

Material Safety Data Sheet

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SECTION 1 PRODUCT AND COMPANY IDENTIFICATION

Product Name SBS (and/or) SBS/SEBS Modified Bitumen Roofing and Waterproofing Membrane
Chemical Name Mixture
Trade Name(s) *layfastSBS*[®], *layflatSBS*[®], *fireguardSBS*[®], *fireguardfastorchSBS*[®], *fastorchSBS*[®], *metalflexSBS*[®], *superflexSBS*[®], *supercapSBS*[®]
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SECTION 2 PRODUCT COMPONENTS / INGREDIENTS

<u>Component Name</u>	<u>Common Name</u>	<u>CAS Number</u>
Petroleum Asphalt	Bitumen	8052-42-4, 64742-93-4
Hydrotreated Heavy Naphthenic Distillate (petroleum)	Process Oil	64742-34-3, 64741-96-4, 64742-52-5
Heavy Naphthenic Extract (petroleum)	Oil	64742-11-6
Styrene-Butadiene-Styrene	SBS Rubber	9003-55-8
Styrene-Ethylene/Butylene-Styrene	SEBS Rubber	66070-58-4
Calcium Carbonate (asbestos-free) *	Limestone	1317-65-3
Crystalline Silica in the form of Quartz	Sand	14808-60-7
Continuous Filament Glass Fiber	Fiberglass Mat	65997-17-3
Polyester Fibers	Polyester Mat	Mixture
Ammonium Polyphosphate	Ammonium Polyphosphate	68333-79-9, 14728-39-9
Decabromodiphenyl Oxide	DBDPO	1163-19-5
Calcium Borate	Colemanite	1318-33-8
Mineral Granules	Roofing Granules	Mixture
Polyolefin Film	Polyethylene (PE) Film	9002-88-4
Aluminum / Copper Foils	Aluminum / Copper	7429-90-5 / 7440-50-8

* (Particulate matter containing no asbestos and less than detect levels of crystalline silica)

*NOTE: Products made may not include every ingredient listed above.
Asbestos is not used as a raw ingredient in the manufacture of any MBTechnology product.
MBTechnology product(s) are asbestos-free. (See Section 16 for additional information)*

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SECTION 3

HAZARDS INFORMATION

EMERGENCY OVERVIEW

Dark mat with or without sand/granules/aluminum. Asphalt Odor. Under normal conditions of use and handling, this product is not expected to create any health or safety hazards. Vapors generated during installation may cause irritation of eyes, nose, throat and respiratory tract.

POTENTIAL HEALTH EFFECTS

SKIN CONTACT: May cause skin irritation. Contact with hot or molten material can cause thermal burns.

SKIN ABSORPTION: Not Applicable

EYES: Overexposure to product vapor/fumes/dust during installation may cause irritation and/or redness. Contact with hot or molten material can cause thermal burns.

INHALATION: Overexposure to product vapor/fumes/dust during installation may cause irritation of upper respiratory tract, coughing, headache, nausea and/or dizziness.

INGESTION: Not intended to be ingested. If ingested, it may cause temporary irritation to the gastrointestinal (digestive) tract.

SECTION 4

FIRST AID MEASURES

NOTE TO PHYSICIAN

Substances released from this product during cutting or heating may be irritating, but are not expected to produce any lasting health effects from acute exposure. Treatment should be directed toward removing the source of irritation with symptomatic treatment as necessary. If ingested, perform in accordance with procedures for ingestion of petroleum products.

SKIN CONTACT: Contact with dust - Wash gently with warm water and soap to remove.
Contact with hot/molten material – Do not attempt to remove material from affected area. Flush skin with large amounts of cold water, pack with ice and seek medical attention. Use olive or vegetable oil to remove the cooled material from the skin.

SKIN ABSORPTION: Not Applicable

EYES: Flush eyes with water for at least 15 minutes. Seek medical attention if irritation persists.

INHALATION: Remove immediately to fresh air. Drink water to clear throat. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

INGESTION: Not intended to be ingested. If ingested DO NOT INDUCE VOMITING. Give water or clear liquids and seek medical attention.

