



Safety Data Sheet

Copyright, 2014, 3M Company All rights reserved. Copying and/or downloading of this information for the purpose of properly utilising 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 product is defined as an article under REACH and does not require a Safety Data Sheet under Article 31 of Regulation (EC) No. 1907/2006. Since an SDS is not required, this document does not contain all of the information that is required for substance and mixture SDSs under REACH.

Document group:	11-0744-0	Version number:	8.00
Revision date:	21/01/2014	Supersedes date:	04/02/2013
Transportation version number:	1.00 (04/02/2013)		

This Safety Data Sheet has been prepared in accordance with the REACH Regulation (EC) 1907/2006 and its modifications.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Scotch® 2228 Rubber Mastic Tape

Product identification numbers

80-6103-2294-5 80-6107-3766-2 80-6108-3329-7

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Electrical tape.

1.3. Details of the supplier of the substance or mixture

Address: 3M United Kingdom PLC, 3M Centre, Cain Road, Bracknell, Berkshire, RG12 8HT.
E Mail: tox.uk@mmm.com
Website: www.3M.com/uk

1.4. Emergency telephone number

+44 (0)1344 858 000

SECTION 2: Hazard identification

2.1. Classification of the substance or mixture

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

This product is considered an article and is exempt from hazard classification.

2.2. Label elements

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

Scotch® 2228 Rubber Mastic Tape**Symbol(s)**

None.

Contains:

No ingredients are assigned to the label.

Risk phrases None.**Safety phrases** None.**2.3. Other hazards**

None known.

SECTION 3: Composition/information on ingredients

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Polyolefin	Mixture		40 - 85	
Inorganic fillers	Mixture		35 - 70	
Carbon black	1333-86-4	EINECS 215-609-9	1 - 10	
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE	152698-66-3		1 - 7	
Residual oils (petroleum), solvent-refined	64742-01-4	EINECS 265-101-6	1 - 4	Nota L (EU) R53 (Self Classified) Nota L (CLP) Aquatic Chronic 4, H413 (Self Classified)
Asphalt	8052-42-4	EINECS 232-490-9	1 - 4	
Zinc Stearate	557-05-1	EINECS 209-151-9	0 - 1	
Quartz	14808-60-7	EINECS 238-878-4	0 - 0.5	Xn:R48/20 (Vendor) STOT RE 1, H372 (Self Classified)

Please see section 16 for the full text of any R phrases and H statements referred to in this section

Please refer to section 15 for the any applicable Notas that have been applied to the above components

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

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

Scotch® 2228 Rubber Mastic Tape

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. 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

Substance

Carbon monoxide.

Carbon dioxide.

Condition

During combustion.

During combustion.

5.3. Advice 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.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

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.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Ingredient	CAS Nbr	Agency	Limit type	Additional comments
Quartz	14808-60-7	Health and Safety Comm. (UK)	TWA(respirable):0.1 mg/m3	

Health and Safety Comm. (UK) : UK Health and Safety Commission

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

Physical state	Solid.
Specific Physical Form:	Roll of Tape.
Appearance/Odour	Black roll with release liner
Odour threshold	<i>Not applicable.</i>
pH	<i>Not applicable.</i>
Boiling point/boiling range	<i>Not applicable.</i>
Melting point	<i>No data available.</i>
Flammability (solid, gas)	Not classified
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	No flash point
Autoignition temperature	<i>No data available.</i>
Flammable Limits(LEL)	<i>Not applicable.</i>
Flammable Limits(UEL)	<i>Not applicable.</i>
Vapour pressure	<i>Not applicable.</i>
Relative density	approximately 1.1 Units not available or not applicable. [<i>Ref Std:WATER=1</i>]
Solubility- non-water	<i>Not applicable.</i>

Partition coefficient: n-octanol/water	No data available.
Evaporation rate	Not applicable.
Vapour density	Not applicable.
Decomposition temperature	Not applicable.
Viscosity	Not applicable.

9.2. Other information

Volatile organic compounds (VOC)	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 polymerisation will not occur.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
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 labelling, 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.

Scotch® 2228 Rubber Mastic Tape**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
Residual oils (petroleum), solvent-refined			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	Dermal		LD50 estimated to be > 5,000 mg/kg
Quartz	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
Residual oils (petroleum), solvent-refined		Data not available or insufficient for classification
Zinc Stearate		Data not available or insufficient for classification
Quartz		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
Residual oils (petroleum), solvent-refined		Data not available or insufficient for classification
Zinc Stearate		Data not available or insufficient for classification
Quartz		Data not available or insufficient for classification

Scotch® 2228 Rubber Mastic Tape**Skin Sensitisation**

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
Residual oils (petroleum), solvent-refined		Data not available or insufficient for classification
Zinc Stearate		Data not available or insufficient for classification
Quartz		Data not available or insufficient for classification

