



SECTION 1: PRODUCT AND COMPANY INFORMATION

PRODUCT NAME: Monaco™ Shingles
TRADE NAME: Asphalt / Fiberglass Shingles
CHEMICAL NAME / SYNONYM: N/A
CHEMICAL FAMILY: N/A
MANUFACTURER: GAF
ADDRESS: 1361 Alps Road, Wayne, NJ 07470
24-HOUR EMERGENCY PHONE (CHEMTREC): 800 – 424 – 9300
INFORMATION ONLY: 800 – 766 – 3411
PREPARED BY: Corporate EHS
APPROVED BY: Corporate EHS

NFPA Hazard Rating

HMIS Hazard Rating

Health
Flammable
Reactive
Special Hazards

1
1
0
-

Health
Flammable
Reactive
Personal Protection

1
1
0
B

OSHA HAZARDOUS: Yes

No

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

OCCUPATIONAL EXPOSURE LIMITS

CHEMICAL NAME	CAS #	%	OSHA	ACGIH	OTHER
Granules	-	20 – 45	NE	NE	NE

OCCUPATIONAL EXPOSURE LIMITS

CHEMICAL NAME	CAS #	%	OSHA	ACGIH	OTHER
Limestone	1317-65-3	25 – 45	5 mg/m ³ – resp. 15 mg/m ³ – total	3 mg/m ³ – resp. 10 mg/m ³ – total	REL: 5 mg/m ³ – resp. 10 mg/m ³ – total
Oxidized Asphalt	64742-93-4	10 – 30	NE	0.5 mg/m ³ (inhalable fraction, as benzene-soluble aerosol)	5 mg/m ³ – ceiling (15 min. fumes)
Crystalline Silica	14808-60-7	0 – 10	10 mg/m ³ / (% SiO ₂ + 2) – resp.	0.025 mg/m ³	REL: 0.05 mg/m ³ – resp.
Fiberglass Mat	65997-17-3	1 – 3	1 f/cc – resp.	1 f/cc – resp.	REL: 5 mg/m ³ – total fibers
Titanium Dioxide	13463-67-7	0 – 4	15 mg/m ³ – total	10 mg/m ³ – total	REL: lowest feasible concentration

NE = Not Established

As defined in the OSHA Hazard Communication Standard, 29 CFR 1910.1200, the products above are considered articles and do not require an MSDS. All components listed for this product are bound within the shingle. When handled as intended and under normal conditions of use, there is no evidence that any of the ingredients are released in amounts that pose a significant health risk. Although these products are not subject to the OSHA Standard, GAF would like to disclose as much health and safety information as possible to ensure that this product is handled and used properly. This MSDS contains valuable information critical to the safe handling and proper use of the product. This MSDS should be retained and be made available for employees and other users of this product. In addition, the recommendations for handling and use of these products should be included in worker training programs.

SECTION 3: HAZARDS IDENTIFICATION

PRIMARY ROUTE OF EXPOSURE: Occasional nuisance dust, Inhalation

SIGNS & SYMPTOMS OF EXPOSURE

Eyes: May cause irritation to the eyes.

Skin: May cause 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: May cause irritation to the respiratory tract.

ACUTE HEALTH HAZARDS: NIOSH has found that studies of workers exposed to asphalt fumes

have repeatedly found irritation of the serous membranes of the conjunctivae (eye irritation) and the mucous membranes of the upper respiratory tract (nasal and throat irritation).

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:

IARC has determined that occupational exposure to oxidized asphalt and its emissions is probably carcinogenic to humans (Group 2A). IARC concluded that available data from cancer studies in humans points to an association between exposures to oxidized asphalts during roofing and lung cancer and tumors in the upper aero-digestive tract. In addition, IARC found sufficient evidence of carcinogenicity in experimental animals for extracts and fume condensates of oxidized asphalts.

NIOSH has concluded that the collective data from human, animal, genotoxicity and exposure studies provide sufficient evidence that roofing asphalt fumes are a potential occupational carcinogen.

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.

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: Remove to fresh uncontaminated air.

INGESTION: Not expected to be ingested.

**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:** NIOSH-approved self contained breathing apparatus is recommended for smoke protection.

**UNUSUAL FIRE & EXPLOSION
HAZARDS:** N/A

SECTION 6: ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Pick up large pieces. Avoid creating dusts during clean up.

SECTION 7: HANDLING AND STORAGE

HANDLING AND STORAGE: No specific handling or storage requirements.

OTHER PRECAUTIONS: None

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

**ENGINEERING CONTROLS /
VENTILATION:** N/A

RESPIRATORY PROTECTION: N/A under normal use conditions. In circumstances where dust or fumes are generated and may exceed recognized allowable exposure levels, appropriate NIOSH approved respiratory protection is recommended.

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.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE & ODOR:	Granule coated shingle; no appreciable odor.		
FLASH POINT:	> 550 °F	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:	No data
SOLUBILITY IN WATER:	No data	SPECIFIC GRAVITY:	No data
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 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: None available for the product. See section 3.

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.

RCRA HAZARD CLASS: None

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: None

311 / 312 HAZARD CATEGORIES: None

313 REPORTABLE INGREDIENTS: None

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: Oxidized Asphalt, 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
Limestone	1317-65-3	No	Yes	Yes	No	Yes	Yes
Oxidized Asphalt	64742-93-4	No	No	No	No	No	No
Crystalline Silica	14808-60-7	Yes	Yes	Yes	Yes	Yes	Yes
Fiberglass Mat	65997-17-3	Yes	No	Yes	Yes	No	Yes
Titanium Dioxide	13463-67-7	No	Yes	Yes	Yes	Yes	Yes

SECTION 16: OTHER INFORMATION

ADDITIONAL COMMENTS: None.

DATE OF PREVIOUS MSDS: New MSDS

CHANGES SINCE PREVIOUS MSDS: N/A

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.