MATERIAL SAFETY DATA SHEET

MSDS Number: T029200 Revision Date: May 2007

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: GI Granules

USE & DESCRIPTION: Granules for coating roofing shingles

CHEMICAL FAMILY:

MANUFACTURED FOR: **EMERGENCY TELEPHONE NUMBERS;**

TAMKO Building Products, Inc. General Information: 1-904-284-7571 (8 a.m. - 5 p.m. EST) 1-620-429-1800 (8 a.m. - 5 p.m. CST) P.O. Box 1404 Joplin, MO 64802-1404

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

Chemtrec: 1-800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

			Exposure Limits*				
Components	Cas No.	% by Wt.	OSHA	OSHA		ACGIH	
			TWA	STEL	TWA	STEL	Unit
Kaolin Clay	1332-58-7	< 6	5 (Resp.) 15 (Total Dust)	NE NE	2**	NE NE	mg/m³ mg/m³
Titanium Dioxide	13463-67-7	< 3	5 (Resp.) 15 (Total Dust)	NE NE	10	NE NE	mg/m³ mg/m³
Chromium III Oxide	1308-38-9	< 1	0.5	NE	0.5	NE	mg/m³
Iron Oxide Pigment	1309-37-1	< 1	10 (Fume)	NE	5	NE	mg/m³
Carbon Black	1333-86-4	< 1	3.5	NE	3.5	NE	mg/m³
Quartz (component of the rock used to form the granules)	14808-60-7	Varies	Table Z.3	NE	0.025	NE	mg/m³

See Section 8 for additional relevant exposure limits

NE = Not established

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^{*} Note: Due to the form of the product, hazardous exposures are not expected to occur. Exposure limits are provided for information purposes only.

^{**} Exposure limit is for non-asbestos containing material with < 1% crystalline silica.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: Granules are not respirable. Dust generated during handling may contain respirable material.

Warning! Product contains a chemical or chemicals which may cause cancer.

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

Potential Health Effects

EYE CONTACT: Mechanical eye irritation. Signs/symptoms may include pain, redness, tearing and corneal abrasion.

SKIN CONTACT: Contact may cause mechanical skin irritation. Signs/symptoms may include abrasion, redness, pain and itching.

SKIN ABSORPTION: N/A

INGESTION: Gastrointestinal Irritation. Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting & diarrhea.

INHALATION: Respiratory Tract Irritation. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

NOTE: Prolonged or repeated inhalation exposure may cause: Silicosis, signs/symptoms may include breathlessness, weakness, chest pain, persistent cough, increased amounts of sputum, and heart disease.

CHRONIC EFFECT/CARCINOGENICITY/SPECIAL TOXIC EFFECTS: This product contains small amounts of respirable crystalline silica (quartz and crystobalite). The International Agency for Research on Cancer (IARC) and the National Toxicology Program (NTP) have determined that there is sufficient evidence for the carcinogenicity of respirable crystalline silica in experimental animals and limited evidence for its carcinogenicity in humans. Prolonged and repeated exposure to respirable silica-containing dust may have serious lung effects including silicosis, bronchitis and lung cancer.

This product contains small amounts of Carbon Black. The International Agency for Research on Cancer (IARC) has determined that there is sufficient evidence for the carcinogenicity of Carbon Black in experimental animals and limited evidence for its carcinogenicity in humans. Prolonged and repeated exposure to Carbon Black may have serious lung effects including cancer.

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This product contains small amounts of Titanium Dioxide. The International Agency for Research on Cancer (IARC) has determined that there is sufficient evidence for the carcinogenicity of Titanium Dioxide in experimental animals and limited evidence for its carcinogenicity in humans. Prolonged and repeated exposure to Titanium Dioxide may have serious lung effects including cancer.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing medical conditions that may be aggravated by exposure include disorders of the skin and respiratory tract including asthma.

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. Remove contacts if in use. Get medical attention if irritation persists.

SKIN CONTACT: Clean the exposed skin with warm soapy water. Use a waterless hand cleaner without pumice. Do not use solvents or thinners to remove material from skin. Get medical attention if irritation persists or develops.

