



Safety Data Sheet

Copyright, 2013, 3M 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 written 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.

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:	11-0744-0	Version Number:	24.00
Issue Date:	12/27/13	Supersedes Date:	07/25/12

SECTION 1: Identification

1.1. Product identifier

Scotch® 2228 Rubber Mastic Tape

Product Identification Numbers

ID Number	UPC	ID Number	UPC
2228		78-8055-7098-9	
80-6103-2294-5	00-54007-09656-6	80-6107-3766-2	00-54007-50727-7
80-6109-2896-4	00-54007-42918-0	80-6112-0077-7	00-54007-43478-8
80-6112-1055-2	00-54007-44385-8	80-6112-1056-0	00-54007-50727-7
80-6112-1186-5		80-6114-1998-9	000-51128-55775-4
80-6114-6887-9	000-51128-59228-1		

1.2. Recommended use and restrictions on use

Recommended use

Electrical tape.

1.3. Supplier's details

MANUFACTURER:	3M
DIVISION:	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.

11% of the mixture consists of ingredients of unknown acute oral toxicity.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Inorganic fillers	Mixture	22 - 37
Polyolefin	Mixture	18 - 28
Carbon Black	1333-86-4	5 - 10
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE	152698-66-3	1 - 7
Asphalt	8052-42-4	2 - 4
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)	64742-01-4	1 - 4
ZINC STEARATE	557-05-1	0 - 1
QUARTZ SILICA	14808-60-7	0 - 0.5

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

No need for first aid is anticipated.

Skin Contact:

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye Contact:

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

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.

Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion

5.3. Special protective actions for fire-fighters

No unusual fire or explosion hazards 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

No occupational exposure limit values exist for any of the components listed in Section 3 of this SDS.

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 roll with release liner
Odor threshold	<i>Not Applicable</i>
pH	<i>Not Applicable</i>
Melting point	<i>No Data Available</i>
Boiling Point	<i>Not Applicable</i>
Flash Point	No flash point
Evaporation rate	<i>Not Applicable</i>
Flammability (solid, gas)	Not Classified
Flammable Limits(LEL)	<i>Not Applicable</i>
Flammable Limits(UEL)	<i>Not Applicable</i>
Vapor Pressure	<i>Not Applicable</i>
Vapor Density	<i>Not Applicable</i>
Specific Gravity	Approximately 1.1 Units not avail. or not appl. [Ref Std: WATER=1]
Solubility- non-water	<i>Not Applicable</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>
Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>Not Applicable</i>
Viscosity	<i>Not Applicable</i>
Volatile Organic Compounds	<i>No Data Available</i>
VOC Less H2O & Exempt Solvents	<i>No Data Available</i>

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

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

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:

Contact with the skin during product use is not expected to result in significant irritation.

Eye Contact:

Contact with the eyes during product use is not expected to result in significant irritation.

Ingestion:

No health effects are expected.

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
Inorganic fillers	Dermal		LD50 estimated to be > 5,000 mg/kg
Inorganic fillers	Ingestion	Rat	LD50 > 5,000 mg/kg
Polyolefin	Dermal		LD50 estimated to be > 5,000 mg/kg
Polyolefin	Ingestion	Rat	LD50 > 2,000 mg/kg

DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE			Data not available or insufficient for classification
Carbon Black	Dermal	Rabbit	LD50 > 3,000 mg/kg
Carbon Black	Ingestion	Rat	LD50 > 8,000 mg/kg
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)			Data not available or insufficient for classification
Asphalt	Dermal	Rabbit	LD50 > 2,000 mg/kg
Asphalt	Ingestion	Rat	LD50 > 5,000 mg/kg
ZINC STEARATE	Dermal	Rabbit	LD50 > 2,000 mg/kg
ZINC STEARATE	Ingestion	Rat	LD50 > 5,000 mg/kg
QUARTZ SILICA	Dermal		LD50 estimated to be > 5,000 mg/kg
QUARTZ SILICA	Ingestion		LD50 estimated to be > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Inorganic fillers	Rabbit	No significant irritation
Polyolefin	Rabbit	No significant irritation
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE		Data not available or insufficient for classification
Carbon Black	Rabbit	No significant irritation
Asphalt	Human	Minimal irritation
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)		Data not available or insufficient for classification
ZINC STEARATE		Data not available or insufficient for classification
QUARTZ SILICA		No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Inorganic fillers	Rabbit	No significant irritation
Polyolefin	Rabbit	No significant irritation
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE		Data not available or insufficient for classification
Carbon Black	Rabbit	No significant irritation
Asphalt	Human	Mild irritant
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)		Data not available or insufficient for classification
ZINC STEARATE		Data not available or insufficient for classification
QUARTZ SILICA		Data not available or insufficient for classification

