MATERIAL SAFETY DATA SHEET $3M^{TM}$ TemflexTM General Use Vinyl Electrical Tapes 1700P (Printed) and 1700C (Colors); $3M^{TM}$ TartanTM General Use Vinyl Electrical Insulating Tape 1710 02/14/12



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: 3M[™] Temflex[™] General Use Vinyl Electrical Tapes 1700P (Printed) and 1700C (Colors);

3M[™] Tartan[™] General Use Vinyl Electrical Insulating Tape 1710

MANUFACTURER: 3M

DIVISION: Electrical Markets Division

ADDRESS: 3M Center, St. Paul, MN 55144-1000

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

Issue Date: 02/14/12 **Supercedes Date:** 11/10/11

Document Group: 21-8536-1

Product Use:

Intended Use: Electrical

SECTION 2: INGREDIENTS

Ingredient	<u>C.A.S. No.</u>	<u>% by Wt</u>
POLY VINYL CHLORIDE BACKING	Mixture	70 - 85
Rubber adhesive	Trade Secret	10 - 25
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	7 - 10
CARBON BLACK	1333-86-4	1 - 2

This product complies with Directive 2002/95/EC of the European Parliament on the Restriction of Hazardous Substances (RoHS)

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Specific Physical Form: Roll of Tape

MATERIAL SAFETY DATA SHEET 3MTM TemflexTM General Use Vinyl Electrical Tapes 1700P (Printed) and 1700C (Colors); 3MTM $Tartan^{TM}$ General Use Vinyl Electrical Insulating Tape 1710 02/14/12

Odor, Color, Grade: slight odor, black and other colors, tape

General Physical Form: Solid

Immediate health, physical, and environmental hazards: Contact with aluminum or zinc in a pressurized system may generate hydrogen gas which could create an explosion hazard. Contains a chemical or chemicals which can cause cancer. 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.

3.2 POTENTIAL HEALTH EFFECTS

Eve 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>	C.A.S. No.	Class Description	<u>Regulation</u>
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	Anticipated human carcinogen	National Toxicology Program Carcinogens
CARBON BLACK	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
CARBON BLACK EXTRACTS	NONE	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
POLY VINYL CHLORIDE BACKING	9002-86-2	Cancer hazard	OSHA Carcinogens

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.

Eve 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

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5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: See Hazardous Decomposition section for products of combustion. Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

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

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Not applicable.

6.2. Environmental precautions

Not applicable.

Clean-up methods

Not applicable.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Do not ingest. Wash hands after handling and before eating. 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. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment.

7.2 STORAGE

Not applicable. Store away from areas where product may come into contact with food or pharmaceuticals. Store away from oxidizing agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Not applicable.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Not applicable.

8.2.2 Skin Protection

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Not applicable. Avoid skin contact. Gloves are not required. Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

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	<u>Type</u>	<u>Limit</u>	Additional Information
ANTIMONY COMPOUNDS	ACGIH	TWA, as Sb	0.5 mg/m3	
ANTIMONY COMPOUNDS	OSHA	TWA, as Sb	0.5 mg/m3	
BIS(2-ETHYLHEXYL)PHTHALATE	ACGIH	TWA	5 mg/m3	
BIS(2-ETHYLHEXYL)PHTHALATE	OSHA	TWA	5 mg/m3	
CARBON BLACK	ACGIH	TWA, inhalable	3 mg/m3	
		fraction		
CARBON BLACK	CMRG	TWA	0.5 mg/m3	
CARBON BLACK	OSHA	TWA	3.5 mg/m3	
POLY VINYL CHLORIDE BACKING	ACGIH	TWA, respirable	1 mg/m3	
		fraction		
POLY VINYL CHLORIDE BACKING	OSHA	TWA, as vinyl	1 ppm	Skin Notation*; 29 CFR 1910.1017
		chloride monomer		
POLY VINYL CHLORIDE BACKING	OSHA	STEL, as vinyl	5 ppm	Skin Notation*; 29 CFR 1910.1017
		chloride monomer		

^{*} Substance(s) 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

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: Roll of Tape

Odor, Color, Grade: slight odor, black and other colors, tape

General Physical Form: Solid

Specific Gravity 1.2

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Solubility in Water Nil

Not Applicable Kow - Oct/Water partition coef Not Applicable Viscosity

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid:

10.1 Conditions to avoid

Not determined

10.2 Materials to avoid

Strong oxidizing agents

Reactive metals

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

Substance Condition

Hydrocarbons Oxidative Degradation Carbon monoxide **During Combustion During Combustion** Carbon dioxide Hydrogen Chloride **During Combustion** Irritant Vapors or Gases Oxidative Degradation **During Combustion** Oxides of Antimony

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.

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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.

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

SECTION 14:TRANSPORT INFORMATION

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - No Delayed Hazard - No

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>	% by Wt
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	7 - 10

STATE REGULATIONS

Contact 3M for more information.

CALIFORNIA PROPOSITION 65

Ingredient	C.A.S. No.	<u>Classification</u>
CARBON BLACK EXTRACTS	NONE	**Carcinogen
CARBON BLACK	1333-86-4	**Carcinogen
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	*Male reproductive toxin
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	**Carcinogen
BIS(2-ETHYLHEXYL)PHTHALATE	117-81-7	*Developmental Toxin

^{*} WARNING: contains a chemical or chemicals which can cause birth defects or other reproductive harm.

CHEMICAL INVENTORIES

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.

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

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SECTION 16: OTHER INFORMATION

NFPA Hazard Classification

Health: 0 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: Product name was modified.
Page Heading: Product name was modified.

Copyright was modified.

Section 9: Property description for required properties was deleted.

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