

## TAMKO BUILDING PRODUCTS, INC. SAFETY DATA SHEET – T05B2015

**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

TRADE NAME: TAMKO Rolled Underlayment

LABEL: MOISTURE GUARD PLUS; MOISTURE GUARD

USE &amp; DESCRIPTION: Rolled Underlayment used under roofing applications

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 2A

Specific Target Organ Toxicity, Repeated Exposure – Category 1

Specific Target Organ Toxicity, Single Exposure – Category 2

**HAZARD STATEMENTS:**

May cause cancer

Harmful if swallowed

Causes damage to organs through prolonged or repeated exposure

Causes skin irritation

Causes serious eye irritation

May cause an allergic skin reaction.

May cause damage to respiratory system

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.

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

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

Wash hands and exposed skin thoroughly after handling.

Response

If on skin: Wash with plenty of water.

Specific treatment: See section 4-First Aid

Take off contaminated clothing and wash before reuse.

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

In case of fire: See Section 5.

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
Asphalt	8052-42-4	45-65
Limestone*	1317-65-3	10-35
Coal Slag Fines*	68476-96-0	10-20
Polymer	NE	5-10
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
*Contains Crystalline Silica (Quartz)	14808-60-7	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 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 cured product particles, fumes, vapors, or mist 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, CO<sub>2</sub>, or foam fire extinguisher should be used. Avoid use of straight-stream water.

**SPECIAL FIRE FIGHTING PROCEDURES:** Firefighters should not enter confined spaces without wearing a National Institute for Occupational Safety and Health (NIOSH) approved positive pressure self-contained breathing apparatus (SCBA) with full face mask and full protective equipment. Water may be used to cool containers in a fire-exposed area.

**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 may cause thick black smoke.

SEE SECTION 10 FOR COMBUSTION PRODUCTS

**6. ACCIDENTAL RELEASE MEASURES**

**PRECAUTIONS IF MATERIAL IS SPILLED OR RELEASED:** Pick up large pieces. 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 Raw Products	CAS No.	OSHA		ACGIH		Unit
		TWA	STEL	TWA	STEL	
Asphalt	8052-42-4	NE	NE	0.5*	NE	mg/m <sup>3</sup>
Fiberglass†	65997-17-3	15/5**	NE	5***	NE	mg/m <sup>3</sup>
Limestone††	1317-65-3	15/5**	NE	10/3**	NE	mg/m <sup>3</sup>
Coal Slag Fines††	68476-96-0	15/5**	NE	10/3**	NE	mg/m <sup>3</sup>
†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 <sup>3</sup>

NE= Not established.

Note: Due to the form of the product, hazardous exposures from this product are not expected to occur. 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, 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, training standards and regulations.

**VENTILATION:** Use only with adequate ventilation to maintain exposures below applicable exposure limits. Local exhaust ventilation and/or enclosure of the process may be required. All equipment must be explosion proof.

**EYE PROTECTION:** Chemical safety goggles with side-shields or face shield must be used if eye contact is possible.

**SKIN:** Chemical resistant gloves, apron, or other protective clothing needed to prevent skin contact. Must wear leather or heat-resistant gloves, long-sleeve cotton shirt, long pants with no cuffs, and non-skid shoes or boots with 6-inch leather uppers during application and/or tear off activities.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance and Odor:	Granule Coated Mat.
Odor Threshold	Not Applicable
pH:	Not Applicable
Boiling Point:	>700 °F
Melting Point:	>200 °F
Flash Point:	Not Applicable
Autoignition Temperature:	>460°C/860°F
Viscosity:	Not Applicable
Decomposition Temperature:	Not Applicable

Upper/Lower Flammability or Explosive Limits:	Not Applicable
Vapor Pressure:	Not Applicable
Vapor Density (Air = 1):	Not Applicable
Specific Gravity/Relative Density:	Variable
Solubility (IES):	No data available
Initial Boiling Point and Boiling Range:	Not Applicable
Evaporation Rate (Butyl Acetate = 1):	<0.1
Flammability(Solid and Gas):	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.

**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. These combustion products are not expected unless product is heated or burned.

**11. TOXICOLOGICAL INFORMATION**

**EYE** – Can cause eye irritation.

**SKIN** – Can 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 sawing, 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 or 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 cause autoimmune disease, kidney disease, tuberculosis, and nonmalignant respiratory disease, and bronchitis.

**ASPHALT**

**Cancer** - This product contains asphalt. The National Institute for Occupational Safety and Health has concluded that the fumes of heated roofing asphalt are a potential occupational carcinogen. Asphalt may also cause irritation of the respiratory tract. The physical nature of this product may help limit any inhalation hazard from 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, fumes, vapors, mist may cause nose, throat, 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 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.

**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.

**DOT PROPER SHIPPING NAME:** Not Applicable

**DOT HAZARD CLASSIFICATION:** Not Applicable

**DOT LABELING REQUIREMENTS:** Not Applicable

**UN/NA NUMBER:** Not Applicable

**PACKING GROUP:** Not Applicable

**IMDG CODE:** Not Applicable

**IMDG SHIPPING NAME:** Not Applicable

**IMDG HAZARD CLASS:** Not Applicable

**UN/ID NUMBER:** Not Applicable

**PACKING GROUP NUMBER:** 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

Section 313 Reportable Ingredients: This material contains the following chemicals which are subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

Chemical Name	CAS Number	Concentration (% by Wt.)
Formaldehyde	50-00-0	<0.1

California Proposition 65:  **WARNING:** Cancer and Reproductive Harm – [www.P65Warnings.ca.gov/product](http://www.P65Warnings.ca.gov/product).

**16. OTHER INFORMATION**

HMS Rating:	NFPA Rating:
Health - * 1	Health - 1
Flammability - 1	Flammability - 1
Reactivity - 0	Reactivity - 0

Preparation Date: **April 2015**

Revision Date: **August 2015**

Revisions: Added product (Moisture Guard) to SDS

Revision Date: **February 2017**

Revisions: Updated % by weight in Section 3

Corrected typo in Section 7

Updated 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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