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: FP-301 HEAT SHRINK TUBING - COLORS ISSUED: February 02, 2001 SUPERSEDES: December 03, 1997 DOCUMENT: 07-0698-6 _____ 1. INGREDIENT C.A.S. NO. PERCENT _____ FLAME RETARDANT POLYOLEFIN..... Unknown 100 _____ 2. PHYSICAL DATA _____ BOILING POINT: N/A VAPOR PRESSURE: N/A VAPOR DENSITY: N/A EVAPORATION RATE:.... N/A SOLUBILITY IN WATER:..... N/A SPECIFIC GRAVITY:..... 1.3 Water=1 PERCENT VOLATILE:..... N/A pH:.....N/A VISCOSITY:..... N/A MELTING POINT:..... N/D APPEARANCE AND ODOR: Tubing, various sizes and colors _____ 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: FP-301 HEAT SHRINK TUBING - COLORS February 02, 2001 PAGE 2 _____ 3. FIRE AND EXPLOSION HAZARD DATA (continued) _____ 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: None known. NFPA HAZARD CODES: HEALTH: 0 FIRE: 0 REACTIVITY: 0 UNUSUAL REACTION HAZARD: none OSHA FIRE HAZARD CLASS: Not applicable _____ 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, Aldehydes, Oxides of Antimony, Toxic Vapors, Gases or Particulates Heating product beyond temperature recommended by instruction sheet may cause release of the following compounds: Benzene, Toluene, Formaldehyde, Acetaldehyde, and Hydrogen Bromide. _____ 5. ENVIRONMENTAL INFORMATION _____ SPILL RESPONSE: Not applicable. RECOMMENDED DISPOSAL: Dispose of waste product in a sanitary landfill. ENVIRONMENTAL DATA: No data available. _____ Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

MSDS: FP-301 HEAT SHRINK TUBING - COLORS February 02, 2001 PAGE 3 _____ 5. ENVIRONMENTAL INFORMATION (continued) _____ REGULATORY INFORMATION: Volatile Organic Compounds: N/A. VOC Less H2O & Exempt Solvents: N/A. Since regulations vary, consult applicable regulations or authorities before disposal. EPCRA HAZARD CLASS: FIRE HAZARD: NO PRESSURE: NO REACTIVITY: NO ACUTE: NO CHRONIC: NO _____ 6. SUGGESTED FIRST AID _____ EYE CONTACT: If exposed to vapors or smoke, 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. _____ Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

February 02, 2001				P	AGE	
7. PRECAUTIONARY INFORMATION (con	tinued)					
WHEN USING THIS PRODUCT IN A CONFINED BE INADEQUATE THEN RESPIRATORY PROTECT VENTILATION OR CONFINED SPACES WOULD OF THIS PRODUCT TO BE PRESENT IN THE CAUSE RESPIRATORY IRRITATION. EXCESSI BEYOND THE RECOMMENDED APPLICATION TEL FAHRENHEIT IS NOT RECOMMENDED AND MAY AND DECOMPOSITION PRODUCTS WHICH MAY EFFECTS. RESPIRATORY PROTECTION: Avoid breathing of fumes. Select one respirators based on airborne concent: accordance with OSHA regulations: Ha	TION MAY E CAUSE VAPO USER'S BRE VE HEATING MPERATURE RESULT IN RESULT IN of the fo ration of	BE WORN. I DRS FROM H EATHING ZO G OF THIS OF 250 DE N THERMAL ADVERSE H DILOWING N contamina	NADEQUA EATING NE AND PRODUCT GREES DEGRADA EALTH IOSH ap nts and	MAY MAY MIION Pproved in		
with dust/mist prefilter. PREVENTION OF ACCIDENTAL INGESTION:		-game vap		114001		
Wash hands after handling and before	eating.					
RECOMMENDED STORAGE:						
Store at room temperature. Keep out	of the rea	ach of chi	ldren.			
Store at room temperature. Keep out FIRE AND EXPLOSION AVOIDANCE: Not applicable.	of the rea	ach of chi	ldren.			
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FIRE AND EXPLOSION AVOIDANCE: Not applicable. EXPOSURI	E LIMITS VALUE (NONE N icated wit 11 exposur er by airb	INIT NONE th 'Y' und ce by the porne or,	TYPE NONE er SKIN cutanec more pa	NONE I refer pus rou rticul	to te arly	
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FIRE AND EXPLOSION AVOIDANCE: Not applicable. EXPOSURN INGREDIENT FLAME RETARDANT POLYOLEFIN * SKIN NOTATION: Listed substances ind the potential contribution to the overa including mucous membrane and eye, eithory oy direct contact with the substance. SOURCE OF EXPOSURE LIMIT DATA:	E LIMITS VALUE (NONE N icated wit ll exposur er by airk Vehicles o	JNIT NONE th 'Y' und te by the borne or, can alter	TYPE NONE er SKIN cutanec more pa skin ak	NONE I refer ous rou articul osorpti	to te arly on.	
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MSDS: FP-301 HEAT SHRINK TUBING - COLORS February 02, 2001 PAGE 5 _____ 8. HEALTH HAZARD DATA (continued) _____ SKIN CONTACT: Skin Burns (thermal, from contact with hot material): signs/symptoms can include burning pain, red and swollen skin, and blisters. INHALATION: 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". IF SWALLOWED: Ingestion is not a likely route of exposure to this product. _____ SECTION CHANGE DATES _____ PHYSICAL DATA SECTION CHANGED SINCE December 03, 1997 ISSUE

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