Skin Sensitization

Name	Species	Value
Inorganic fillers	Guinea pig	Not sensitizing
Polyolefin		Data not available or insufficient for classification
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE		Data not available or insufficient for classification
Carbon Black		Data not available or insufficient for classification
Asphalt		Data not available or insufficient for classification
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)		Data not available or insufficient for classification
ZINC STEARATE		Data not available or insufficient for classification
QUARTZ SILICA		Data not available or insufficient for classification

Photosensitization

Name	Species	Value
Asphalt	Human	Some positive data exist, but the data are not sufficient for classification

Respiratory Sensitization

Name	Species	Value
Inorganic fillers		Data not available or insufficient for classification
Polyolefin		Data not available or insufficient for classification
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE		Data not available or insufficient for classification
Carbon Black		Data not available or insufficient for classification
Asphalt		Data not available or insufficient for classification

SOLVENT REFINED RESIDUAL OIL (PETROLEUM)		Data not available or insufficient for classification
ZINC STEARATE		Data not available or insufficient for classification
QUARTZ SILICA		Data not available or insufficient for classification

Germ Cell Mutagenicity

Name	Route	Value
Inorganic fillers		Data not available or insufficient for classification
Polyolefin		Data not available or insufficient for classification
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE		Data not available or insufficient for classification
Carbon Black	In Vitro	Not mutagenic
Carbon Black	In vivo	Some positive data exist, but the data are not sufficient for classification
Asphalt	In vivo	Not mutagenic
Asphalt	In Vitro	Some positive data exist, but the data are not sufficient for classification
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)		Data not available or insufficient for classification
ZINC STEARATE		Data not available or insufficient for classification
QUARTZ SILICA	In Vitro	Some positive data exist, but the data are not sufficient for classification
QUARTZ SILICA	In vivo	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
Inorganic fillers	Not Specified	Multiple animal species	Not carcinogenic
Polyolefin			Data not available or insufficient for classification
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE			Data not available or insufficient for classification
Carbon Black	Dermal	Mouse	Not carcinogenic
Carbon Black	Ingestion	Mouse	Not carcinogenic
Carbon Black	Inhalation	Rat	Carcinogenic
Asphalt	Not Specified	Human and animal	Some positive data exist, but the data are not sufficient for classification
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)			Data not available or insufficient for classification
ZINC STEARATE			Data not available or insufficient for classification
QUARTZ SILICA	Inhalation	Human and animal	Carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Inorganic fillers	Ingestion	Not toxic to development	Rat	NOAEL 768 mg/kg/day	during organogenesis
Polyolefin		Data not available or insufficient for classification			
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE		Data not available or insufficient for classification			
Carbon Black		Data not available or insufficient for classification			
Asphalt		Data not available or insufficient for classification			
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)		Data not available or insufficient for classification			
ZINC STEARATE		Data not available or insufficient for classification			
QUARTZ SILICA		Data not available or insufficient for			

		classification			
--	--	----------------	--	--	--

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Inorganic fillers			Data not available or insufficient for classification			
Polyolefin			Data not available or insufficient for classification			
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE			Data not available or insufficient for classification			
Carbon Black			Data not available or insufficient for classification			
Asphalt			Data not available or insufficient for classification			
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)			Data not available or insufficient for classification			
ZINC STEARATE			Data not available or insufficient for classification			
QUARTZ SILICA			Data not available or insufficient for classification			

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Polyolefin			Data not available or insufficient for classification			
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE			Data not available or insufficient for classification			
Carbon Black	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Asphalt	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)			Data not available or insufficient for classification			
ZINC STEARATE			Data not available or insufficient for classification			
QUARTZ SILICA	Inhalation	silicosis	Causes damage to organs through prolonged or repeated exposure	Human	NOAEL Not available	occupational exposure

Aspiration Hazard

Name	Value
Inorganic fillers	Not an aspiration hazard
Polyolefin	Not an aspiration hazard
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE	Not an aspiration hazard
Carbon Black	Not an aspiration hazard
Asphalt	Not an aspiration hazard
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)	Not an aspiration hazard
ZINC STEARATE	Not an aspiration hazard
QUARTZ SILICA	Not an aspiration hazard

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.

This product has been classified as a non-hazardous waste. Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste.

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

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 STEARATE (ZINC COMPOUNDS)	557-05-1	0 - 1

15.2. State Regulations

Contact 3M for more information.

California Proposition 65

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
SCOTCH(TM) 2228 Rubber Mastic Tape	NONE	Carcinogen

WARNING: This product contains a chemical known to the State of California to cause cancer.

15.3. Chemical Inventories

The components of this product are in compliance with the new substance notification requirements of CEPA.

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.

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.

HMIS Hazard Classification

Health: 0 Flammability: 1 Physical Hazard: 0 Personal Protection: A

Hazardous Material Identification System (HMIS® III) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

Document Group:	11-0744-0	Version Number:	24.00
Issue Date:	12/27/13	Supersedes Date:	07/25/12

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of 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.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M

3M USA SDSs are available at www.3M.com