

MATERIAL SAFETY
DATA SHEET



DIVISION: INDUSTRIAL MINERAL DIVISION
TRADE NAME:
3M BRAND ROOFING GRANULES (LITTLE ROCK, AR)

3M ID NUMBER/U.P.C.:	98-0111-1289-7	-	-	-	98-0111-1326-7	-	-	-
	98-0111-1328-3	-	-	-	98-0111-1329-1	-	-	-
	98-0111-1330-9	-	-	-	98-0111-1331-7	-	-	-
	98-0111-1332-5	-	-	-	98-0111-1333-3	-	-	-
	98-0111-1334-1	-	-	-	98-0111-1335-8	-	-	-
	98-0111-1336-6	-	-	-	98-0111-1337-4	-	-	-
	98-0111-1338-2	-	-	-	98-0111-1339-0	-	-	-
	98-0111-1340-8	-	-	-	98-0111-1341-6	-	-	-
	98-0111-1342-4	-	-	-	98-0111-1343-2	-	-	-
	98-0111-1350-7	-	-	-	98-0111-1378-8	-	-	-
	98-0111-1399-4	-	-	-	98-0111-1400-0	-	-	-
	98-0111-1487-7	-	-	-				

ISSUED: MARCH 2, 1995
SUPERSEDES: SEPTEMBER 13, 1994
DOCUMENT: 10-0169-2

1. INGREDIENT	C.A.S. NO.	PERCENT
PLAGIOCLASE FELDSPAR	None	35
POTASSIUM FELDSPAR	None	30
NEPHELINE	None	5
SODIUM SILICATE	1344-09-8	<
KAOLIN	1332-58-7	<
CARBON BLACK	1333-86-4	<
HYDROTREATED HEAVY NAPHTHENIC PETROLEUM DISTILLATES	64742-52-5	<
ZINC FERRITE	12063-19-3	<
RUTILE TITANIUM DIOXIDE	1317-80-2	<
IRON OXIDE (FE2O3)	1309-37-1	<
CHROMIUM OXIDE (TRIVALENT CHROMIUM)	1308-38-9	<
QUARTZ	14808-60-7	<

NOTE: THE AMOUNT OF DUST GENERATED WHILE HANDLING THESE GRANULES IS EXPECTED TO VARY DEPENDING ON THE USER'S OPERATION. THE LEVEL OF RESPIRABLE CRYSTALLINE SILICA IN THE DUST IS EXPECTED TO BE LESS THAN 1% BY WEIGHT OF THE DUST.

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 FERRITE
- CHROMIUM OXIDE (TRIVALENT CHROMIUM)

2. PHYSICAL DATA

BOILING POINT:	N/A
VAPOR PRESSURE:	N/A
VAPOR DENSITY:	N/A
EVAPORATION RATE:	N/A
SOLUBILITY IN WATER:	N/A

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

MATERIAL SAFETY
DATA SHEETMSDS: 3M BRAND ROOFING GRANULES (LITTLE ROCK, AR)
MARCH 2, 1995

PAGE: 2 of 5

2. PHYSICAL DATA (continued)

SP. GRAVITY:.....	2.5-2.6
PERCENT VOLATILE:	N/A
VOLATILE ORGANICS:	N/A
VOC LESS H2O & EXEMPT SOLVENT	N/A
pH:	SL BASIC
VISCOSITY:	N/A
MELTING POINT.....	N/A
APPEARANCE AND ODOR:	Granules, Various colors, slightly oily odor, typical particle size 0.84-2.0 mm

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:.....	N/A
FLAMMABLE LIMITS - LEL:	N/A
FLAMMABLE LIMITS - UEL:	N/A
AUTOIGNITION TEMPERATURE: ...	N/A
EXTINGUISHING MEDIA:	Non-combustible. Choose material suitable for surrounding fire.
SPECIAL FIRE FIGHTING PROCEDURES:	Not applicable
UNUSUAL FIRE AND EXPLOSION HAZARDS:	No unusual fire or explosion hazards are anticipated.

4. REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY - MATERIALS TO AVOID:
NONE
HAZARDOUS POLYMERIZATION: Will Not Occur
HAZARDOUS DECOMPOSITION PRODUCTS:
NONE

5. ENVIRONMENTAL INFORMATION**SPILL RESPONSE:**

Observe precautions from other sections. Collect spilled material.
Use wet sweeping compound or water to avoid dusting.

RECOMMENDED DISPOSAL:

Dispose of waste product in a sanitary landfill.

Since regulations vary, consult applicable regulations or authorities before disposal.

ENVIRONMENTAL DATA:

Not determined.

REGULATORY INFORMATION:

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).

MATERIAL SAFETY
DATA SHEET**3M**MSDS: 3M BRAND ROOFING GRANULES (LITTLE ROCK, AR)
MARCH 2, 1995

PAGE: 3 of 5

5. ENVIRONMENTAL INFORMATION (continued)

EPCRA HAZARD CLASS:

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

6. SUGGESTED FIRST AID

EYE CONTACT:

Immediately flush eyes with large amounts of water. Get immediate medical attention.

