

**TAMKO BUILDING PRODUCTS LLC SAFETY DATA SHEET - T01B2022****1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION****TRADE NAME:** Roofing Granules**LABEL:** GI Granules**USE & DESCRIPTION:** Roofing Manufacturing**CHEMICAL FAMILY:** Mixture**MANUFACTURED FOR:**

TAMKO Building Products LLC

P.O. Box 97

Galena, KS 66739-0097

www.TAMKO.com

**EMERGENCY TELEPHONE NUMBERS:**

General Information: 1-417-624-6644 (8 a.m. - 5 p.m. CST)

Chemtrec: 1-800-424-9300 (24 HOURS)

**2. HAZARDS IDENTIFICATION****SIGNAL WORD:** Danger**GHS CLASSIFICATION:**

Carcinogenicity – Category 1A

Specific Target Organ Toxicity, Repeated Exposure – Category 2 (lungs)

**HAZARD STATEMENTS:**

May cause cancer.

May cause damage to organs (lungs) through prolonged or repeated exposure.

Additional hazard information: Can cause silicosis and other permanent lung damage.

**PRECAUTIONARY STATEMENTS:**Prevention

Obtain special instructions before use.

Do not breathe dust.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

Response

In case of fire: See Section 5.

Specific treatment: See section 4-First Aid

Get medical advice/attention: If exposed or concerned or you feel unwell; and/or if respiratory irritation persists.

Storage

Store locked up.

Disposal

Dispose in accordance with Federal, State, and Local regulations. (See section 13 for additional information).

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

Components	CAS No.	% by Weight
Basalt or Andesite or Rhyolite*	Mixture	80-98
Quartz (a component of Basalt or Andesite or Rhyolite) (Silica)	14808-60-7	4-44
Ceramic	Mixture	1-5
Iron Oxide	1309-37-1	<3
Titanium dioxide	13463-67-7	<3
Zinc oxide	1314-13-2	<2
Chromium oxide	1308-38-9	<1
Carbon black	1333-86-4	<1
Distillates (petroleum)	Varies**	<1
Siloxane	10217-34-2	<0.1

\*Natural rock material. Composition varies naturally and typically contains feldspar, chlorite, microcline, muscovite, hematite, and epidote.

\*\* One of the following: 64742-52-5; 65742-54-7; 64742-58-1; or 64742-65-0.

**4. FIRST AID MEASURES****EYE CONTACT:** Do not rub eyes. Immediately flush eyes with plenty of cool water for at least 20 minutes, occasionally lifting the eye lids to ensure thorough rinsing. Get medical attention if irritation develops and persists.**SKIN CONTACT:** Wash off with soap and plenty of water. Get medical attention if irritation develops or persists.**INGESTION:** If swallowed, do not induce vomiting. If victim is fully conscious, give a cupful of water. If vomiting occurs, keep head lower than hips to avoid aspiration of vomit into the lungs which can cause inflammation or pneumonitis. Call poison control center or get immediate medical attention.**INHALATION:** Move person to fresh air. Call a physician if symptoms develop or persist.**NOTES TO PHYSICIAN:** Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

Dusts may irritate the respiratory tract, skin, and eyes. Other symptoms / effects: coughing, discomfort in the chest, shortness of breath, prolonged exposure may cause chronic effects.

**GENERAL INFORMATION:** If exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.**5. FIRE FIGHTING MEASURES****EXTINGUISHING MEDIA:** Use appropriate extinguishing media for any nearby fire.**SPECIAL FIRE FIGHTING PROCEDURES:** Self-contained breathing apparatus (SCBA) and full protective clothing should be worn when fighting chemical fires. Use protective equipment appropriate for surrounding materials.**UNUSUAL FIRE OR EXPLOSION HAZARDS:** None.**HAZARDOUS COMBUSTION PRODUCTS:** None known.

**6. ACCIDENTAL RELEASE MEASURES**

**PRECAUTIONS IF MATERIAL IS SPILLED OR RELEASED:** Wear appropriate personal protective equipment (See Section 8). Clean up promptly by vacuum. Do not dry sweep or blow with air in confined area. Avoid dust formation. Minimize dust generation and accumulation.

**WASTE DISPOSAL METHODS:** Dispose in accordance with applicable Federal, State, and Local regulations. Do not burn.

**7. HANDLING AND STORAGE**

**HANDLING:** Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Do not breath dust. Wear appropriate personal protective equipment. Wash thoroughly after handling.

