

MATERIAL SAFETY 3M
 DATA SHEET 3M Center
 St. Paul, Minnesota
 55144-1000
 1-800-364-3577 or (651) 737-6501 (24 hours)

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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.

DIVISION: ELECTRICAL PRODUCTS DIVISION
 TRADE NAME:
 SCOTCH(TM) 2228 Rubber Mastic Tape
 U.P.C. Number:
 00-54007-09656-6 00-54007-50727-7 00-54007-42918-0
 ISSUED: June 12, 2001
 SUPERSEDES: September 12, 2000
 DOCUMENT: 11-0744-0

1. INGREDIENT	C.A.S. NO.		PERCENT
Alumina Trihydrate.....	21645-51-2	48	- 58
Polyisobutylene.....	9003-27-4	18	- 28
Polybutylene.....	9003-29-6	10	- 20
Ethylene-Propylene-Ethylidenenorbornene Terpolymer.....	25038-36-2	8	- 18
Calcium Carbonate.....	471-34-1	8	- 18
Kaolin.....	1332-58-7	5	- 15
Polypropylene.....	9003-07-0	5	- 10
Carbon Black.....	1333-86-4	5	- 10
EPDM/POLYOLEFIN BLEND.....	None	3	- 8
Isobutylene-Isoprene Polymer.....	9010-85-9	4	- 8
Piperylene-2-Methyl-2-Butene Polymer....	26813-14-9	4	- 8
Solvent-refined Heavy Paraffinic Petroleum Distillates.....	64741-88-4	2	- 7
1-Hexene,polymer with 1,3- cyclopentadiene and other isomers....	68003-51-0	2	- 8
Asphalt.....	8052-42-4	2	- 4
Zinc Stearate.....	557-05-1	0.5	- 0.8

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

1. INGREDIENT	C.A.S. NO.	PERCENT	
TETRAKIS[METHYLENE(3,5-DI-TERT-BUTYL-4-HYDROXYHYDROCINNAMATE)]METHANE.....	6683-19-8	0.1	- 0.5
Calcium Silicate.....	1344-95-2	0.1	- 0.15

The components of this product are in compliance with the chemical notification requirements of TSCA. All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

Carbon black, calcium silicate and zinc stearate are compounded into the polymeric matrix; therefore, these will not contribute to dust hazard for inhalation nor ingestion.

This product contains the following toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR Part 372:
Zinc Stearate

2. PHYSICAL DATA

BOILING POINT:..... N/A
VAPOR PRESSURE:..... N/A
VAPOR DENSITY:..... N/A
EVAPORATION RATE:..... N/A
SOLUBILITY IN WATER:..... Nil
SPECIFIC GRAVITY:..... ca. 1.1 Water=1
PERCENT VOLATILE:..... 0
pH:..... N/A
VISCOSITY:..... N/A
MELTING POINT:..... N/D

APPEARANCE AND ODOR:
Black roll with release liner

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... N/A
FLAMMABLE LIMITS - LEL:..... N/A
FLAMMABLE LIMITS - UEL:..... N/A
AUTOIGNITION TEMPERATURE:..... N/D

EXTINGUISHING MEDIA:
Carbon dioxide, Dry chemical, Foam

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3. FIRE AND EXPLOSION HAZARD DATA (continued)

SPECIAL FIRE FIGHTING PROCEDURES:
Not applicable

UNUSUAL FIRE AND EXPLOSION HAZARDS:
Not applicable.

NFPA HAZARD CODES: HEALTH: 0 FIRE: 1 REACTIVITY: 0
UNUSUAL REACTION HAZARD: none

4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:
Not applicable.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon Monoxide and Carbon Dioxide.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:
Not applicable.

RECOMMENDED DISPOSAL:
Incinerate in an industrial or commercial facility in the presence of
a combustible material. Disposal alternative: Dispose of waste
product in a sanitary landfill.

ENVIRONMENTAL DATA:
Not determined.

REGULATORY INFORMATION:
Volatile Organic Compounds: N/D.
VOC Less H2O & Exempt Solvents: N/D.

Since regulations vary, consult applicable regulations or authorities
before disposal. In the event of an uncontrolled release of this
material, the user should determine if the release qualifies as a
reportable quantity. U.S. EPA Hazardous Waste Number = None (Not
U.S. EPA Hazardous).

EPCRA HAZARD CLASS:

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5. ENVIRONMENTAL INFORMATION (continued)

FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: No CHRONIC: No

6. SUGGESTED FIRST AID

EYE 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.

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

Not applicable.

SKIN PROTECTION:

Not applicable.

RECOMMENDED VENTILATION:

Not applicable.

RESPIRATORY PROTECTION:

Not applicable.

PREVENTION OF ACCIDENTAL INGESTION:

Not applicable.