Photosensitisation

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

Respiratory Sensitisation

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
Residual oils (petroleum), solvent-refined		Data not available or insufficient for classification
Zinc Stearate		Data not available or insufficient for classification
Quartz		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
Residual oils (petroleum), solvent-refined		Data not available or insufficient for classification
Zinc Stearate		Data not available or insufficient for classification
Quartz	In Vitro	Some positive data exist, but the data are not sufficient for classification
Quartz	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
Residual oils (petroleum), solvent-refined			Data not available or insufficient for classification

Scotch® 2228 Rubber Mastic Tape

Zinc Stearate			Data not available or insufficient for classification
Quartz	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			
Residual oils (petroleum), solvent-refined		Data not available or insufficient for classification			
Zinc Stearate		Data not available or insufficient for classification			
Quartz		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			
Residual oils (petroleum), solvent-refined			Data not available or insufficient for classification			
Zinc Stearate			Data not available or insufficient for classification			
Quartz			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

Scotch® 2228 Rubber Mastic Tape

Asphalt	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
Residual oils (petroleum), solvent-refined			Data not available or insufficient for classification			
Zinc Stearate			Data not available or insufficient for classification			
Quartz	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
Residual oils (petroleum), solvent-refined	Not an aspiration hazard
Zinc Stearate	Not an aspiration hazard
Quartz	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

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

No product test data available.
No component test data available.

12.2. Persistence and degradability

No test data available.

12.3 : Bioaccumulative potential

No test data available.

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations**13.1 Waste treatment methods**

See Section 11.1 Information on toxicological effects

Scotch® 2228 Rubber Mastic Tape

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.

The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of 3M, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

EU waste code (product as sold)

08 04 10 Waste adhesives and sealants other than those mentioned in 08 04 09
20 01 39 Plastics

SECTION 14: Transportation information

80-6103-2294-5, 80-6107-3766-2, 80-6108-3329-7

Not hazardous for transportation

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Carcinogenicity

<u>Ingredient</u>	<u>CAS Nbr</u>	<u>Classification</u>	<u>Regulation</u>
Asphalt	8052-42-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Carbon black	1333-86-4	Grp. 2B: Possible human carc.	International Agency for Research on Cancer
Quartz	14808-60-7	Grp. 1: Carcinogenic to humans	International Agency for Research on Cancer

Global inventory status

Contact 3M for more information. 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.

15.2. Chemical Safety Assessment

Not applicable

SECTION 16: Other information

List of relevant H statements

H372 Causes damage to organs through prolonged or repeated exposure.
H413 May cause long lasting harmful effects to aquatic life.

List of relevant R-phrases

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
R53 May cause long-term adverse effects in the aquatic environment.

Revision information:

Revision Changes:

Section 1: Product use information information was modified.

Section 1: Product identification numbers information was modified.

Section 15: Carcinogenicity information information was modified.

Section 3: Composition/ Information of ingredients table information was modified.

Section 9: Relative density information information was modified.

Copyright information was modified.

Section 8: Occupational exposure limit table information was modified.

Aspiration Hazard Table information was modified.

Section 11: Acute Toxicity table information was modified.

Carcinogenicity Table information was modified.

Serious Eye Damage/Irritation Table information was modified.

Germ Cell Mutagenicity Table information was modified.

Skin Sensitisation Table information was modified.

Respiratory Sensitisation Table information was modified.

Photosensitisation Table information was modified.

Reproductive Toxicity Table information was modified.

Skin Corrosion/Irritation Table information was modified.

Target Organs - Repeated Table information was modified.

Target Organs - Single Table information was modified.

Section 11: Health Effects - Eye information information was modified.

Section 11: Health Effects - Skin information information was modified.

Section 11: Health Effects - Additional Information information was modified.

Section 5: Fire - Extinguishing media information information was modified.

Section 8: Personal Protection - Skin/hand information information was modified.

Section 13: 13.1. Waste disposal note information was modified.

Section 4: First aid for eye contact information information was modified.

Section 4: First aid for skin contact information information was modified.

Section 10: Hazardous decomposition products during combustion text information was added.

Section 11: Disclosed components not in tables text information was added.

Section 12: Acute aquatic hazard information information was deleted.

Section 12: Chronic aquatic hazard heading information was deleted.

Section 12: Acute aquatic hazard heading information was deleted.

Section 12: Chronic aquatic hazard information information was deleted.

Section 14: Transportation classification information was deleted.

Section 8: mg/m³ key information was deleted.

Section 8: ppm key information was deleted.

Section 11: Lactation table heading information was deleted.

Lactation Table information was deleted.

Section 11: Lactation table - Name heading information was deleted.

Section 11: Lactation table - Route heading information was deleted.

Section 11: Lactation table - Species heading information was deleted.

Section 11: Lactation table - Value heading information was deleted.

DISCLAIMER: The information on this Safety Data Sheet is based on our experience and is correct to the best of our knowledge at the date of publication, but we do not accept any liability for any loss, damage or injury resulting from its use (except as required by law). The information may not be valid for any use not referred to in this Data Sheet or use of the product in combination with other materials. For these reasons, it is important that customers carry out their own test to satisfy themselves as to the suitability of the product for their own intended applications.

3M United Kingdom MSDSs are available at www.3M.com/uk