**STORING:** Store in a manner which will minimize dust generation and accumulation. Store in sealed containers in a protected area. Follow recommended work practices and use recommended personal protective clothing and equipment. See Section 8 of this SDS.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION****EXPOSURE LIMITS**

Components Raw Products	CAS No.	OSHA		ACGIH		Unit
		TWA	STEL	TWA	STEL	
Carbon Black	1333-86-4	3.5	NE	3*	NE	mg/m <sup>3</sup>
Iron oxide	1309-37-1	5**	NE	5**	NE	mg/m <sup>3</sup>
Titanium dioxide	13463-67-7	15**	NE	10	NE	mg/m <sup>3</sup>
Crystalline Silica (Quartz)	14808-60-7	0.05**	NE	0.025**	NE	mg/m <sup>3</sup>

NE= Not established.

Note: Due to the form of the product, hazardous exposures from this product are not expected to occur under normal conditions of use. Gloves must be worn when handling and adequate ventilation must be provided during roofing related activities.

\* Inhalable Fraction.

\*\* Respirable Fraction.

**ENGINEERING CONTROLS:** Ensure adequate ventilation, especially in confined areas.

**RESPIRATORY PROTECTION:** If engineering controls do not maintain airborne concentrations below recommended exposure limits, use a NIOSH approved air-purifying respirator. If concentrations are sufficiently high that this respirator is inadequate, or high enough to cause oxygen deficiency, use a positive pressure self-contained breathing apparatus (SCBA). Follow all applicable respirator/SCBA use, fitting, and training standards and regulations.

**VENTILATION:** Use only with adequate ventilation to maintain exposures below applicable exposure limits.

**EYE PROTECTION:** Safety glasses with side shields (or goggles).

**SKIN:** Wear protective gloves. Observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

<b>Appearance and Odor:</b>	Solid granules	<b>Upper/Lower Flammability or Explosive Limits:</b>	Not Applicable
<b>Odor Threshold</b>	Not Applicable	<b>Vapor Pressure:</b>	Not Applicable
<b>pH:</b>	Not Applicable	<b>Vapor Density (Air = 1):</b>	Not Applicable
<b>Boiling Point:</b>	Not Applicable	<b>Specific Gravity/Relative Density:</b>	2.8 - 3
<b>Melting Point:</b>	>2300 °F	<b>Solubility (IES):</b>	Negligible
<b>Flash Point:</b>	Not Applicable	<b>Initial Boiling Point and Boiling Range:</b>	Not Applicable
<b>Autoignition Temperature:</b>	Not Available	<b>Evaporation Rate (Butyl Acetate = 1):</b>	Not Available
<b>Viscosity:</b>	Not Applicable	<b>Flammability (Solid and Gas):</b>	Non flammable
<b>Decomposition Temperature:</b>	Not Available	<b>Partition Coefficient: N-Octanol/Water:</b>	Not Available

**10. STABILITY AND REACTIVITY**

**STABILITY:** Material is stable under normal conditions.

**REACTIVITY:** The product is stable and non-reactive under normal conditions of use, storage and transport.

**CONDITIONS TO AVOID:** Contact with incompatible materials.

**PRODUCT SHOULD NOT BE BURNED OR HEATED USING A DIRECT FLAME DEVICE.**

**HAZARDOUS REACTION:** No dangerous reaction known under conditions of normal use.

**INCOMPATIBILITY (MATERIALS TO AVOID):** None known.

**HAZARDOUS COMBUSTION PRODUCTS:** No hazardous decomposition products are known.

**11. TOXICOLOGICAL INFORMATION**

See information in Section 2. Likely routes of exposure:

**EYE** – Dust may irritate the eyes.

**SKIN** – Dust or powder may irritate the skin.

**INHALATION** – May cause damage to organs through prolonged or repeated exposure by inhalation. Dust may irritate respiratory system.

**INGESTION** – Expected to be a low ingestion hazard.

**Symptoms related to the physical, chemical and toxicological characteristics:** Dust may irritate the respiratory tract, skin and eyes. Other symptoms: Coughing, discomfort in the chest, and shortness of breath.

**THE FOLLOWING COMPONENT DATA IS PROVIDED FOR USER INFORMATION:****SILICA**

**Cancer** - This product contains crystalline silica (quartz). IARC has determined that crystalline silica inhaled in the form of quartz from occupational sources is carcinogenic to humans (Group 1). IARC concluded that there was sufficient evidence in humans and animals for the carcinogenicity of inhaled crystalline silica in the form of quartz from occupational sources. The NTP has classified silica as known to be a human carcinogen. The physical nature of this product may help limit any inhalation hazard from crystalline silica during application and in its hardened state. However, physical forces such as grinding, drilling and other demolition work on this product may liberate crystalline silica dust.

