MATERIAL SAFETY DATA SHEET - T09A2011

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: TAMKO Waterproofing Membrane

LABEL: TW FLASH-N-WRAP 4", TW FLASH-N-WRAP 6", TW FLASH-N-WRAP 9", TW

MOISTURE WRAP 4", TW MOISTURE WRAP 6", TW WINDOW & DOOR FLASHING, TW THRU-

WALL FLASHING, TW MOISTURE WRAP 9", TW UNDERLAYMENT

USE & DESCRIPTION: Waterproofing

CHEMICAL FAMILY: Mixture

MANUFACTURED BY: EMERGENCY TELEPHONE NUMBERS;

TAMKO Building Products, Inc. General Information: 1-417-624-6644 (8 a.m. - 5 p.m. CST)

P. O. Box 1404 Chemtrec: 1-800-424-9300 (24 HOURS)

Joplin, MO 64802-1404

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

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

INHALATION OF PRODUCT DUST MAY CAUSE TEMPORARY UPPER RESPIRATORY IRRITATION.

MAY CAUSE SKIN IRRITATION.

MAY CAUSE EYE IRRITATION.

MAY CAUSE HARMFUL EFFECTS IF SWALLOWED.

UNDER NORMAL CONDITIONS OF USE, THE PRODUCT IS NOT EXPECTED TO CREATE ANY EMERGENCY HAZARDS.

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

POTENTIAL HEALTH EFFECTS:

Eye Contact: If dust enters eye, may cause irritation resulting in tearing, stinging, redness or swelling.

Skin Contact: Repeated contact may cause skin irritation. Redness, drying and cracking of the skin (dermatitis) may occur following prolonged and repeated contact. Prolonged or repeated skin contact could result in absorption of hazardous components.

Ingestion: Ingestion of this product may cause irritation of the digestive tract followed by vomiting. Avoid aspiration of vomit into the lungs which can cause inflammation or pneumonitis.

Inhalation: Exposure to dust may cause irritation of the nose and throat. Use of this product in well-ventilated working conditions is not expected to cause adverse effects.

Chronic Effect/Carcinogenicity/Special/Toxic:

Can cause cancer.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS No.	% by Weight	
Asphalt	8052-42-4	<80	
Polymer	NE	<7	
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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 preferred. Avoid use of straight-stream water.

SPECIAL FIRE FIGHTING PROCEDURES: Combustible. 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.

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. THIS PRODUCT SHOULD NOT BE HEATED OR BURNED 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 MSDS.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits *

Components	CAS No.	OSHA		ACGIH		
Raw Products		TWA	STEL	TWA	STEL	Unit
Asphalt	8052-42-4	NE	NE	0.5**	NE	mg/m ³

NE= Not established

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/MSHA 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 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, 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: Asphalt coated film.

ODOR THRESHOLD: Not Applicable

pH: Not Applicable

BOILING POINT: >700 °F

MELTING POINT/ Freezing Point: >200 °F

INITIAL BOILING POINT AND BOLING RANGE: Not Applicable

FLASH POINT: Not Applicable

EVAPORATION RATE (BUTYL ACETATE = 1): <0.1 FLAMMABILITY (SOLID AND GAS): Not Applicable

UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS: Not Applicable

VAPOR DENSITY (AIR = 1): Not Applicable

VAPOR PRESSURE: Not Applicable

SPECIFIC GRAVITY/RELATIVE DENSITY: Variable

SOLUBILITY (IES): No data available

PARTITION COEFFICIENT: N-OCTANOL/WATER: Not Applicable

AUTOIGNITION TEMPERATURE: > 460°C/860°F **DECOMPOSITION TEMPERATURE:** Not Applicable

^{*} 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

MSDS Number: T09A2011 – FLASH&MOISTURE WRAPS Revision Date: January, 2012

VISCOSITY: Not Applicable

10. STABILITY AND REACTIVITY

STABILITY: Stable

CONDITIONS TO AVOID: Keep from heat, sparks, open flame and other sources of ignition. Avoid contact with strong oxidizing agents. **THIS PRODUCT SHOULD NOT BE HEATED OR**

BURNED USING A DIRECT FLAME DEVICE.

HAZARDOUS REACTION: Polymerization will not occur.

INCOMPATIBILTY (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:

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. The 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. The physical nature of this product may help limit any inhalation or dermal hazard during application and/or removal. However, physical forces such as sawing, grinding or drilling during demolition work and heating or burning may increase the inhalation or dermal exposure hazard of this product. Take precautions to prevent breathing and contact with skin. Burning or heating of the product may cause fumes, vapors or mists.

Acute Effects - Inhalation of 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. Asphalt may also cause irritation of the respiratory tract.

12. ECOLOGICAL INFORMATION

No specific data on this product.

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.

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: None

California Proposition 65:

WARNING: This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

16. OTHER INFORMATION

 Preparation Date: December, 2011 (Replaces previous version of MSDS for product due to IARC Oxidized Asphalt classification and warning language improvement.)

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 his or herself that they are suitable and complete for the user's particular use.