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**SECTION 1: PRODUCT AND COMPANY INFORMATION**

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**PRODUCT NAME:** Mineral Shield™ Roofing Granules  
**TRADE NAME:** N/A  
**CHEMICAL NAME / SYNONYM:** N/A  
**CHEMICAL FAMILY:** N/A  
**MANUFACTURER:** GAF  
**ADDRESS:** 1 Campus Drive, Parsippany, NJ 07054  
**24-HOUR EMERGENCY PHONE (CHEMTREC):** 800 – 424 – 9300  
**INFORMATION ONLY:** 800 – 766 – 3411  
**PREPARED BY:** Corporate EHS  
**APPROVED BY:** Corporate EHS

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**SECTION 2: HAZARD IDENTIFICATION**

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**NFPA and HMIS RATINGS:**

	NFPA Hazard Rating		HMIS Hazard Rating
	2		2
	0		0
	0		0
Special Hazards	-	Personal Protection	X

**GHS LABEL ELEMENTS:**

**GHS CLASSIFICATION:** Eye Irritant - Category 2A  
Skin Irritant - Category 2  
Acute Toxicity - Category 4  
Carcinogen - Category 1B  
Hazardous to the Aquatic Environment (chronic) - Category 4

## GHS PICTOGRAMS:



**SIGNAL WORD:** Danger

**HAZARD STATEMENTS:**

May cause damage to organs through prolonged or repeated exposure.  
Causes skin irritation.  
Causes serious eye irritation.  
May cause respiratory irritation.  
Suspected of causing cancer.  
Harmful if inhaled.  
Harmful to aquatic life with long lasting effects.

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**ADDITIONAL HAZARD IDENTIFICATION INFORMATION:**

**PRIMARY ROUTE OF EXPOSURE:** Eye contact, Skin contact

**SIGNS & SYMPTOMS OF EXPOSURE**

**Eyes:** Not expected to be a hazard under normal use conditions. If contact occurs, it may cause mechanical irritation to the eyes.

**Skin:** Not expected to be a hazard under normal use conditions. If contact occurs, it may cause mechanical irritation to the skin.

**Ingestion:** This product is not intended to be ingested. If ingested, it may cause temporary irritation to the gastrointestinal (digestive) tract.

**Inhalation:** Not expected to be a hazard under normal use conditions. If inhaled, it may cause irritation to the respiratory tract.

**ACUTE HEALTH HAZARDS:** See above.

**CHRONIC HEALTH HAZARDS:** Studies in humans have found that exposure to respirable crystalline silica (quartz) can cause silicosis, a fibrosis (scarring) of the lungs. Silicosis is a serious and irreversible disease; it may be progressive even after exposure has ceased; it can lead to disability and death. Human studies also have found that silicosis is a risk factor for tuberculosis, and that occupational exposure to respirable crystalline silica is associated with chronic obstructive pulmonary disease, including bronchitis and emphysema. Some studies show excess numbers of cases of scleroderma, connective tissue disorders, lupus, rheumatoid arthritis, chronic kidney diseases and end-stage kidney disease in workers exposed to respirable crystalline silica.

**CARCINOGENICITY:** Occupational exposure to respirable crystalline silica is classified as a known carcinogen in humans. IARC has determined that respirable crystalline silica is carcinogenic to humans (Group 1),

based on findings of sufficient evidence of carcinogenicity in both humans and experimental animals. NTP has classified respirable crystalline silica as a known human carcinogen based on sufficient evidence of carcinogenicity from studies in humans indicating a causal relationship between exposure to respirable crystalline silica and increased lung cancer rates in workers exposed to crystalline silica dust. NIOSH has determined that respirable crystalline silica is a potential occupational carcinogen.

IARC has determined that occupational exposure to Titanium Dioxide is possibly carcinogenic to humans (Group 2B). IARC concluded lung tumors were observed in rats following high dose exposure by inhalation and in female rats exposed by intra-tracheal instillation. Other studies have shown no tumors in rats following inhalation exposure and no tumors in mice or rats following oral exposure.

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**SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**


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CHEMICAL NAME	CAS #	%	OCCUPATIONAL EXPOSURE LIMITS		
			OSHA	ACGIH	OTHER
Kaolin clay	1332-58-7	0 – 6	5 mg/m <sup>3</sup> – resp. 15 mg/m <sup>3</sup> – total	5 mg/m <sup>3</sup> – resp. 10 mg/m <sup>3</sup> – total	REL: 5 mg/m <sup>3</sup> – resp., 10 mg/m <sup>3</sup> – total
Titanium dioxide	13463-67-7	0 – 3	15 mg/m <sup>3</sup> – total	10 mg/m <sup>3</sup> – total	REL: lowest feasible concentration
Chrome oxide	1308-38-9	0 – 1	0.5 mg/m <sup>3</sup> *	0.5 mg/m <sup>3</sup> *	0.5 mg/m <sup>3</sup> *
Iron oxide pigment	1309-37-1	0 – 1	10 mg/m <sup>3</sup> (fume)	5 mg/m <sup>3</sup> – resp.	REL: 5 mg/m <sup>3</sup>
Carbon black pigment	1333-86-4	0 – 1	3.5 mg/m <sup>3</sup>	3.5 mg/m <sup>3</sup>	REL: 3.5 mg/m <sup>3</sup>
Crystalline Silica	14808-60-7	5 - 25	10 mg/m <sup>3</sup> / (% SiO <sub>2</sub> + 2) – resp.	0.025 mg/m <sup>3</sup>	REL: 0.05 mg/m <sup>3</sup> – resp.
Aluminum Oxide	1344-28-1	<20	1 mg/m <sup>3</sup> respirable fraction for Aerosol	5 mg/m <sup>3</sup> – resp.	NE
Non-hazardous ingredients	-	60-80	NE	NE	NE

