GAF
Safety Data Sheet
SDS # 2118
SDS Date: April 2018

SECTION 1: PRODUCT AND COMPANY INFORMATION

PRODUCT NAME:	Mineral Shield™ Roofing Granules
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

SECTION 2: HAZARD IDENTIFICATION

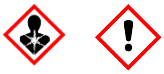
NFPA and HMIS RATINGS:

	NFPA Hazard Rating		HMIS Hazard Rating
Health	*2*	**Health**	*2*
Flammable	*0*	***Flammable***	*0*
Reactive	*0*	**Reactive**	*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.

ADDITIONAL HAZARD IDENTIFICATION INFORMATION:

PRIMARY ROUTE OF EXPOSURE: Eye contact, Skin contact

SIGNS & SYMPTONS 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.

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.

IARC has determined that occupational exposure to carbon black is possibly carcinogenic to humans (Group 2B).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

			OCCUPATIONAL EXPOSURE LIMITS		
CHEMICAL NAME	**CAS #**	**%**	**OSHA**	**ACGIH**	**OTHER**
Kaolin clay	1332-58-7	0 – 6	5 mg/m3 – resp. 15 mg/m3 – total	5 mg/m3 – resp. 10 mg/m3 – total	REL: 5 mg/m3 – resp., 10 mg/m3 – total
Titanium dioxide	13463-67-7	0 – 3	15 mg/m3 – total	10 mg/m3 – total	REL: lowest feasible concentration
Chrome oxide	1308-38-9	0 – 1	0.5 mg/m3 *	0.5 mg/m3 *	0.5 mg/m3 *
Iron oxide pigment	1309-37-1	0 – 1	10 mg/m3 (fume)	5 mg/m3 – resp.	REL: 5 mg/m3
Carbon black pigment	1333-86-4	0 – 1	3.5 mg/m3	3.5 mg/m3	REL: 3.5 mg/m3
Crystalline Silica	14808-60-7	5 - 25	50 mcg/m3 /	0.025 mg/m3	REL: 0.05 mg/m3 – resp.
Aluminum Oxide	1344-28-1	<20	1 mg/m3 respirable fraction for Aerosol	5 mg/m3 – resp.	NE
Non-hazardous ingredients	-	60-80	NE	NE	NE

* Chromium (III) inorganic compounds, as Cr

NE = Not Established

SECTION 4: FIRST AID MEASURES

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

SECTION 5: FIRE FIGHTING PROCEDURES

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.

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES:	Scoop up or sweep up granules. Avoid creating dusts during clean up.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE:	Store in sealed containers in a protected area.
OTHER PRECAUTIONS:	None

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS / VENTILATION:	Use in a well ventilated area.
RESPIRATORY PROTECTION:	Use NIOSH-approved respirator, where exposure limits may be exceeded.
EYE PROTECTION:	Safety glasses with side shields.
SKIN PROTECTION:	Cotton or leather gloves are recommended when handling.
OTHER PROTECTIVE EQUIPMENT:	None
WORK HYGIENIC PRACTICES:	Wash exposed skin prior to eating, drinking or smoking and at the end of each shift.
EXPOSURE GUIDELINES:	N/A

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE & ODOR:	Various colored granules; no appreciable odor.		
FLASH POINT:	No data	**LOWER EXPLOSIVE LIMIT:**	No data
METHOD USED:	No data	**UPPER EXPLOSIVE LIMIT:**	No data
EVAPORATION RATE:	No data	**BOILING POINT:**	No data
pH (undiluted product):	No data	**MELTING POINT:**	>2300 °F
SOLUBILITY IN WATER:	No data	**SPECIFIC GRAVITY:**	2.8
VAPOR DENSITY:	No data	**PERCENT VOLATILE:**	No data
VAPOR PRESSURE:	No data	**MOLECULAR WEIGHT:**	No data
VOC WITH WATER (LBS/GAL):	No data	**WITHOUT WATER (LBS/GAL):**	No data

SECTION 10: STABILITY AND REACTIVITY

THERMAL STABILITY: **STABLE X** **UNSTABLE** ☐

CONDITIONS TO AVOID (STABILITY): None known.

INCOMPATIBILITY (MATERIAL TO AVOID):	None known.
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:	Carbon dioxide and carbon monoxide.
HAZARDOUS POLYMERIZATION:	Will not occur.

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL INFORMATION: No information available.

SECTION 12: ECOLOGICAL INFORMATION

ECOLOGICAL INFORMATION: No information available.

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.

SECTION 14: TRANSPORTATION INFORMATION

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

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 carbon black, crystalline silica and titanium dioxide, chemicals known to the state of California to cause cancer.

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: December 2014

CHANGES SINCE PREVIOUS SDS: Update Sections 14 and 15.

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.