

# MATERIAL SAFETY DATA SHEET

MSDS Number: T028000

Revision Date: April, 2001

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

**TRADE NAME:** Coated Roll Roofing and SBS & APP Modified products - See Attachment 1

**LABEL:** TAMKO

**USE & DESCRIPTION:** Rolled Roofing

**CHEMICAL FAMILY:** Mixture

**CONTACT INFORMATION:**

TAMKO Roofing Products, Inc.  
P.O. Box 1404  
Joplin, MO 64802-1404

**EMERGENCY TELEPHONE NUMBERS:**

General Information: 1-417-624-6644 (8 a.m. - 5 p.m. CST)  
Chemtrec: 1-800-424-9300

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS No.	% by Wt	Exposure Limits				Unit
			OSHA*		ACGIH*		
			TWA	STEL	TWA	STEL	
Petroleum asphalt	8052-42-4	<40	5 fume	NE	.5 fume	NE	mg/M <sup>3</sup>
Limestone	1317-65-3	<40	15 total dust 5 resp. dust	NE	10 total dust 3 resp. dust	NE	mg/M <sup>3</sup>
Styrene - Butadiene Block Co-Polymer	903-55-8	<15	NE	NE	NE	NE	
Mineral Granules	NE	<40	NE	NE	NE	NE	
MAT		<8					
Continuos Filament Fiber Glass	65997-17-3		15 total dust 5 resp. dust	NE	1 fiber/cc	NE	mg/M <sup>3</sup>
Polyester	NE		NE	NE	NE	NE	
Felt	NE		NE	NE	NE	NE	
Sand	14808-60-7	<10	0.1	NE	0.05	NE	mg/M <sup>3</sup>
Talc							

NE = Not established

\* NOTE: Due to the form of the product, hazardous exposures are not expected to occur. Exposure limits are provided for information purposes only.

### 3. HAZARDS IDENTIFICATION

#### EMERGENCY OVERVIEW

Under normal conditions of use, the product not expected to create any emergency hazards.

Inhalation of product dust may cause temporary upper respiratory irritation - remove affected individuals to fresh air.

Skin irritation may be treated by washing area with soap and water.

Eye irritation may be treated by flushing eyes with large amounts of water.

<u>HMIS Rating:</u> Health - 1 Flammability - 1 Reactivity - 0	<u>NFPA Rating:</u> Health - 1 Flammability - 1 Reactivity - 0
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#### Potential Health Effects

##### EYE CONTACT

If particles enter eye, may cause irritation resulting in tearing, stinging, redness or swelling.

##### SKIN CONTACT

Primary route of exposure is 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.

##### INGESTION

In general, asphalt products have low toxicity when swallowed. However, this product may cause irritation of the digestive tract followed by vomiting. If vomiting occurs, small amounts of material can be aspirated into the lung and cause inflammation or damage.

##### INHALATION

When product is heated, exposure to fumes, vapors or mists may cause irritation of the nose and throat, and possible signs of central nervous system depression (symptoms may include headache, excitation, dizziness, loss of coordination, and drowsiness). Loss of consciousness can occur in poorly ventilated or confined spaces. Additional signs and symptoms of exposure may include reduced appetite and abnormal fatigue. Use of this product in well-ventilated working conditions is not expected to cause adverse effects.

NOTE: Hydrogen sulfide (H<sub>2</sub>S), an extremely toxic gas, may be emitted from heated asphalt and may accumulate in storage tanks and other confined spaces. At low concentrations, H<sub>2</sub>S is irritating to the eyes, nose and throat, and at high concentrations (>500 ppm) can cause rapid unconsciousness and death. The odor of H<sub>2</sub>S cannot be used as an indicator of exposure, because the gas causes rapid olfactory fatigue which deadens the sense of smell. Use this product only under well-ventilated working conditions.

**CHRONIC EFFECTS/CARCINOGENICITY/SPECIAL TOXIC EFFECTS**

This product contains petroleum asphalt. Petroleum asphalt is not listed as a carcinogen by OSHA or NTP. The International Agency for Research on Cancer (IARC) has determined there is inadequate evidence that asphalt alone is carcinogenic to humans, and that there is inadequate evidence for the carcinogenicity of undiluted air-refined asphalts in experimental animals. The National Institute of Occupational Safety and Health (NIOSH) has concluded that at higher temperatures roofing asphalt fumes are a potential occupational carcinogen. If this product is heated or comes in contact with heated material, avoid breathing fumes.

This product may contain small amounts of polyaromatic hydrocarbons which are recognized carcinogens in humans and experimental animals.

This product may contain small amounts of respirable crystalline silica. IARC and 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.

This product contains small amounts of respirable crystalline silica (quartz and cristobolite). 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. 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 the hardened product may liberate crystalline silica dust.

This product may contain non-woven glass mat made up of filament glass fiber. Filament glass fiber has not been classified as to its carcinogenicity.

**4. FIRST AID MEASURES****EYE CONTACT**

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the eye lids to ensure thorough rinsing. Get medical attention if irritation persists.

**SKIN CONTACT**

Clean exposed skin with warm soapy water. Use a waterless hand cleaner to help remove the asphalt. 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**

This product is a mechanical irritant and is not expected to produce any chronic health effects from exposure. Treatment should be based on removing the source of irritation with treatment of symptoms as necessary.