\* Chromium (III) inorganic compounds, as Cr

**NE = Not Established**

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**SECTION 4: FIRST AID MEASURES**

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**FIRST AID PROCEDURES**

- EYES:** Hold eyelids open and wash with gentle stream of water for at least 15 minutes preferably at eyewash fountain.
- SKIN:** Wash affected area thoroughly with soap and water.
- INHALATION:** No specific treatment is necessary since material is not likely to be hazardous by inhalation. If exposed to excessive levels of dust or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.
- INGESTION:** Not expected to be ingested. If ingested, do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek medical attention. Never give anything by mouth to an unconscious person.

**NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:** No information available

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**SECTION 5: FIRE FIGHTING PROCEDURES**

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- SUITABLE EXTINGUISHING MEDIA:** Water spray, Alcohol foam, Carbon dioxide or Dry chemical.
- HAZARDOUS COMBUSTION PRODUCTS:** Carbon dioxide and carbon monoxide.
- RECOMMENDED FIRE FIGHTING PROCEDURES:** Fire fighters should wear full protective clothing, including self-contained breathing equipment.
- UNUSUAL FIRE & EXPLOSION HAZARDS:** None known.
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**SECTION 6: ACCIDENTAL RELEASE MEASURES**

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- ACCIDENTAL RELEASE MEASURES:** Scoop up or sweep up granules. Avoid creating dusts during clean up.
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**SECTION 7: HANDLING AND STORAGE**

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- HANDLING AND STORAGE:** Store in sealed containers in a protected area.
- OTHER PRECAUTIONS:** None
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**INCOMPATIBILITY (MATERIAL TO AVOID):** None known.

**HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:** Carbon dioxide and carbon monoxide.

**HAZARDOUS POLYMERIZATION:** Will not occur.

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**SECTION 11: TOXICOLOGICAL INFORMATION**

**TOXICOLOGICAL INFORMATION:** No information available.

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**SECTION 12: ECOLOGICAL INFORMATION**

**ECOLOGICAL INFORMATION:** No information available.

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**SECTION 13: DISPOSAL CONSIDERATIONS**

**WASTE DISPOSAL METHOD:** This product, as supplied, is not regulated as a hazardous waste by the U.S. Environmental Protection Agency (EPA) under Resource Conservation and Recovery Act (RCRA) regulations. Comply with state and local regulations for disposal.

**RCRA HAZARD CLASS:** None

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**SECTION 14: TRANSPORTATION INFORMATION**

**U.S. DOT TRANSPORTATION**

**PROPER SHIPPING NAME:** This product is not classified as a hazardous material for transport.

**HAZARD CLASS:** N/A

**ID NUMBER:** N/A

**PACKING GROUP:** N/A

**LABEL STATEMENT:** N/A

**OTHER:** N/A

**SECTION 15: REGULATORY INFORMATION****U.S. FEDERAL REGULATIONS**

**TSCA:** This product and its components are listed on the TSCA 8(b) inventory.

**CERCLA:** None

**SARA**

**311 / 312 HAZARD CATEGORIES:** Acute Health Hazard, Chronic Health Hazard

**313 REPORTABLE INGREDIENTS:** Chrome oxide, 1308-38-9, 0 – 1%

**CALIFORNIA PROPOSITION 65:** This product contains a chemical known to the state of California to cause cancer and birth defects or other reproductive harm. Cancer: carbon black, crystalline silica and titanium dioxide.

Other state regulations may apply. Check individual state requirements. The following components appear on one or more of the following state hazardous substances lists:

Chemical Name	CAS #	CA	MA	MN	NJ	PA	RI
Kaolin clay	1332-58-7	No	No	Yes	Yes	Yes	Yes
Titanium Dioxide	13463-67-7	No	No	Yes	Yes	Yes	Yes
Chrome oxide	1308-38-9	Yes	No	Yes	Yes	No	No
Iron oxide pigment	1309-37-1	Yes	Yes	Yes	Yes	Yes	Yes
Carbon black pigment	1333-86-4	Yes	Yes	Yes	Yes	Yes	Yes
Crystalline Silica	14808-60-7	Yes	Yes	Yes	Yes	Yes	Yes
Aluminum Oxide	1344-28-1	No	No	Yes	Yes	Yes	Yes

**SECTION 16: OTHER INFORMATION**

**ADDITIONAL COMMENTS:** None

**DATE OF PREVIOUS SDS:** October 2013

**CHANGES SINCE PREVIOUS SDS:** Headquarters Address Change

This information relates to the specific material designated and may not be valid for such material used on combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee, expressed or implied, is made as to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license of valid patents.