**Acute Effects** - Exposure to silica dust can cause irritation of the eyes, nose and throat. Exposure to high concentrations can also cause Accelerated Silicosis causing progressive shortness of breath, fever, coughing, and weight loss.

**Chronic Effects** – In addition to cancer, breathing of silica over a period of time can cause damage to the lung tissue and silicosis after long exposure at low concentrations causing shortness of breath, fever, coughing, and weight loss. Prolonged and repeated exposure to respirable silica-containing dust may also cause autoimmune disease, kidney disease, tuberculosis, nonmalignant respiratory disease, and bronchitis.

#### **TITANIUM DIOXIDE**

**Cancer** - Titanium dioxide has recently been classified by the International Agency for Research on Cancer (IARC) as Group 2B "possibly carcinogen to humans". IARC determined that high concentrations of pigment-grade (powdered) and ultrafine titanium dioxide dust caused respiratory tract cancer in rats exposed by inhalation and intratracheal instillation. The series of biological events or steps that produced the rat lung cancers (e.g. particle deposition, impaired lung clearance, cell injury, fibrosis, mutations and ultimately cancer) have also been seen in people working in dusty environments. Therefore, IARC considered the animal data relevant to people doing jobs with exposures to titanium dioxide dust. The physical nature of this product may help limit any inhalation hazard from titanium dioxide during application and in its hardened state. However, physical forces such as grinding, drilling and other demolition work on this product may liberate titanium dioxide dust.

**Acute Effects**- Skin exposure to titanium dioxide is a mild irritant and may cause mechanical irritation (irritation from frictional action but is believed not to be absorbed through intact skin. Dust may cause mechanical irritation (irritation from frictional action) of eyes. May cause gastrointestinal (digestive) tract irritation with nausea, vomiting and diarrhea if swallowed. It is not absorbed following ingestion. Dust may be harmful if inhaled and causes respiratory tract irritation. May affect respiration and blood.

**Chronic Effects** - Heavy occupational dust exposures may cause chronic rhinitis, chronic bronchitis, impaired pulmonary function, resemblance of silicosis without any fibrosis, functional change in trachea or bronchi, chronic pulmonary edema.

#### **CARBON BLACK**

**Cancer** – This product may contain carbon black. IARC has classified carbon black as Group 2B "possibly carcinogenic to humans". The physical nature of this product may help limit any inhalation hazard from product dust during application and in its hardened state. However, physical forces such as grinding, drilling and other demolition work on this product may liberate wood dust.

**Acute Effects** - Exposure to product dust can cause irritation of the eyes, nose and throat causing shortness of breath, dryness and soreness of the throat, sneezing, tearing and conjunctivitis.

**Chronic Effects** - Results of epidemiological studies of carbon black production workers suggest that cumulative exposure to carbon black may result in small decrements in lung function.

## **12. ECOLOGICAL INFORMATION**

**Ecotoxicity:** Components of this product are harmful to aquatic life with long lasting effects.

**Persistence and degradability:** Not applicable to inorganic substances.

**Bioaccumulative potential:** No data available.

**Mobility in soil:** The product is insoluble in water.

**Other adverse effects:** No other adverse environmental effects (e.g., ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this product.

## **13. DISPOSAL CONSIDERATIONS**

Dispose of contents / container in accordance with Federal, State, and Local regulations.

## **14. TRANSPORT INFORMATION**

This product is not regulated as a hazardous material for transport under 49 CFR or for vessel transport under the IMDG Code.


## **15. REGULATORY INFORMATION**

**TSCA Section 12(b) Export Notification:** Not regulated.

**CERCLA / SARA:**

**Section 302 / Section 304 / Section 313:** Product composition is listed in Section 3 of the SDS

**Section 311 / Section 312:** See Section 2 of the SDS

**California Proposition 65:**  **WARNING:** Cancer and Reproductive Harm – <https://www.P65Warnings.ca.gov>.

## **16. OTHER INFORMATION**

<u>HMIS Rating:</u>	<u>NFPA Rating:</u>
Health – 1*	Health - 1
Flammability - 0	Flammability - 0
Reactivity - 0	Reactivity - 0

SDS Date of Preparation / Revision: February 2022

#### **Disclaimer of Liability**

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