



Safety Data Sheet

Copyright, 2013, 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:	7.00
Revision date:	04/02/2013	Supersedes date:	11/08/2009
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

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

Identified uses

Electrical, ELECTRICAL INSULATION AND MOISTURE SEALING

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
Inorganic fillers	Mixture		20 - 50	
Polyolefin	Mixture		5 - 25	
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE	152698-66-3		1 - 7	
Carbon black	1333-86-4	EINECS 215- 609-9	1 - 5	
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)	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 distearate	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

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. Extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam.

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
Silica, crystalline (airborne particles of respirable size)	14808-60-7	Health and Safety Comm. (UK)	TWA(respirable):0.1 mg/m ³	
Zinc distearate	557-05-1	Health and Safety Comm. (UK)	TWA (as inhalable dust): 10 mg/m ³ ; TWA (as respirable dust): 4 mg/m ³ ; STEL (as inhalable dust): 20 mg/m ³	
Asphalt	8052-42-4	Health and Safety Comm. (UK)	TWA(as fume):5 mg/m ³ ;STEL(as fume):10 mg/m ³	

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

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

ppm: parts per million

mg/m³: milligrams per cubic metre

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

Skin protection is not 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>

Scotch® 2228 Rubber Mastic Tape

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	± 1.1 Units not available or not applicable. [<i>Ref Std: WATER=1</i>]

Solubility- non-water *Not applicable.*

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

Substance

Condition

None known.

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.

Skin contact

No health effects are expected.

Eye contact

No health effects are expected.

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

Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No test 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			No data available
Carbon black	Dermal	Rabbit	LD50 > 3,000 mg/kg
Carbon black	Ingestion	Rat	LD50 > 8,000 mg/kg
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)			No data available
Asphalt	Dermal	Rabbit	LD50 > 2,000 mg/kg
Asphalt	Ingestion	Rat	LD50 > 5,000 mg/kg
Zinc distearate	Dermal	Rabbit	LD50 > 2,000 mg/kg
Zinc distearate	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

Scotch® 2228 Rubber Mastic Tape

Polyolefin	Rabbit	No significant irritation
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE		No data available
Carbon black		No significant irritation
Asphalt		Minimal irritation
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)		No data available
Zinc distearate		No data available
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		No data available
Carbon black		No data available
Asphalt		Mild irritant
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)		No data available
Zinc distearate		No data available
Quartz		No data available

Skin Sensitisation

Name	Species	Value
Inorganic fillers	Guinea pig	Not sensitizing
Polyolefin		No data available
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE		No data available
Carbon black		No data available
Asphalt		Not sensitizing
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)		No data available
Zinc distearate		No data available
Quartz		No data available

Photosensitisation

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

Respiratory Sensitisation

Name	Species	Value
Inorganic fillers		No data available
Polyolefin		No data available
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE		No data available
Carbon black		No data available
Asphalt		No data available
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)		No data available
Zinc distearate		No data available
Quartz		No data available

Scotch® 2228 Rubber Mastic Tape

Germ Cell Mutagenicity

Name	Route	Value
Inorganic fillers		No data available
Polyolefin		No data available
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE		No data available
Carbon black	In vivo	Some positive data exist, but the data are not sufficient for classification
Asphalt	In vivo	Mutagenic
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)		No data available
Zinc distearate		No data available
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			No data available
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE			No data available
Carbon black	Dermal		Not carcinogenic
Carbon black	Ingestion		Not carcinogenic
Carbon black	Inhalation		Carcinogenic.
Asphalt	Inhalation		Some positive data exist, but the data are not sufficient for classification
Asphalt	Dermal		Carcinogenic.
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)			No data available
Zinc distearate			No data available
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		No data available			
DISTILLATES (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE		No data available			
Carbon black		No data available			
Asphalt	Dermal	Not toxic to reproduction and/or development		NOAEL 2,000 mg/kg/day	
Asphalt	Inhalation	Not toxic to reproduction and/or development		NOAEL 0.1 mg/l	
SOLVENT REFINED		No data available			

Scotch® 2228 Rubber Mastic Tape

RESIDUAL OIL (PETROLEUM)					
Zinc distearate		No data available			
Quartz		No data available			

