Safety Data Sheet

This Safety Data Sheet (SDS) is provided as a courtesy in response to a customer request. This product is not regulated under, and a SDS 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.

Document Group:	08-7081-6	**Version Number:**	8.00
Issue Date:	08/22/14	**Supercedes Date:**	09/22/05

SECTION 1: Identification

1.1. Product identifier
3M BRAND ELECTRICAL TAPE 23

Product Identification Numbers
HT-0020-0002-0, HT-0020-0003-8, HT-0020-0012-9, HT-0020-0013-7, HT-0020-0014-5, HT-0020-0018-6, HT-0020-0109-3

1.2. Recommended use and restrictions on use

Recommended use
Electrical Tape.

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	3M Brazil Electrical Markets Division
ADDRESS:	3M Center, St. Paul, MN 55144-1000, USA
Telephone:	1-888-3M HELPS (1-888-364-3577)

1.4. Emergency telephone number
1-800-364-3577 or (651) 737-6501 (24 hours)

SECTION 2: Hazard identification

2.1. Hazard classification
This product is exempt from hazard classification according to OSHA Hazard Communication Standard, 29 CFR 1910.1200.

2.2. Label elements
Signal word
Not applicable.

Symbols

Not applicable.

Pictograms
Not applicable.

2.3. Hazards not otherwise classified
None.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
SYNTHETIC RUBBER	9003-27-4	10 - 30
TALC	14807-96-6	20 - 30
SYNTHETIC RUBBER	25038-36-2	15 - 25
POLYPROPYLENE	9003-07-0	5 - 15
Paraffin Oils	8012-95-1	1 - 10
PIPERYLENE-2-METHYL-2-BUTENE POLYMER	26813-14-9	1 - 10
SYNTHETIC RUBBER	9003-29-6	1 - 10
CARBON BLACK	1333-86-4	1 - 5
MIXTURE OF POLYPROPYLENE RESIN, CARBON BLACK AND ZINC STEARATE	Unknown	1 - 5
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER	2082-79-3	0.1 - 1

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:
No need for first aid is anticipated.

Skin Contact:
No need for first aid is anticipated.

Eye Contact:
No need for first aid is anticipated.

If Swallowed:
No need for first aid is anticipated.

4.2. Most important symptoms and effects, both acute and delayed
See Section 11.1. Information on toxicological effects.

4.3. Indication of any immediate medical attention and special treatment required
Not applicable

SECTION 5: Fire-fighting measures

5.1. Suitable extinguishing media
In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

5.2. Special hazards arising from the substance or mixture
None inherent in this product.

5.3. Special protective actions for fire-fighters
No special protective actions for fire-fighters are anticipated.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
Not applicable.

6.2. Environmental precautions
Not applicable.

6.3. Methods and material for containment and cleaning up
Not applicable.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
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.

7.2. Conditions for safe storage including any incompatibilities
Not applicable.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
CARBON BLACK	1333-86-4	ACGIH	TWA(inhalable fraction):3 mg/m3	A3: Confirmed animal carcin.
CARBON BLACK	1333-86-4	CMRG	TWA:0.5 mg/m3	
CARBON BLACK	1333-86-4	OSHA	TWA:3.5 mg/m3	
TALC	14807-96-6	ACGIH	TWA(respirable fraction):2 mg/m3	A4: Not class. as human carcin
TALC	14807-96-6	CMRG	TWA(as respirable dust):0.5 mg/m3	
TALC	14807-96-6	OSHA	TWA concentration(as total dust):0.3 mg/m3;TWA concentration(respirable):0.1 mg/m3(2.4 millions of particles/cu. ft.);TWA:20 millions of particles/cu. ft.	
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER	2082-79-3	CMRG	TWA:10 mg/m3	
Paraffin Oils	8012-95-1	CMRG	TWA(as mist):0.5 mg/m3;STEL(as mist):10 mg/m3	
Paraffin Oils	8012-95-1	OSHA	TWA(as mist):5 mg/m3	
POLYPROPYLENE	9003-07-0	CMRG	TWA(as respirable dust):5 mg/m3;TWA(as total dust):10	

			mg/m3	

ACGIH : American Conference of Governmental Industrial Hygienists
AIHA : American Industrial Hygiene Association
CMRG : Chemical Manufacturer's Recommended Guidelines
OSHA : United States Department of Labor - Occupational Safety and Health Administration
TWA: Time-Weighted-Average
STEL: Short Term Exposure Limit
CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls
Not applicable.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Eye protection not required.

Skin/hand protection
No chemical protective gloves are required.

Respiratory protection

Respiratory protection is not required.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

General Physical Form:	Solid
Specific Physical Form:	Roll of Tape
Odor, Color, Grade:	Black
Odor threshold	*Not Applicable*
pH	*Not Applicable*
Melting point	*No Data Available*
Boiling Point	*Not Applicable*
Flash Point	*Not Applicable*
Evaporation rate	*Not Applicable*
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	*Not Applicable*
Flammable Limits(UEL)	*Not Applicable*
Vapor Pressure	*Not Applicable*
Vapor Density	*Not Applicable*
Specific Gravity	*Not Applicable*
Solubility In Water	*Not Applicable*
Solubility- non-water	*Not Applicable*
Partition coefficient: n-octanol/ water	*No Data Available*
Autoignition temperature	*No Data Available*
Decomposition temperature	*Not Applicable*
Viscosity	*Not Applicable*
Volatile Organic Compounds	*No Data Available*
VOC Less H2O & Exempt Solvents	*No Data Available*

SECTION 10: Stability and reactivity

10.1. Reactivity
This material is considered to be non reactive under normal use conditions.

10.2. Chemical stability
Stable.

10.3. Possibility of hazardous reactions
Hazardous polymerization will not occur.

10.4. Conditions to avoid
None known.

10.5. Incompatible materials
None known.

10.6. Hazardous decomposition products

Substance	Condition
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified

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

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:
No health effects are expected.

