

Material Safety Data Sheet

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This material safety data sheet (MSDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a MSDS is not required for this product by the OSHA Hazard Communication Standard (29 CFR 1910.1200) because, when used as recommended or under ordinary conditions, it should not present a health and safety hazard. However, use or processing of the product not in accordance with the product's recommendations or not under ordinary conditions may affect the performance of the product and may present potential health and safety hazards.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: PST Cold Shrink Tubing-EPDM

MANUFACTURER: 3M

DIVISION: Electrical Products Division

ADDRESS: 3M Center

St. Paul, MN 55144-1000

EMERGENCY PHONE: 1-800-364-3577 or (651) 737-6501 (24 hours)

Issue Date: 06/23/2003 **Supercedes Date:** 06/23/2003

Document Group: 18-6333-1

Product Use:

Intended Use: Electrical

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
ETHYLENE-PROPYLENE-ETHYLIDENENORBORNENE TERPOLYMER	25038-36-2	25 - 35
SOLVENT REFINEDE RESIDUAL OIL (PETROLEUM)	64742-01-4	15 - 25
SILICA	7631-86-9	15 - 20
CARBON BLACK	1333-86-4	10 - 15
SOLVENT-REFINED HEAVY PARAFFINIC PETROLEUM DISTILLATES	64741-88-4	5 - 10
ZINC OXIDE	1314-13-2	1 - 5
KAOLIN	1332-58-7	1 - 5
1,4-Benzenedimethanol, .alpha.,.alpha.,.alpha.',.alpha.'-tetramethyl-	2948-46-1	0.1 - 1.56 (typically 0.1)
ZINC PYRETHIONE	13463-41-7	< 0.1

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: black, rubber tube on removable plastic ribbon core

Odor, Color, Grade: black, cured rubber tubing

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General Physical Form: Solid black tubing on plastic ribbon core

Immediate health, physical, and environmental hazards: This product, when used under reasonable conditions and in accordance with the 3M directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards. Contains a chemical or chemicals which can cause cancer.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

No health effects are expected.

Skin Contact:

No health effects are expected.

Inhalation:

No health effects are expected.

Ingestion:

No health effects are expected.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

<u>Ingredient</u>	<u>C.A.S. No.</u>	Class Description	Regulation
CARBON BLACK	1333-86-4	Group 2B	International Agency for Research on Cancer
CARBON BLACK EXTRACTS	NONE	Group 2B	International Agency for Research on Cancer

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: No need for first aid is anticipated.

Skin Contact: No need for first aid is anticipated.

Inhalation: No need for first aid is anticipated.

If Swallowed: No need for first aid is anticipated.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperatureNo Data AvailableFlash PointNot Applicable

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5.2 EXTINGUISHING MEDIA

Ordinary combustible material. Use fire extinguishers with class A extinguishing agents (e.g., water, foam). Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Water may be used to blanket the fire. 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. See Hazardous Decomposition section for products of combustion.

Unusual Fire and Explosion Hazards: No unusual fire or explosion hazards are anticipated. Not applicable.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Not applicable.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

For industrial use only. Not intended for use as a medical device or drug. This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions. Avoid contact with oxidizing agents.

7.2 STORAGE

Store away from heat. Store away from oxidizing agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Provide appropriate local exhaust when product is heated.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact.

8.2.2 Skin Protection

Not applicable.

8.2.3 Respiratory Protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

8.2.4 Prevention of Swallowing

Not applicable.

8.3 EXPOSURE GUIDELINES

<u>Ingredient</u>	Authority	Type	<u>Limit</u>	Additional Information
CARBON BLACK	ACGIH	TWA	3.5 mg/m3	Table A4
CARBON BLACK	CMRG	TWA	0.5 mg/m3	
CARBON BLACK	OSHA	TWA	3.5 mg/m3	Table Z-1
KAOLIN	ACGIH	TWA - respirable	2 mg/m3	Table A4
KAOLIN	OSHA	TWA -	5 mg/m3	Table Z-1
KAOLIN	OSHA	respirable TWA,	10 mg/m3	
		Vacated - as		
KAOLIN	OSHA	dust TWA - as total	15 mg/m3	Table Z-1
CH ICA	CMDC	dust	2 (2	
SILICA	CMRG	TWA - specific form	3 mg/m3	as respirable dust
SOLVENT-REFINED HEAVY PARAFFINIC	CMRG	TWA	5 mg/m3	
PETROLEUM DISTILLATES ZINC OXIDE	ACGIH	TWA -	2 ma/m2	
ZINC OAIDE	ACGIH	respirable	2 mg/m3	
ZINC OXIDE	ACGIH	STEL	10 mg/m3	
ZINC OXIDE	OSHA	TWA - as fume	5 mg/m3	Table Z-1
ZINC OXIDE	OSHA	TWA -	5 mg/m3	Table Z-1
ZINC OXIDE	OSHA	respirable STEL,	10 mg/m3	
		Vacated - as fume		
ZINC OXIDE	OSHA	TWA,	10 mg/m3	
		Vacated - as dust		
ZINC OXIDE	OSHA	TWA - as total	15 mg/m3	Table Z-1
ZINC PYRETHIONE	CMRG	dust TWA	0.35 mg/m3	

VAC Vacated PEL:Vacated Permissible Exposure Limits [PEL] are enforced as the OSHA PEL in some states. Check with your local regulatory agency.

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Specific Physical Form: black, rubber tube on removable plastic ribbon core

Odor, Color, Grade: black, cured rubber tubing

General Physical Form: Solid black tubing on plastic ribbon core

Autoignition temperatureNo Data AvailableFlash PointNot ApplicableVapor DensityNot ApplicableVapor PressureNot Applicable

Specific Gravity 1.09
Solubility in Water Nil

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: Strong oxidizing agents; Reducing agents

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

<u>Substance</u> <u>Condition</u>

Carbon monoxide During Combustion
Carbon dioxide During Combustion
Oxides of Sulfur During Combustion

Hazardous Decomposition: Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not applicable.

CHEMICAL FATE INFORMATION

Not applicable.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose of waste product in a sanitary landfill. As a disposal alternative, incinerate in an industrial or commercial facility.

EPA Hazardous Waste Number (RCRA): Not regulated

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14:TRANSPORT INFORMATION

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

<u>Ingredient</u>	<u>C.A.S. No</u>	<u>% by Wt</u>
ZINC OXIDE (ZINC COMPOUNDS)	1314-13-2	1 - 5
ZINC PYRETHIONE (ZINC COMPOUNDS)	13463-41-7	< 0.1

STATE REGULATIONS

Contact 3M for more information.

CALIFORNIA PROPOSITION 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	Classification
CARBON BLACK	1333-86-4	**Carcinogen
CARBON BLACK EXTRACTS	NONE	**Carcinogen

^{**} WARNING: contains a chemical which can cause cancer.

CHEMICAL INVENTORIES

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

This product is an article as defined by TSCA regulations, and is exempt from TSCA Inventory listing requirements.

Contact 3M for more information.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 1 Flammability: 1 Reactivity: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

Revision Changes:

Section 1: Initial issue message was modified.

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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.

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