MATERIAL SAFETY DATA SHEET - T08A2011

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

TRADE NAME: Saturated Felt Underlayments

LABEL: NO.15, NO15UL, NO.15 ASTM D-4869 TYPE I, NO15 ASTM D-226 TYPE I, NO. 30, NO. 30UL, NO. 30 18 in, NO. 30 ASTM D-4869 TYPE I, NO.30 ASTM D-226 TYPE II, NO. 30 ASTM D-4869 TYPE III, NO. 30 ASTM SHAKE UNDERLAYMENT USE & DESCRIPTION: Underlayment CHEMICAL FAMILY: Mixture

MANUFACTURED BY: EMERGENCY TELEPHONE NUMBERS;

TAMKO Building Products, Inc. P. O. Box 1404 Joplin, MO 64802-1404 General Information: 1-417-624-6644 (8 a.m. - 5 p.m. CST) Chemtrec: 1-800-424-9300 (24 HOURS)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

DO NOT HEAT OR BURN USING DIRECT FIRE OR 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 due to roughness of product. 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 dusts 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
Oxidized Asphalt**	64742-93-4	<30
Asphalt**	8052-42-4	<30
Felt ***	NE	<40
***Contains Wood Dust	NE	<80

NE = Not established

** Can contain Asphalt and/or Oxidized Asphalt

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. **DO NOT HEAT OR BURN USING DIRECT FIRE OR 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		7
Raw Products		TWA	STEL	TWA	STEL	Unit
Oxidized Asphalt	64742-93-4	NE	NE	0.5 ***	NE	mg/m ³
Asphalt	8052-42-4	NE	NE	0.5***	NE	mg/m ³
Wood Dust	NE	15/5**	NE	1/0.5****	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. Gloves must be worn when handling and adequate ventilation must be provided during roofing related activities.

** Total Nuisance Dust/Respirable

***Asphalt Fume

**** Hardwood/Softwood

RESPIRATORY PROTECTION: Normally not needed in well-ventilated areas. If applicable exposure standards are exceeded or can 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.

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: Black asphalt saturated felt 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 PRESSURE: Not Applicable VAPOR DENSITY (AIR = 1): Not Applicable MSDS Number: T08A2011 – Saturated Felt 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 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. **DO NOT HEAT OR BURN USING DIRECT FIRE OR 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:

WOOD DUST

Cancer - This product contains wood dust. NTP and IARC have classified wood dust as a known human carcinogen. IARC concluded that there was increased risk of adenocarcinomas of the nasal cavities and paranasal sinuses. The physical nature of this product may help limit any inhalation hazard from wood 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 wood dust can cause irritation of the eyes, nose and throat causing shortness of breath, dryness and soreness of the throat, sneezing, tearing and conjunctivitus. **Chronic Effects** – In addition to cancer, breathing of wood dust over a period of time can cause damage to the lung tissue and shortness of breath.

ASPHALT

Cancer - This product contains oxidized asphalt, CAS No. <u>64742-93-4</u>. 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. This product also contains asphalt, CAS No. <u>8052-42-4</u>. The National Institute for Occupational Safety

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and Health has concluded that the fumes of heated roofing asphalt are a potential occupational carcinogen. The asphalts 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 hazard from asphalt during application in its hardened state. However, physical forces such as sawing, grinding, drilling and other demolition work on this product may liberate dust containing 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.

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.

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. <u>REGULATORY INFORMATION</u>

 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

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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