

TAMKO BUILDING PRODUCTS, INC. SAFETY DATA SHEET - T01B2015

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, Inc.

P. O. Box 1404

Joplin, MO 64802-1404

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 IDENTIFICATIONSIGNAL WORD: **Danger**

GHS CLASSIFICATION:

Carcinogenicity – Category 1A

Skin Irritation – Category 2

Eye Irritation – Category 2B

Specific Target Organ Toxicity, Repeated Exposure – Category 1

Specific Target Organ Toxicity, Single Exposure – Category 3

HAZARD STATEMENTS:

May cause cancer.

Causes skin and eye irritation.

Causes damage to organs through prolonged or repeated exposure.

May cause respiratory irritation

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 eat, drink or smoke when using this product.

Use only outdoors or in well ventilated area.

Response

If on skin: Wash with plenty of water.

In case of fire: See Section 5.

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

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If inhaled: Remove person to fresh air and keep comfortable for breathing.

Storage

Store locked up, in a well-ventilated place.

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 (Composition varies naturally. Typically contains feldspar, chlorite, microcline, muscovite and epidote)	Mixture	82-94
Quartz (a component of Basalt or Andesite) (Silica)	14808-60-7	4-12
Ceramic	Mixture	1-5
Iron Oxide	1309-37-1	0.1-3
Titanium dioxide	13463-67-7	0.1-3
Carbon black	1333-86-4	0.1-1
Chromium oxide	1308-38-9	0.1-1

NE = Not established

4. FIRST AID MEASURES**EYE CONTACT:** 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:** If inhaled, remove person to fresh air. Drink water to clear throat or blow nose to clear. If not breathing, give artificial respiration or give oxygen by trained personnel and get immediate medical attention.**NOTES TO PHYSICIAN:** Treat symptomatically.

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 sweeping or vacuum. 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: Avoid contact with skin and eyes. Avoid dust formation. Avoid breathing dust. Minimize dust generation and accumulation. 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	CAS No.	OSHA		ACGIH		Unit
		TWA	STEL	TWA	STEL	
Raw Products						
Carbon Black	1333-86-4	3.5	NE	3*	NE	mg/m ³
Iron oxide	1309-37-1	NE	NE	5**	NE	mg/m ³
Titanium dioxide	13463-67-7	NE	NE	10	NE	mg/m ³
Crystalline Silica (Quartz)	14808-60-7	0.05	NE	0.025	NE	mg/m ³

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor: Granules

Odor Threshold: Not Applicable

pH: Not Applicable

Boiling Point: Not Applicable

Melting Point: >2300 °F

Flash Point: Not determined

Autoignition Temperature: No data available.

Viscosity: No data available.

Decomposition Temperature: Not Applicable

Upper/Lower Flammability or Explosive Limits:

Vapor Pressure:

Vapor Density (Air = 1):

Specific Gravity/Relative Density:

Solubility (IES):

Initial Boiling Point and Boiling Range:

Evaporation Rate (Butyl Acetate = 1):

Flammability(Solid and Gas):

Partition Coefficient: N-Octanol/Water:

Not Applicable

Not Applicable

Not Applicable

2.8

Negligible

Not Applicable

Not Applicable

Not Applicable

No data available.

10. STABILITY AND REACTIVITY

STABILITY: Stable

REACTIVITY: Reactivity will not occur.

CONDITIONS TO AVOID: Not available.

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

HAZARDOUS REACTION: Polymerization will not occur.

INCOMPATIBILITY (MATERIALS TO AVOID): No data available.

HAZARDOUS COMBUSTION PRODUCTS: No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Ingredient Name CAS No.	Approximate Weight %	NIOSH – Selected LD50s and LC50s
Carbon black 1333-86-4	0.1 - 1	>8000 mg/kg Oral LD50 Rat >3 g/kg Dermal LD50 Rabbit

Carcinogens:

Ingredient Name CAS No.	Approximate Weight %	Carcinogen Categories
Carbon black 1333-86-4	0.1 - 1	ACGIH Carcinogens: A3 – Confirmed animal carcinogen with unknown relevance to humans IARC Group 2B: Possibly carcinogenic to humans.
Iron oxide 1309-37-1	0.1-3	ACGIH Carcinogens: A4 – Not classifiable as a human carcinogen IARC Group 3: Not classifiable as to carcinogenicity to humans.
Quartz (component of Basalt and Andesite) 14808-60-7	4-12	ACGIH Carcinogens: A2 – Suspected human carcinogen IARC Group 1: Carcinogenic to humans NTP: Known to be human carcinogen
Titanium Dioxide 13463-67-7	0.1-3	ACGIH Carcinogens: A4 – Not classifiable as a human carcinogen IARC Group 2B: Possibly carcinogenic to humans.

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.

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 – No data available
 Persistence and degradability – No data available
 Bioaccumulative potential – No data available
 Mobility in Soil – No data available
 Other adverse effects (GHG, Ozone) - No data available

13. DISPOSAL CONSIDERATIONS


This product has not been regulated as a hazardous waste by the USEPA. Dispose of product and container in accordance with Federal, State, and Local regulations. Do not burn. Do not dispose as sewage.

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.
 UN number: Not applicable
 UN Proper Shipping Name: Not applicable
 Packing Group, if applicable: Not applicable
 Environmental Hazards: Not applicable
 Transport in bulk: Not applicable
 Special Precautions: Not applicable

15. REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT (TSCA): Not regulated.
 COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA): None
 SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA), TITLE III:
 Section 302 Extremely Hazardous Substances: None
 Section 311/312 Hazard Categories: Delayed Health
 Section 313 Reportable Ingredients: None

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

16. OTHER INFORMATION

HMIS Rating:	NFPA Rating:
Health - 1	Health - 1
Flammability - 0	Flammability - 0
Reactivity - 0	Reactivity - 0

Preparation Date: **April 2015**
 Revision Date: **February 2017**
 Revisions: Updated % by weight in Section 3
 Corrected typo in Section 7
 Changed OSHA TWA for crystalline silica quartz in Section 8
 Updated California Proposition 65 warning language in Section 15

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