**5. FIRE FIGHTING MEASURES****FLASH POINT**

N/A

**FLAMMABLE LIMITS**

N/A

**AUTOIGNITION TEMPERATURE**

460 degrees c/860 degrees f

**EXTINGUISHING MEDIA**

Dry chemical and carbon dioxide 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.

**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.

**7. HANDLING AND STORAGE****STORAGE TEMPERATURE**

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

**PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING**

Follow protective controls outlined in this 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

Chemical safety goggles or face shield 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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### APPEARANCE AND ODOR

Dark mat. Some products may have granular surface.

### BOILING POINT

>700 °F

### PH

Not applicable

### MELTING POINT

>200 °F

### SPECIFIC GRAVITY

Variable

### VAPOR PRESSURE

Not applicable

### VAPOR DENSITY (AIR = 1)

Not applicable

### % VOLATILE, BY VOLUME

Not applicable

### SOLUBILITY IN WATER

Negligible

### EVAPORATION RATE (BUTYL ACETATE = 1)

<0.1

### OTHER PHYSICAL AND CHEMICAL DATA

None

## 10. STABILITY AND REACTIVITY

### STABILITY

Stable

### CONDITIONS TO AVOID

Except when application requires heat welding or torch application methods for installation to roof, keep from heat, sparks, open flame, and other sources of ignition. Safety is of major importance when heat welding modified bitumens. It is the sole responsibility of the roofing applicator to enforce fire safety precautions and to ensure safety at all times. Torches should be extinguished when not in use and should not be left unattended. There should be a sufficient number of fire extinguishers on the roof to handle any contingency that might develop (min. 1 per torch). The roofing applicators should be trained in the proper use of fire extinguishers. Avoid contact with strong oxidizing agents.

### HAZARDOUS POLYMERIZATION

Will not occur.

### INCOMPATIBILITY (MATERIALS TO AVOID)

Strong acids or bases, oxidizing agents and selected amines

### HAZARDOUS DECOMPOSITION PRODUCTS

Carbon monoxide, carbon dioxide, ozone, hydrogen sulfide, oxides of sulfur and various hydrocarbons

## 11. TOXICOLOGICAL INFORMATION

According to NIOSH, research has identified low levels of polycyclic aromatic hydrocarbons (PAHs) in laboratory generated asphalt fumes. Benzo(a)pyrenes, known carcinogens, have been identified in field-generated asphalt fumes. Asphalt roofing fume condensates and fractions have been shown to contain chemicals known as PAC's, which have a chemical structure similar to known carcinogens and genotoxins. Laboratory-generated asphalt fumes have been shown to be genotoxic. Laboratory-derived roofing asphalt fume condensates have been shown to be mutagenic, clastogenic, and inhibit intracellular communication in mammalian cells.

Laboratory studies have shown chemical extracts of asphalt fumes to be carcinogenic to the skin of experimental animals following lifetime exposures, and to show positive mutagenicity in screening bioassays. The relevance of these studies to human exposures is not known at this time. Inhalation studies have not been conclusive regarding asphalt's carcinogenic potential; however, adverse lung effects were seen in several species of laboratory animals.

Skin application of undiluted air-refined (oxidized) asphalt to experimental animals has not resulted in skin tumors. The results were weakly positive when the samples were applied in a solvent vehicle.

## 12. ECOLOGICAL INFORMATION

No specific data on this product.

### **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.

### **15. REGULATORY INFORMATION**

#### **TOXIC SUBSTANCES CONTROL ACT (TSCA)**

The 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**

This product may contain chemicals (small amounts of some polynuclear aromatic hydrocarbons) known to the State of California to cause cancer.

### **16. OTHER INFORMATION**

Preparation Date: May, 2000

Replaces: None

#### Disclaimer of Liability

The information and recommendations contained herein are to the best of **Tamko Roofing Products, Inc.**'s knowledge and belief, accurate and reliable as of the date issued. **Tamko Roofing Products, Inc.** does not warrant or guarantee their accuracy or reliability, and **Tamko Roofing Products, Inc.** shall not be liable for any loss or damage arising out of the use thereof.

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.

## Attachment 1

### Coated Roll Roofing and SBS & APP Modified products:

AWA Heat Welding  
AWA Versa Flex  
AWA Versa Smooth  
Awa-Flex  
Awa-Flex FR  
Awaplan Premium  
Awaplan 170  
Awaplan 170 FR  
Awaplan Premium FR  
Base Sheet  
Base-N-Ply  
Bridgeguard  
Moisture Wrap  
Moisture Guard Plus  
Nail Fast 1.5 SSQ  
ASTM Tile Underlayment  
No. 30 ASTM Shake Underlayment  
No. 150 Shake Underlayment  
No. 15 Shake Underlayment  
No. 15 UL Shake Underlayment  
No. 15 ASTM Shake Underlayment  
No. 30 Shake Underlayment  
No. 30 UL Shake Underlayment  
Saturated Felt No. 30  
Shake Underlayment  
Slate Surfaced Roll Roofing  
ASTM Slate Surfaced  
4" Selvedge Edge Slate Surfaced  
TAM-CAP  
TAM-GLASS Premium Talcless  
TAMKO Vapor-Chan  
TAMKO Glass-Base  
TAM-PLY IV-5 SSQ Talcless  
TAMKO APP G  
TAMKO APP S  
Tile Underlayment  
TWH-1  
TWH-2  
TW Metal & Tile  
TW-40  
TW-60  
TW-Barrier  
Versa-Base  
Versa-Cap FR