INGESTION: If swallowed, do not induce vomiting because of danger of aspirating material into lungs, resulting in damage and chemical pneumonia. Never give anything by mouth to an unconscious person. If vomiting occurs, keep head lower than hips to prevent aspiration. Get immediate medical attention.

INHALATION: If inhalation occurs, 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. Get immediate medical attention.

NOTES TO PHYSICIAN: None other than listed above.

5. FIRE FIGHTING MEASURES

FLASH POINT (METHOD): N/A

FLAMMABLE LIMITS (% VOLUME IN AIR - SOLVENT COMPONENT):

Lower= N/AUpper = N/A

AUTOIGNITION TEMPERATURE: N/A

EXTINGUISHING MEDIA: Non-combustible. Choose material suitable for surrounding fire. Material will not burn.

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SPECIAL FIRE FIGHTING PROCEDURES: Firefighters should not enter confined spaces without wearing NIOSH approved positive pressure breathing apparatus (SCBA) with full face mask and full protective equipment.

UNUSUAL FIRE OR EXPLOSION HAZARDS: N/A

6. ACCIDENTAL RELEASE MEASURES

PRECAUTIONS IF MATERIAL IS SPILLED OR RELEASED: Observe precautions from other sections. Reclaim undamaged product. Collect as much of the spilled material as possible and place in a closed container approved for transportation by appropriate authorities. Clean up residue with detergent and water. In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

WASTE DISPOSAL METHODS: Dispose of collected material as soon as possible.

7. HANDLING AND STORAGE

STORAGE: N/A

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Follow protective controls outlined in the MSDS (See Section 8).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION: Normally not needed in well-ventilated areas. If applicable standards are exceeded or are likely to be exceeded, use a NIOSH/MSHA approved, contaminant-specific, air-purifying respirator. If such 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 use, fitting, and training standards and regulations.

EYE PROTECTION: Safety glasses with side shields or goggles are needed if eye contact is possible.

SKIN: Leather or cotton gloves if necessary.

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

EXPOSURE GUIDELINES: See section 2 for component materials.

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9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Various color granules, slightly oily odor.

BOILING POINT: Not determined

Ph: Not determined

MELTING POINT: > 2,300 °F

SPECIFIC GRAVITY: 2.6 - 3.0

VAPOR PRESSURE: Not determined

VAPOR DENSITY (AIR = 1): N/A

% VOLATILE, BY VOLUME: N/A

SOLUBILITY IN WATER: Negligible

EVAPORATION RATE (BUTYL ACETAT = 1): N/A

OTHER PHYSICAL AND CHEMICAL DATA: Product is a solid in granule form.

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: None known

HAZARDOUS POLYMERIZATION: Will not occur.

INCOMPATIBILTY (MATERIALS TO AVOID): None

HAZARDOUS DECOMPOSITION PRODUCTS: None

11. TOXICOLOGICAL INFORMATION: For toxicological information on this product and/or components listed in any section, please review specific information in NIOSH Registry of Toxic Affects of Chemical Substances (RTECS), ACGIH TLV Documentation, IARC Monographs, and/or NTP information.

12. ECOLOGICAL INFORMATION: Not available

13. DISPOSAL CONSIDERATIONS: Reclaim if feasible. Since regulations vary, consult applicable regulations or authorities before disposal.

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14. TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME: N/A

DOT HAZARD CLASSIFICATION: None

DOT LABELING REQUIREMENTS: None

UN/NA NUMBER: None

PLACARDS: N/A

IMDG CODE: N/A

IMDG SHIPPING NAME: N/A

IMDG HAZARD CLASS: N/A

UN/ID NUMBER: N/A

PACKING GROUP NUMBER: N/A

15. REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT (TSCA): The components of this product are in compliance with the chemical notification requirements of TSCA.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT (CERCLA):

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 (SARA), TITLE III:

SECTION 311/312 HAZARD CATEGORIES: Delayed Health

SECTION 313 REPORTABLE INGREDIENTS: None

CALIFORNIA PROPOSITION 65:

WARNING: This product contains a chemical known to the State of California to cause cancer.

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16. OTHER INFORMATION

Preparation Date: March 15, 2007

Revision:

May 2007 (Formatting Issues)

Replaces: None

Disclaimer of Liability

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The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use.

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