SKIN CONTACT:

No need for first aid is anticipated in the event of skin contact.

INHALATION:

If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

IF SWALLOWED:

Drink two glasses of water. Call a physician.

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

Avoid eye contact. The following should be worn alone or in combination, as appropriate, to prevent eye contact: Wear safety glasses with side shields.

SKIN PROTECTION:

Avoid prolonged or repeated skin contact.

VENTILATION PROTECTION:

If exhaust ventilation is not available, use appropriate respiratory protection.

RESPIRATORY PROTECTION:

Avoid breathing of dust. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: half-mask dust respirator.

PREVENTION OF ACCIDENTAL INGESTION:

Wash hands after handling and before eating.

RECOMMENDED STORAGE:

Not applicable.

FIRE AND EXPLOSION AVOIDANCE:Not applicable.

MATERIAL SAFETY
DATA SHEETMSDS: 3M BRAND ROOFING GRANULES (LITTLE ROCK, AR)
MARCH 2, 1995

PAGE: 4 of 5

7. PRECAUTIONARY INFORMATION (CONTINUED)

INGREDIENTS	EXPOSURE LIMITS		TYPE	AUTH	SKIN*
	VALUE	UNIT			
PLAGIOCLASE FELDSPAR	NONE	NONE	NONE	NONE	
POTASSIUM FELDSPAR	NONE	NONE	NONE	NONE	
NEPHELINE	NONE	NONE	NONE	NONE	
SODIUM SILICATE	NONE	NONE	NONE	NONE	
KAOLIN	2	mg/m3	TWA	ACGIH	
	respirable dust				
KAOLIN	10	mg/m3	TWA	OSHA	
CARBON BLACK	3.5	mg/m3	TWA	ACGIH	
CARBON BLACK	3.5	mg/m3	TWA	OSHA	
HYDROTREATED HEAVY NAPHTHENIC PETROLEUM DISTILLATES	5	mg/m3	TWA	CMRG	
HYDROTREATED HEAVY NAPHTHENIC PETROLEUM DISTILLATES	10	mg/m3	STEL	CMRG	
ZINC FERRITE	NONE	NONE	NONE	NONE	
RUTILE TITANIUM DIOXIDE	10	mg/m3	TWA	ACGIH	
RUTILE TITANIUM DIOXIDE	10	mg/m3	TWA	OSHA	
IRON OXIDE (FE2O3)	5	mg/m3	TWA	ACGIH	
	as Fe				
IRON OXIDE (FE2O3)	10	mg/m3	TWA	OSHA	
	as fume				
IRON OXIDE (FE2O3)	5	mg/m3	TWA	ACGIH	
	as Fe				
CHROMIUM OXIDE (TRIVALENT CHROMIUM) ..	0.5	mg/m3	TWA	ACGIH	
	as Cr				
CHROMIUM OXIDE (TRIVALENT CHROMIUM) ..	0.5	mg/m3	TWA	OSHA	
	as Cr				
QUARTZ	0.1	mg/m3	TWA	ACGIH	
	as quartz resp. dust				
QUARTZ	0.1	mg/m3	TWA	OSHA	
	as quartz resp. dust				

* 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
- AIHA: American Industrial Hygiene Assoc. Workplace Environmental Exposure Level G
- OSHA: Occupational Safety and Health Administration
- CMRG: Chemical Manufacture Recommended Guidelines
- NONE: None Established

8. HEALTH HAZARD DATA**EYE CONTACT:**

May cause eye irritation if dust gets into eyes.

MATERIAL SAFETY
DATA SHEETMSDS: 3M BRAND ROOFING GRANULES (LITTLE ROCK, AR)
MARCH 2, 1995

PAGE: 5 of 5

8. HEALTH HAZARD DATA (continued)

SKIN CONTACT:

No adverse health effects are expected from skin contact.

INHALATION:

Prolonged and repeated exposure to crystalline silica containing dust can result in injury to the lungs; the condition is called silicosis.

Single overexposure, above recommended guidelines, may cause:

Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

Prolonged or repeated overexposure, above recommended guidelines, may cause:

Silicosis: signs/symptoms can include shortness of breath and persistent coughing.

Pneumoconiosis (general): signs/symptoms can include persistent coughing and shortness of breath.

IF SWALLOWED:

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

CANCER:

QUARTZ SILICA (14808-60-7) is a potential cancer hazard causing lung tumors by the inhalation and intratracheal routes of exposure in laboratory animal studies (NTP anticipated human carcinogen, IARC probable human carcinogen 2A, Calif. Proposition 65).

SECTION CHANGE DATES

HEADING**SECTION CHANGED SINCE SEPTEMBER 13, 1994 ISSUE**

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

The information on this Data Sheet represents our current data and best opinion as to the proper use in handling of this material under normal conditions. Any use of the material which is not in conformance with this Data Sheet or which involves using the material in combination with any other material or any other process is the responsibility of the user.