Lactation

Name	Route	Species	Value
Asphalt	Dermal		Does not cause effects on or via lactation
Asphalt	Inhalation		Does not cause effects on or via lactation

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Inorganic fillers			No data available			
Polyolefin			No data available			
DISTILLATE S (PETROLEUM), C3-6, PIPERYLENE-RICH, POLYMERS WITH ISOBUTYLENE			No data available			
Carbon black	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		Irritation Positive	
Asphalt	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification		Irritation Positive	
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)			No data available			
Zinc distearate			No data available			
Quartz			No data available			

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Polyolefin			No data available			
DISTILLATE S (PETROLEUM), C3-6, PIPERYLENE			No data available			

Scotch® 2228 Rubber Mastic Tape

E-RICH, POLYMERS WITH ISOBUTYLE NE						
Carbon black	Inhalation	heart	Some positive data exist, but the data are not sufficient for classification		NOEL N/A	
Carbon black	Inhalation	pneumoconiosis	Some positive data exist, but the data are not sufficient for classification		NOAEL N/A	
Asphalt	Dermal	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		NOEL 200 mg/kg/day	
Asphalt	Dermal	endocrine system hematopoietic system	Some positive data exist, but the data are not sufficient for classification		NOEL 1,000 mg/kg/day	
Asphalt	Dermal	heart bone, teeth, nails, and/or hair bone marrow liver immune system muscles nervous system respiratory system	All data are negative		NOAEL 2,000 mg/kg/day	
Asphalt	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification		NOEL 0.02 mg/l	
Asphalt	Inhalation	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification		LOEL 0.004 mg/l	
Asphalt	Inhalation	heart endocrine system bone, teeth, nails, and/or hair bone marrow hematopoietic system liver immune system muscles nervous system	All data are negative		NOAEL 0.1 mg/l	
SOLVENT REFINED RESIDUAL OIL (PETROLEU M)			No data available			
Zinc distearate			No data available			

Scotch® 2228 Rubber Mastic Tape

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
SOLVENT REFINED RESIDUAL OIL (PETROLEUM)	Not an aspiration hazard
Zinc distearate	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**Acute aquatic hazard:**

Not acutely toxic to aquatic life by GHS criteria.

Chronic aquatic hazard:

Not chronically toxic to aquatic life by GHS criteria.

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

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.

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

Not hazardous for transportation

ADR/AMDG/IATA: Not restricted for transport

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	Gr. 3: Not classifiable	International Agency for Research on Cancer
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:

No revision information is available.

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

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [3m manufacturer](#):

Other Similar products are found below :

[SC401U](#) [98-0003-3071-6](#) [00-054007-70220-7](#) [00-054007-34717-0](#) [021200-40230](#) [6840-2X50-GRAY](#) [701-W](#) [7993MP-2CIRCLE-100](#)
[FDV14-187C](#) [8124/14](#) [812510-100](#) [8125/17](#) [813216](#) [8204-3LFM](#) [8425-8](#) [MNG14BCX](#) [FP301-1-6"-Clear](#) [FV14-6C](#) [920102-01-25-R](#)
[927739-40](#) [929835-01-28-RK](#) [929836-09-16](#) [929974-01-40-R](#) [951240-2520-AR-PR](#) [960X/980X](#) [98-0003-3075-7](#) [HF36564-100](#) [HF625/26-](#)
[30](#) [1/2-5-5430](#) [1/2-5-850S](#) [1/2-5-3431](#) [12X12-6-4056B](#) [12X12-6-433](#) [12X12-6-4930](#) [13-500-NB](#) [14526-EZ5B-300-02C](#) [1-4-4658F](#) [14520-](#)
[EZAB-300-0EC](#) [DSTK9013-3420](#) [DSTK9015-3402](#) [14T26-SZLB-200-0LC](#) [14T50-SZWB-100-0NC](#) [1-5-3437](#) [1-5-4496W](#) [1-5-4943F](#) [1-5-](#)
[363](#) [1-5-5451](#) [1-5-421](#) [158250-0120](#) [MTI14-187L](#)