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: ITCSN HEAT SHRINK TUBING ISSUED: February 02, 2001 SUPERSEDES: February 13, 1998 DOCUMENT: 07-0874-3 _____ 1. INGREDIENT C.A.S. NO. PERCENT _____ 100 ADHESIVE-LINED POLYOLEFIN..... Unknown The components of this product are in compliance with the chemical notification requirements of TSCA. _____ 2. PHYSICAL DATA _____ BOILING POINT:..... N/A VAPOR PRESSURE:..... N/A VAPOR DENSITY:..... N/A EVAPORATION RATE:.... N/A SOLUBILITY IN WATER:..... INSOLUBLE SPECIFIC GRAVITY: ca. 1.28 Water=1 PERCENT VOLATILE:..... N/A pH:.....N/A VISCOSITY:..... N/A MELTING POINT:..... N/D APPEARANCE AND ODOR: Black tubing, various sizes _____ 3. FIRE AND EXPLOSION HAZARD DATA _____ FLASH POINT:..... N/A FLAMMABLE LIMITS - LEL:..... N/A FLAMMABLE LIMITS - UEL:..... N/A AUTOIGNITION TEMPERATURE:..... N/D _____ Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: ITCSN HEAT SHRINK TUBING February 02, 2001 PAGE 2 _____ 3. FIRE AND EXPLOSION HAZARD DATA (continued) _____ EXTINGUISHING MEDIA: Water spray, 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: 0 FIRE: 0 REACTIVITY: 0 UNUSUAL REACTION HAZARD: none _____ 4. REACTIVITY DATA _____ STABILITY: Stable INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID: None known. HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur. HAZARDOUS DECOMPOSITION PRODUCTS: Carbon Monoxide and Carbon Dioxide, Oxides of Nitrogen, Hydrogen Cyanide, Hydrogen Bromide, Oxides of Antimony. 5. ENVIRONMENTAL INFORMATION _____ SPILL RESPONSE: Not applicable. RECOMMENDED DISPOSAL: Dispose of waste product in a sanitary landfill. ENVIRONMENTAL DATA: No data available. **REGULATORY INFORMATION:** Volatile Organic Compounds: N/A. VOC Less H2O & Exempt Solvents: N/A. Since regulations vary, consult applicable regulations or authorities _____ Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: ITCSN HEAT SHRINK TUBING February 02, 2001 PAGE 3 _____ 5. ENVIRONMENTAL INFORMATION (continued) _____ before disposal. EPCRA HAZARD CLASS: FIRE HAZARD: NO PRESSURE: NO REACTIVITY: NO ACUTE: NO CHRONIC: NO _____ 6. SUGGESTED FIRST AID _____ EYE CONTACT: Immediately flush eyes with large amounts of water. Get immediate medical attention. SKIN CONTACT: If skin contact with hot material occurs: DO NOT ATTEMPT TO REMOVE MOLTEN MATERIAL. Immediately flush affected area with plenty of cold water and cover with a clean dressing. Have burn treated by a physician. INHALATION: If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician. IF SWALLOWED: Drink two glasses of water. Call a physician. _____ 7. PRECAUTIONARY INFORMATION _____ EYE PROTECTION: AVOID EYE CONTACT WITH VAPORS OR SMOKE RESULTING FROM OVERHEATING OR WHEN USED IN CONFINED AREAS. SKIN PROTECTION: Avoid skin contact with hot material. Wear appropriate gloves, such as Nomex, when handling this material to prevent thermal burns. RECOMMENDED VENTILATION: Local exhaust is required for operations using large amounts of material. Conduct air monitoring to determine adequacy of ventilation. 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. WHEN USING THIS PRODUCT IN A CONFINED SPACE OR WHERE VENTILATION MAY BE INADEQUATE THEN RESPIRATORY PROTECTION MAY BE WORN. INADEQUATE VENTILATION OR CONFINED SPACES WOULD CAUSE VAPORS FROM HEATING OF THIS PRODUCT TO BE PRESENT IN THE USER'S BREATHING ZONE AND MAY _____ Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: ITCSN HEAT SHRINK TUBING February 02, 2001 PAGE 4 _____ 7. PRECAUTIONARY INFORMATION (continued) _____ CAUSE RESPIRATORY IRRITATION. EXCESSIVE HEATING OF THIS PRODUCT BEYOND THE RECOMMENDED APPLICATION TEMPERATURE OF 250 DEGREES FAHRENHEIT IS NOT RECOMMENDED AND MAY RESULT IN THERMAL DEGRADATION AND DECOMPOSITION PRODUCTS WHICH MAY RESULT IN ADVERSE HEALTH EFFECTS. RESPIRATORY PROTECTION: Avoid breathing of fumes. 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 with dust/mist prefilter. PREVENTION OF ACCIDENTAL INGESTION: Wash hands after handling and before eating. RECOMMENDED STORAGE: Store at room temperature. Keep out of the reach of children. FIRE AND EXPLOSION AVOIDANCE: Not applicable. EXPOSURE LIMITS INGREDIENT VALUE UNIT TYPE AUTH SKIN* _____ ADHESIVE-LINED POLYOLEFIN..... 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: - NONE: None Established _____ 8. HEALTH HAZARD DATA _____ EYE CONTACT: Vapors from heated material may cause eye irritation. SKIN CONTACT: Skin Burns (thermal, from contact with hot material): signs/symptoms can include burning pain, red and swollen skin, and blisters. _____ Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: ITCSN HEAT SHRINK TUBING February 02, 2001 PAGE 5 _____ 8. HEALTH HAZARD DATA (continued) _____ TNHALATTON: Vapors of heated material may cause respiratory system irritation. RESPIRATORY IRRITATION WOULD NOT BE EXPECTED IN APPLICATIONS WHERE ADEQUATE VENTILATION AND PROPER APPLICATION (AT DESIGNATED TEMPERATURES) IS UTILIZED. EXCESSIVE HEATING AND INADEQUATE VENTILATION MAY RESULT IN EXPOSURE TO THERMAL DEGRADATION AND DECOMPOSITION PRODUCTS AS INDICATED IN SECTION 4 OF THIS MSDS UNDER "REACTIVITY DATA-HAZARDOUS DECOMPOSITION PRODUCTS". TE SWALLOWED: Ingestion is not a likely route of exposure to this product. _____ SECTION CHANGE DATES _____ PHYSICAL DATA SECTION CHANGED SINCE February 13, 1998 ISSUE

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