

TAMKO BUILDING PRODUCTS, INC. SAFETY DATA SHEET - T01A2015

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: TAMKO Shingle Products

LABEL: Heritage, Heritage Woodgate, Heritage Premium, Heritage Vintage, Elite Glass-Seal, Glass Seal, 12 x 12 Hip & Ridge, Heritage Vintage 12 x 12 Hip & Ridge, 12 ¼ x 12 Hip & Ridge, Heritage Vintage Starter, TAMKO Shingle Starter, TAMKO 10 Inch Starter, TAMKO Perforated Starter

USE & DESCRIPTION: Oxidized Asphalt Shingles used for roofing

CHEMICAL FAMILY: Mixture

MANUFACTURED BY: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 IDENTIFICATION**SIGNAL WORD: **Danger****GHS CLASSIFICATION:**Carcinogenicity – Category 1A
Skin Irritation – Category 2
Sensitization (Skin) – Category 1B
Eye Irritation – Category 2B
Specific Target Organ Toxicity, Repeated Exposure – Category 1**HAZARD STATEMENTS:**

- May cause cancer.
- Causes skin and eye irritation.
- May cause an allergic skin reaction.
- Causes damage to organs 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 handle until all safety precautions have been read and understood.
- Do not breathe dust. Wear protective gloves/protective clothing/eye protection/face protection.
- Do not eat, drink or smoke when using this product. Wash hands and exposed skin thoroughly after handling.

Response

- If on skin: Wash with plenty of water. Get medical advice/attention: If exposed or concerned or you feel unwell, if eye and or skin irritation persists.
- Specific treatment: See section 4-First Aid In case of fire: See Section 5.
- Take off contaminated clothing, and wash before reuse.
- If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

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
Limestone*	1317-65-3	60-70
Oxidized Asphalt	64742-93-4	20-30
Mineral Granules*	NE	30-40
Fiberglass Mat**	NE	5-8
**Contains Fiberglass	65997-17-3	4-7
**Contains Urea Formaldehyde Binder	9011-05-6	0.5-1.5
**Contains Formaldehyde	50-00-0	0.01-0.2
Backing Sand*	14808-60-7	5-10
Coal Slag Fines*	68476-96-0	0-30
*Contains Crystalline Silica (Quartz)	14808-60-7	0.1-5

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 persists.**SKIN CONTACT:** Clean any exposed skin with warm soapy water if possible. If not, and a waterless hand cleaner is used, it should be 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. 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 inhalation of dust 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 and get immediate medical attention.**NOTES TO PHYSICIAN:** Treatment should be based on removing the source of irritation with treatment of symptoms as necessary.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Dry chemical, CO₂, or foam fire extinguisher should be used for controlling small fires. Avoid use of straight-stream water.

SPECIAL FIRE FIGHTING PROCEDURES: Avoid breathing fumes. 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: When heated, fumes may burn if ignition source is provided. Petroleum asphalt fumes can explode if emitted in an enclosed environment and supplied with an ignition source. Burning product will cause thick black smoke.

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, carbon dioxide, ozone, hydrogen sulfide, oxides of sulfur and various hydrocarbons during heating or burning. These combustion products are not expected unless product is heated or burned.

6. ACCIDENTAL RELEASE MEASURES

PRECAUTIONS IF MATERIAL IS SPILLED OR RELEASED: Pick up large pieces. Leather or cotton gloves must be worn when handling. Do not dry sweep dusts or blow with air in confined area.

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

7. HANDLING AND STORAGE

STORAGE TEMPERATURE: Store away from heat and all ignition sources and open flames in accordance with applicable laws and regulations.

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

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: 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						
Oxidized Asphalt	64742-93-4	NE	NE	0.5*	NE	mg/m ³
Limestone†	1317-65-3	15/5**	NE	10/3**	NE	mg/m ³
Coal Slag Fines†	68476-96-0	15/5**	NE	10/3**	NE	mg/m ³
Fiberglass††	65997-17-3	15/5**	NE	5***	NE	mg/m ³
††Contains Formaldehyde	50-00-0	0.75	2	NE	0.3	ppm
†Contains 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.

* Asphalt Fume as benzene-soluble inhalable aerosol (Bitumen); TWA for inhalable fraction.

** Total Nuisance Dust/Respirable Dust.

*** Inhalable fraction.

RESPIRATORY PROTECTION: Normally not needed in well-ventilated areas. If applicable exposure standards are exceeded or can be exceeded introduce ventilation to remove dust. If increased ventilation is not possible, 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 must be used if eye contact is possible.