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SECTION 5

FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES

Flash Point:	> 400°F	Flash Point Method:	Cleveland Open Cup
Auto-Ignition Temperature:	Not Determined	Flame Propagation Rate:	Not Determined
Upper Flammability Limit (UFL):	Not Determined	Lower Flammability Limit (LFL):	Not Determined
Flammability Classification:	Not Determined		

FIRE FIGHTING

General Fire Hazards: Normal fire fighting procedures should be followed to avoid inhalation of smoke and gases. Burning may produce thick, black irritating smoke. Wear self-contained breathing apparatus.

EXTINGUISHING MEDIA: Water/fog, carbon dioxide (CO₂), foam, dry chemical, sand or steam.

COMBUSTION PRODUCTS: At elevated temperatures, product may generate vapors that can form flammable/explosive mixtures in the presence of air and a source of ignition. Hot/molten product at elevated temperatures will sustain combustion. Burning of this material will produce thick black smoke. Irritating and/or toxic gases including carbon monoxide, carbon dioxide, oxides of nitrogen, phosphorous and sulfur may be generated by thermal decomposition or combustion. Products of proprietary nature to be revealed in the event of emergency.

FIRE FIGHTING INSTRUCTIONS: Firefighters should wear full protective clothing including self contained breathing apparatus.

SECTION 6

ACCIDENTAL RELEASE MEASURES

RELEASE or SPILL: Material is not normally involved in a spill/release scenario. If during installation, hot material is released, allow enough time for it to cool completely. Use of water spray will aid in solidifying molten material. Remove solid/cool material for disposal. Avoid sources of ignition. Ventilate the area if release occurs indoors. Scrap/remnant pieces cut off should be picked up and disposed of. If sweeping is necessary, use a dust suppressant.

WASTE DISPOSAL: Follow all local, state and federal regulations governing waste disposal.

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SECTION 7

HANDLING & STORAGE

- HANDLING:** Always wear recommended personal protective equipment. In its intended state, product is in roll form and weight of rolls should be considered before lifting. Must be applied by qualified applicators who have received training relative to protection against accidents caused by use of combustible materials.
- STORAGE:** Primary storage instructions are labeled on the product and are to be followed. Material should be stored ON END, in a cool, dry, well ventilated area and protected from the elements. Material should be stored away from sources of excessive heat, flame or source of ignition. Store in an area where the temperatures are above 50°F but below 90°F. Do not remove labels or protective coating until ready for application or use.

SECTION 8

EXPOSURE CONTROL / PERSONAL PROTECTION

EXPOSURE

Due to product form, exposures to hazardous materials are not expected to occur. Use in a well ventilated area.

PERSONAL PROTECTION

Upon application of product, all applicators should be equipped with protective gear for the eyes, hands and arms to prevent asphalt burns. Fire extinguishers should be present when applying material with a torch. Approved respiratory apparatus should be available where ventilation is inadequate.

- EYE PROTECTION:** Wear chemical safe goggles with side shields.
- FEET PROTECTION:** Wear safety work shoes.
- BODY (Skin) PROTECTION:** Wear adequate protective clothing (long sleeved shirts and long pants is recommended). Wear heat resistant gloves.
- RESPIRATORY PROTECTION:** Wear a properly fitted NIOSH approved respirator to protect against nuisance dust and/or when inadequate ventilation.

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SECTION 9 PHYSICAL / CHEMICAL CHARACTERISTICS

Appearance:	Black solid with or without granules, metal foil or PE film.
Odor:	Asphalt/aromatic
Physical State:	Solid
Chemical Formula:	Mixture
Specific Gravity:	> 1 (Variable)
Melting Point:	Not Determined
Boiling Point:	650°F @ 760 mmHg
Flash Point:	> 400°F (Flash Point method & additional flammability data found in Sec. 5)
Freezing Point:	Not Determined
Viscosity:	Not Applicable
pH:	Not Applicable
Vapor Density:	Not Applicable
Vapor Pressure:	<1 (mm Hg @ 20°C)
% Volatile by Volume:	Not Determined
Solubility in H ₂ O:	Negligible
Evaporation Rate (Butyl Acetate):	Not Applicable
Molecular Weight:	Not Determined (Variable)

SECTION 10 STABILITY / REACTIVITY DATA

CHEMICAL STABILITY:	Material is Stable
INCOMPATIBILITY:	Avoid contact with strong oxidizing agents, strong acids & alkalines, strong basis and organic solvents and greasy substances.
HAZARDOUS DECOMPOSITION:	Material does not decompose under normal conditions of use. Upon Heating or burning, the material may decompose. The decomposition products from this material are those that would be expected from any organic (carbon-containing) material. These decomposition products may include dense smoke, carbon monoxide, carbon dioxide, oxides of nitrogen, phosphorous and sulfur, carbon particles and hydrocarbons.
HAZARDOUS POLYMERIZATION:	Will not occur.
CONDITIONS OF REACTIVITY:	Avoid excessive heat.

