occupational Safety and Health Administration - NONE: None Established _____ 8. HEALTH HAZARD DATA _____ EYE CONTACT: Mild Eye Irritation: signs/symptoms can include redness, swelling, pain, and tearing. 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: Prolonged or repeated exposure may cause: Allergic Respiratory Reaction: signs/symptoms can include difficulty breathing, wheezing, tightness of chest, and respiratory failure. Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing. IF SWALLOWED: Ingestion is not a likely route of exposure to this product. _____

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MSDS: SCOTCHCAST BRAND ELECTRICAL INSULATING RESIN 2100 August 14, 2001 PAGE 6 SECTION CHANGE DATES

HEADING SECTION CHANGED SINCE December 01, 1997 ISSUE

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