



MSDS for SBS Bitumen Membrane

Section 1 – Identification

- **Product Name:** SBS Bitumen Membrane
- **Intended Use:** Roofing, waterproofing, and air/vapor barrier applications

Section 2 – Hazard(s) Identification

- **General:** In its finished membrane form the product is generally not classified as hazardous.
- **When Heated:** Heating (e.g., during torching) may release fumes that can cause irritation of the respiratory system, skin, and eyes.
- **Hazard Statements:**
 - May cause respiratory irritation if fumes are inhaled.
 - May cause skin irritation upon prolonged contact with hot material.
- **Precautionary Statements:** Read all safety instructions before use and use appropriate personal protective equipment (PPE).

Section 3 – Composition/Information on Ingredients

- **Typical Ingredients:**
 - **Bitumen (Asphalt):** CAS 8052-42-4 (approx. 30–70%)
 - **Oxidized Bitumen:** CAS 64742-93-4 (approx. 0–20%)
 - **SBS (Styrene–Butadiene–Styrene) Polymer:** CAS 9003-55-8 (approx. 0–15%)
 - **Fillers (e.g., Calcium Carbonate):** CAS 471-34-1 (approx. 0–60%)
 - **Surface Granules (e.g., Crystalline Silica):** CAS 14808-60-7 (present in trace amounts on the surface)
- **Note:** Exact concentrations are proprietary and provided by the manufacturer.

Section 4 – First-Aid Measures

- **Inhalation:**
 - Remove affected person to fresh air immediately.
 - If breathing is difficult, administer oxygen and seek medical attention.
- **Skin Contact:**
 - Wash affected area immediately with soap and water.
 - Remove contaminated clothing and launder separately.
- **Eye Contact:**
 - Rinse eyes with plenty of water for at least 15 minutes, lifting the eyelids periodically.
 - Seek medical attention if irritation persists.
- **Ingestion:**
 - Rinse mouth thoroughly; do not induce vomiting.
 - Seek immediate medical advice if symptoms occur.



Section 5 – Fire-Fighting Measures

- **General Information:**
 - The membrane is not flammable under normal conditions.
 - When heated or burned, it may emit toxic combustion products (e.g., carbon monoxide, sulfur oxides, nitrogen oxides).
- **Suitable Extinguishing Media:**
 - Water spray, dry chemical, or carbon dioxide (CO₂) may be used.
- **Firefighter Precautions:**
 - Wear self-contained breathing apparatus (SCBA) and full protective gear.
 - Approach the fire from a safe distance and avoid exposure to fumes.

Section 6 – Accidental Release Measures

- **Personal Precautions:**
 - Wear appropriate PPE to avoid contact with dust or fumes.
 - Remove unnecessary personnel from the area.
- **Environmental Precautions:**
 - Prevent product runoff into drains or waterways.
- **Methods for Containment and Clean-Up:**
 - Allow hot material to cool before collection.
 - For solid residues, sweep up and collect in appropriate waste containers.
 - Use dust suppression measures if airborne particles are generated.

Section 7 – Handling and Storage

- **Handling:**
 - Handle only by trained personnel using proper PPE.
 - When torch-applying the membrane, ensure adequate ventilation to minimize fume exposure.
- **Storage:**
 - Store in a cool, dry, and well-ventilated area away from sources of ignition.
 - Keep containers tightly closed and protected from weather conditions.
- **Special Considerations:**
 - Avoid exposure to excessive heat during storage or handling.

Section 8 – Exposure Controls/Personal Protection

- **Engineering Controls:**
 - Use adequate general and local ventilation when applying heat.
- **Respiratory Protection:**
 - In areas where fume concentrations may exceed occupational exposure limits, use a NIOSH-approved respirator.
- **Skin Protection:**
 - Wear chemical-resistant gloves and long-sleeved protective clothing.
- **Eye Protection:**
 - Use safety goggles or face shields when exposure to fumes is possible.



- **Hygiene Measures:**
 - Wash hands and face thoroughly after handling the product.

Section 9 – Physical and Chemical Properties

- **Appearance:** Solid, flexible membrane (varies in color by product type).
- **Odor:** Characteristic asphalt odor.
- **pH:** Not applicable (non-aqueous).
- **Melting/Softening Point:** Varies with formulation; typically high enough to withstand service conditions.
- **Flash Point:** Not applicable in the finished membrane; note that heated bitumen may present a fire hazard.
- **Vapor Pressure:** Low under ambient conditions.
- **Specific Gravity:** Generally >1.0 (variable with formulation).
- **Solubility:** Insoluble in water.

Section 10 – Stability and Reactivity

- **Chemical Stability:**
 - Stable under normal ambient conditions.
- **Conditions to Avoid:**
 - Excessive heat or open flame.
- **Incompatible Materials:**
 - Strong oxidizers, strong acids, alkalis, and organic solvents.
- **Hazardous Decomposition Products:**
 - In fire or thermal degradation, may release toxic gases such as CO, CO₂, NO_x, SO_x, and hydrogen sulfide.

Section 11 – Toxicological Information

- **Acute Exposure:**
 - Fumes may cause irritation to the respiratory tract, eyes, and skin.
- **Chronic Exposure:**
 - Prolonged exposure to asphalt fumes (especially when heated) has been associated with potential respiratory and dermal effects.
- **Carcinogenicity:**
 - Components such as oxidized bitumen have been classified as “probably carcinogenic” (IARC Group 2A) under certain exposure conditions, though exposure in finished form is minimal.
- **Other Effects:**
 - No significant acute toxicity is expected from incidental contact in its end-use state.

Section 12 – Ecological Information

- **Ecotoxicity:**
 - The product in its applied form is not expected to pose an environmental hazard.



- **Persistence and Degradability:**
 - The membrane is designed for long-term durability; it is not biodegradable under normal conditions.
- **Bioaccumulation:**
 - No significant bioaccumulation is anticipated.
- **Environmental Precautions:**
 - In the event of a spill, avoid dispersion into natural water bodies and follow local guidelines for cleanup.

Section 13 – Disposal Considerations

- **Disposal Methods:**
 - Dispose of in accordance with local, regional, and national regulations.
 - Recycle if possible or dispose of as hazardous waste.
- **Waste Treatment:**
 - Do not discharge into sewers or waterways.
 - Empty containers should be triple-rinsed and disposed of in accordance with applicable regulations.

Section 14 – Transport Information

- **General Transport Classification:**
 - In its finished state, the membrane is not classified as hazardous for transportation.
- **UN Number & Proper Shipping Name:**
 - Not applicable for the end-use product; if altered (e.g., heated bitumen), consult applicable transport regulations.
- **Transport Hazard Class:**
 - Not regulated under normal conditions.

Section 15 – Regulatory Information

- **International Regulations:**
 - Components of the product are subject to TSCA (USA), DSL (Canada), and other regional inventories.
- **Occupational Exposure Limits:**
 - Reference values for individual components (e.g., asphalt, crystalline silica) are provided in Section 8.
- **Labeling and Classification:**
 - The product is not classified as hazardous under OSHA or WHMIS when used as intended.

Section 16 – Other Information

- **Revision Date:** 2025.02.23
- **Disclaimer:**
 - The information provided in this SDS is believed to be accurate and reliable as of



the revision date. It is provided for safety purposes only and does not constitute a warranty.

- **Additional Comments:**
 - Users are advised to consult the supplier's current SDS before use, as formulations and regulations may change.
- **Prepared By:** Basekim