SECTION 11 TOXICOLOGICAL INFORMATION

Under normal use this material is not expected to create any health hazards.

ACUTE (*Short-Term*) EXPOSURE: Fumes from hot material during torching may produce nausea and irritation of the upper respiratory tract.

CHRONIC (*Long-Term*) EXPOSURE: Prolonged skin contact may cause slight irritation, skin dermatitis.

CARCINOGENICITY: These products contain petroleum oils similar to one categorized by the International Agency for Research on Cancer (IARC) as causing skin cancer in mice after prolonged repeated contact. There is no evidence to show that similar results could be expected in humans. Any potential Contact hazard can be minimized by following the precautions given in the preceding sections and other MSDS Sheets supplied by manufactures of the components used in application of these products.

Crystalline silica contained in the sand of sanded membranes are classified as carcinogenic to humans (Group 1) according to the International Agency for Research on Cancer (IARC). Respirable crystalline silica from sand (14808-60-7) is not expected to be released; sand is adhered to product and is >99.9% too large to become airborne or to be respirable.

Fiberglass continuous (non-respirable) (65997-17-3) Not classifiable as a human carcinogen (related to continuous filament glass fibers) according to American Conference of Governmental Industrial Hygienists (ACGIH).

SBS 9003-55-8, SEBS 66070-58-4 & Polyolefin Film 9002-88-4
Not Classifiable (Group 3) according to the International Agency for Research on Cancer (IARC).

SECTION 12 ECOLOGICAL INFORMATION

Data has not been determined specifically for these products.
No additional information available.

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SECTION 13 DISPOSAL CONSIDERATIONS

These products are not regulated as a hazardous waste by the U.S. Environmental Protection Agency. Dispose of waste material according to Local, State, Federal and Provincial Environmental Regulations.

SECTION 14 TRANSPORTATION

US D.O.T.: Not Regulated for transport.

T.D.G.: Not Regulated for transport.

ADDITIONAL INFORMATION: Contact the information number found in Section 1

SECTION 15 REGULATORY INFORMATION

General Product Information: Asphalt fumes may contain trace amounts of the following California Proposition 65 Listed Substances as known to the state of California to Cause cancer or reproductive effects:
Poly nuclear aromatic hydrocarbons (benz(a)anthracene, benzo(b)fluoranthene, benzo(j)fluoranthene, benzo(k)fluoranthene, benzo(a)pyrene).

Component Analysis - State: The following components appear on one or more of the following state Hazardous substances lists:

COMPONENT	CAS #	CA	FL	MA	MN	NJ	PA
Petroleum Asphalt	8052-42-44	Yes	No	Yes	Yes	Yes	Yes
Calcium Carbonate	1317-65-3	No	No	Yes	Yes	No	Yes
Continuous Filament Glass Fiber	65997-17-3	No	No	No	Yes	No	No
Crystalline Silica in the form of Quartz	14808-60-7	No	No	Yes	Yes	Yes	Yes
Heavy Naphthenic Extract (petroleum)	64742-11-6	No	No	Yes	No	No	No
Hydrotreated Heavy Naphthenic Distillate (petroleum)	64742-34-3	No	No	Yes	No	No	No
	64741-96-4	No	No	Yes	No	No	No
	64742-52-5	No	No	Yes	No	No	No

Other Regulatory Information: General Product Information: No additional information available.

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SECTION 16

MISCELLANEOUS INFORMATION

COMMENTS: The calcium carbonate (1317-65-3) is used as a compound stabilizer and is encased in the asphaltic matrix and the fibrous glass filaments (65997-17-3) are encapsulated in the modified asphalt coating. Neither of which is expected to be released.

Sand (14808-60-7) and granules is applied to the asphalt surface(s) in such a manner that nominal release from the surface is expected.

Asbestos is a naturally occurring mineral. As with other natural minerals, asbestos may be found in trace amount in many materials and can even be detected in the background air in many areas of the world.

Due to the nature of the specific use of these products, hazardous exposures are highly unlikely; however, all relevant data has been provided for reference.

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