Skin Contact:
No health effects are expected.

Eye Contact:
No health effects are expected.

Ingestion:
No health effects are expected.

Carcinogenicity:

Ingredient	C.A.S. No.	Class Description	Regulation

CARBON BLACK	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Additional Information:
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.

Toxicological Data
If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
TALC	Dermal		LD50 Not available
TALC	Ingestion		LD50 Not available
SYNTHETIC RUBBER	Dermal		LD50 estimated to be > 5,000 mg/kg
SYNTHETIC RUBBER	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
SYNTHETIC RUBBER	Ingestion	Rat	LD50 > 2,000 mg/kg
POLYPROPYLENE	Dermal		LD50 estimated to be > 5,000 mg/kg
POLYPROPYLENE	Ingestion	Mouse	LD50 > 8,000 mg/kg
PIPERYLENE-2-METHYL-2-BUTENE POLYMER	Ingestion	Rat	LD50 > 2,000 mg/kg
Paraffin Oils	Dermal		LD50 estimated to be > 5,000 mg/kg
Paraffin Oils	Ingestion	Rat	LD50 > 24,000 mg/kg
SYNTHETIC RUBBER	Dermal	Rat	LD50 > 10,250 mg/kg
SYNTHETIC RUBBER	Ingestion	Rat	LD50 > 34,600 mg/kg
CARBON BLACK	Dermal	Rabbit	LD50 > 3,000 mg/kg
CARBON BLACK	Ingestion	Rat	LD50 > 8,000 mg/kg
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER	Dermal	Rat	LD50 > 2,000 mg/kg
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 1.8 mg/l
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
TALC	Rabbit	No significant irritation
SYNTHETIC RUBBER		No significant irritation
SYNTHETIC RUBBER	Rabbit	No significant irritation
POLYPROPYLENE	Human and animal	No significant irritation
PIPERYLENE-2-METHYL-2-BUTENE POLYMER		No significant irritation
SYNTHETIC RUBBER	Rabbit	Minimal irritation
CARBON BLACK	Rabbit	No significant irritation
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER	Rabbit	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value
TALC	Rabbit	No significant irritation
SYNTHETIC RUBBER		No significant irritation
SYNTHETIC RUBBER	Rabbit	No significant irritation
POLYPROPYLENE		No significant irritation
SYNTHETIC RUBBER	Rabbit	Mild irritant
CARBON BLACK	Rabbit	No significant irritation
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
POLYPROPYLENE	Human and animal	Not sensitizing
PIPERYLENE-2-METHYL-2-BUTENE POLYMER		Not sensitizing
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER	Human and animal	Some positive data exist, but the data are not sufficient for classification

Respiratory Sensitization

Name	Species	Value
TALC	Human	Not sensitizing

Germ Cell Mutagenicity

Name	Route	Value
TALC	In Vitro	Not mutagenic
TALC	In vivo	Not mutagenic
CARBON BLACK	In Vitro	Not mutagenic
CARBON BLACK	In vivo	Some positive data exist, but the data are not sufficient for classification
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER	In Vitro	Not mutagenic
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
TALC	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
POLYPROPYLENE	Not Specified	Rat	Some positive data exist, but the data are not sufficient for classification
CARBON BLACK	Dermal	Mouse	Not carcinogenic
CARBON BLACK	Ingestion	Mouse	Not carcinogenic
CARBON BLACK	Inhalation	Rat	Carcinogenic
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER	Ingestion	Mouse	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
TALC	Ingestion	Not toxic to development	Rat	NOAEL 1,600 mg/kg	during organogenesis
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER	Ingestion	Not toxic to female reproduction	Rat	NOAEL 421 mg/kg/day	2 generation
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER	Ingestion	Not toxic to male reproduction	Rat	NOAEL 375 mg/kg/day	2 generation
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 421 mg/kg/day	2 generation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration

TALC	Inhalation	pneumoconiosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure
TALC	Inhalation	pulmonary fibrosis | respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 18 mg/m3	113 weeks
SYNTHETIC RUBBER	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.07 mg/l	2 weeks
SYNTHETIC RUBBER	Inhalation	liver	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 0.7 mg/l	2 weeks
CARBON BLACK	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER	Ingestion	liver | kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 300 mg/kg/day	28 days
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER	Ingestion	heart | endocrine system | respiratory system	All data are negative	Rat	NOAEL 300 mg/kg/day	28 days
HYDROCINNAMIC ACID, 3,5-DI-TERT-BUTYL-4-HYDROXY-, OCTADECYL ESTER	Ingestion	hematopoietic system	All data are negative	Rat	NOAEL 1,000 mg/kg/day	28 days

Aspiration Hazard

Name	Value

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

SECTION 12: Ecological information

Ecotoxicological information

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

Chemical fate information

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

SECTION 13: Disposal considerations

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. Prior to disposal, consult all applicable authorities and regulations to insure proper classification.

EPA Hazardous Waste Number (RCRA): Not regulated

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

15.1. 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

15.2. State Regulations
Contact 3M for more information.

15.3. 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.

15.4. International Regulations
Contact 3M for more information.

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

SECTION 16: Other information

NFPA Hazard Classification
Health: 0 **Flammability:** 1 **Instability:** 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.

Document Group:	08-7081-6	**Version Number:**	8.00
Issue Date:	08/22/14	**Supercedes Date:**	09/22/05

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