RECOMMENDED STORAGE:

Not applicable.

FIRE AND EXPLOSION AVOIDANCE:

Keep away from heat, sparks, open flame, and other sources of ignition.

HMIS HAZARD RATINGS: HEALTH: 0 FLAMMABILITY: 1 REACTIVITY: 0
PERSONAL PROTECTION: A (See precautions, section 7.)

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 7. PRECAUTIONARY INFORMATION (continued)

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
Alumina Trihydrate.....	NONE	NONE	NONE	NONE	
Polyisobutylene.....	NONE	NONE	NONE	NONE	
Polybutylene.....	NONE	NONE	NONE	NONE	
Ethylene-Propylene- Ethylidenenorbornene Terpolymer....	NONE	NONE	NONE	NONE	
Calcium Carbonate.....	10	MG/M3	TWA	ACGIH	
Kaolin.....	2	MG/M3	TWA	ACGIH	
		RESPIRABLE			
Kaolin.....	10	MG/M3	TWA	OSHA	
		AS DUST			
		OSHA VACATED PEL			
Kaolin.....	15	MG/M3	TWA	OSHA	
		AS TOTAL DUST			
Kaolin.....	5	MG/M3	TWA	OSHA	
		RESPIRABLE			
Polypropylene.....	10	MG/M3	TWA	CMRG	
		AS TOTAL DUST			
Polypropylene.....	5	MG/M3	TWA	CMRG	
		AS RESPIRABLE DUST			
Carbon Black.....	3.5	MG/M3	TWA	ACGIH	
Carbon Black.....	3.5	MG/M3	TWA	OSHA	
Carbon Black.....	0.5	MG/M3	TWA	CMRG	
EPDM/POLYOLEFIN BLEND.....	NONE	NONE	NONE	NONE	
Isobutylene-Isoprene Polymer.....	NONE	NONE	NONE	NONE	
Piperylene-2-Methyl-2-Butene Polymer.....	NONE	NONE	NONE	NONE	
Solvent-refined Heavy Paraffinic Petroleum Distillates.....	5	MG/M3	TWA	CMRG	
1-Hexene,polymer with 1,3- cyclopentadiene and other isomers..	NONE	NONE	NONE	NONE	
Asphalt.....	0.5	MG/M3	TWA	ACGIH	
		as fume			
Zinc Stearate.....	10	MG/M3	TWA	OSHA	
		AS DUST			
		OSHA VACATED PEL			
Zinc Stearate.....	10	MG/M3	TWA	ACGIH	
Zinc Stearate.....	15	MG/M3	TWA	OSHA	
		AS TOTAL DUST			
Zinc Stearate.....	5	MG/M3	TWA	OSHA	
		RESPIRABLE			
TETRAKIS[METHYLENE(3,5-DI-TERT- BUTYL-4- HYDROXYHYDROCINNAMATE)]METHANE.....	NONE	NONE	NONE	NONE	
Calcium Silicate.....	10	MG/M3	TWA	ACGIH	
		AS TOTAL DUST			
Calcium Silicate.....	15	MG/M3	TWA	OSHA	

 Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
Calcium Silicate.....	5	MG/M3	TWA	OSHA	
		AS TOTAL DUST RESPIRABLE			

* SKIN NOTATION: Listed substances indicated with 'Y' under SKIN 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 Exposure Guidelines
- OSHA: Occupational Safety and Health Administration
- OSHAV: Occupational Safety and Health Administration Vacated PEL. Vacated Permissible Exposure Limits (PEL) are enforced as the OSHA PEL in some states. Check with your local regulatory authority.
- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:

Eye contact is not expected to occur during normal use of the product.

SKIN CONTACT:

Product is not expected to be irritating to the skin.

INHALATION:

No adverse health effects are expected from inhalation exposure.

IF SWALLOWED:

Ingestion is not a likely route of exposure to this product.

No adverse health effects are expected from swallowing.

CANCER:

WARNING: Contains a chemical which can cause cancer.
(1333-86-4,8052-42-4) (IARC possible human carcinogen 2B)

OTHER HEALTH HAZARD INFORMATION:

Exposure to this material in normal storage and handling has not been reported to cause significant adverse health effects. However, under normal processing conditions, e.g. grinding or heating, this product may release fumes and vapors of variable composition based on specific process conditions. These process releases may produce irritation or any of the health effects listed above when the

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8. HEALTH HAZARD DATA (continued)

emissions are present at elevated concentrations. Use with appropriate local exhaust ventilation.

SECTION CHANGE DATES

FIRE AND EXPL. SECTION CHANGED SINCE September 12, 2000 ISSUE
ENVIRONMENTAL INFO. SECTION CHANGED SINCE September 12, 2000 ISSUE
PRECAUTIONARY INFO. SECTION CHANGED SINCE September 12, 2000 ISSUE

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