SKIN: Must wear leather or cotton gloves during application and/or tear off activities.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance and Odor:	Granular surface on oxidized asphalt coated mat.	Upper/Lower Flammability or Explosive Limits:	Not Applicable
Odor Threshold	Not Applicable	Vapor Pressure:	Not Applicable
pH:	Not Applicable	Vapor Density (Air = 1):	Not Applicable
Boiling Point:	>700 °F	Specific Gravity/Relative Density:	Variable
Melting Point:	>200 °F	Solubility (IES):	No data available
Flash Point:	Not Applicable	Initial Boiling Point and Boiling Range:	Not Applicable
Autoignition Temperature:	>460°C/860°F	Evaporation Rate (Butyl Acetate = 1):	<0.1
Viscosity:	Not Applicable	Flammability(Solid and Gas):	Not Applicable
Decomposition Temperature:	Not Applicable	Partition Coefficient: N-Octanol/Water:	Not Applicable

10. STABILITY AND REACTIVITY

STABILITY: Stable

REACTIVITY: Reactivity will not occur.

CONDITIONS TO AVOID: Keep from heat, sparks, open flame and other sources of ignition. Avoid contact with strong oxidizing agents.

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

HAZARDOUS REACTION: Polymerization will not occur.

INCOMPATIBILITY (MATERIALS TO AVOID): Strong acids or bases, oxidizing agents and selected amines.

HAZARDOUS COMBUSTION PRODUCTS: Carbon monoxide, carbon dioxide, ozone, hydrogen sulfide, oxides of sulfur and various hydrocarbons during heating or burning. These combustion products are not expected unless product is heated or burned.

11. TOXICOLOGICAL INFORMATION

EYE – May cause eye irritation.

SKIN – May cause skin irritation.

INHALATION – Dust may cause upper respiratory irritation.

INGESTION – May cause harmful effects if swallowed.

THE FOLLOWING COMPONENT DATA IS PROVIDED FOR USER INFORMATION:

FORMALDEHYDE

Cancer - This product may contain formaldehyde. IARC and NTP have classified formaldehyde as a human carcinogen based on sufficient evidence that formaldehyde causes nasopharyngeal cancer in humans, limited evidence for cancer of the nasal cavity and paranasal sinuses, and "strong but not sufficient evidence" for leukemia. The finding for leukemia reflects the epidemiologists' finding of strong evidence in human studies coupled with an inability to identify a mechanism for induction of leukemia. The physical nature of this product may help limit any inhalation hazard from formaldehyde during application and in its hardened state.

Acute Effects - The major acute toxic effects caused by formaldehyde exposure via inhalation are eye, nose, and throat irritation and effects on the nasal cavity. Other effects seen from exposure to high levels of formaldehyde in humans are coughing, wheezing, chest pains, and bronchitis. Ingestion exposure to formaldehyde in humans has resulted in corrosion of the gastrointestinal tract and inflammation and ulceration of the mouth, esophagus, and stomach.

Chronic Effects - In addition to cancer, exposure to formaldehyde by inhalation in humans has been associated with respiratory symptoms and eye, nose, and throat irritation. Repeated contact with liquid solutions of formaldehyde has resulted in skin irritation and allergic contact dermatitis in humans.

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.

OXIDIZED ASPHALT

Cancer - This product contains oxidized asphalt. Occupational exposures to oxidized asphalt and its emissions during roofing activities has been classified by the International Agency for Research on Cancer (IARC) as "probably carcinogenic to humans" (Group 2A). IARC based this classification on its finding that available data from studies in humans points to an association between exposures to oxidized asphalts during roofing and cancers of the lung and upper aerodigestive tract. IARC also determined that there was sufficient evidence of carcinogenicity of extracts and condensates of oxidized asphalts in experimental animals. The oxidized asphalt in this product may contain small amounts of Polycyclic Aromatic Hydrocarbons (PAH's) some of which are recognized carcinogens in humans or experimental animals. Oxidized asphalt may also cause irritation of the respiratory tract. The physical nature of this product may help limit any inhalation hazard from oxidized asphalt during application in its hardened state. However, physical forces such as grinding, drilling and other demolition work on this product may liberate dust containing oxidized asphalt. Burning or heating of the product may cause fumes, vapors or mists.

Acute Effects - Inhalation of dust may cause nose, throat, respiratory tract, and mucous membrane irritation. Eye contact may cause severe irritation, redness, tearing, and blurred vision. If ingested, may cause mouth, throat and gastrointestinal tract irritation and upset with possible nausea, vomiting and diarrhea. See Section 8 for exposure controls.

Chronic Effects - In addition to cancer, prolonged or repeated skin contact may result in dryness and irritation of the skin. Long term skin exposure to asphalt can increase sensitivity to the sun, and may cause discoloration. Oxidized asphalt may also cause irritation of the upper respiratory tract.

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 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): Some components in this product are listed on the TSCA Inventory.


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: Immediate Health; Delayed Health; Fire Hazard

Section 313 Reportable Ingredients: This material contains Formaldehyde (CAS# 50-00-0), which is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

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

16. OTHER INFORMATION

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

Preparation Date: **April 2015**

Revision Date: **August 2016**

Revisions: Added TAMKO Perforated Starter to label

Updated Sections 3 and 8

Revision Date: **February 2017**

Revisions: Updated ingredients and % by weight in Section 3

Corrected typos in Section 7

Updated raw products, table footnotes, and changed OSHA TWA for crystalline silica quartz in Section 8

Updated California Proposition 65 warning language in Section 15

Disclaimer of Liability

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