SAFETY DATA SHEET

SBS MODIFIED BITUMEN WATERPROOFING MEMBRANE

SECTION I: IDENTIFICATION

Trade names:
- SOPREMA Stickson.
- ELASTOPHENE Flam HS, ELASTOPHENE Flam HS FR, ELASTOPHENE Flam HS FR Sanded, ELASTOPHENE Flam HS FR GR (WHT),
- SOPRALAST TV Alu,
- SOPRALAP Stick,
- SOPRALENE 180 FR, SOPRALENE 180 FR+ GR,
- SOPRALAP FLOORING, SOPRALAP FLOORING FR GR,
- SOPRAFIX Base 614, SOPRALENE 250 Sanded, SOPRALINE Flam 180,
- SOPRAFLASH, SOPRAFIX Base 613, SOPRAFIX Base 622, SOPRAFIX Base 641, SOPRAFIX Base 612, COLVENT 180, COLVENT 180 SA,
- COVREL 180, COVREL 180 SA.

Manufacturers and distributors:
- SOPREMA (Canada) (24h.):
  1675 Haggerty Street
  Drummondville (Quebec) J2C 5P7
  Tel.: 819 478-7813
- SOPREMA Inc. (Canada) (24h.):
  44955 Yale Road West
  Chilliwack (B-C.) V2R 4H3
  CANADA
  Tel.: 604 793-7100
- SOPREMA USA (24h.):
  310 Quadral Drive
  Wadsworth (Ohio) 44281
  UNITED STATES
  Tel.: 1 800 356-3521
- SOPREMA Gulfport (24h.):
  12251 Seaway Road
  Gulfport (Mississippi) 39503
  UNITED STATES
  Tel.: 228 701-1900

In case of emergency:
- SOPREMA (8:00am to 5:00pm): 1 800 567-1492
- CANUTEC (Canada) (24h.): 613 996-6666
- CHEMTREC (USA) (24h.): 1 800 424-9300

Use:
Membranes are used for all types of roofing needs, air barrier and waterproofing protection.

SECTION II: HAZARD(S) IDENTIFICATION

Bitumen membrane. Asphalt odor. Under normal use, this product is not expected to create any health or environmental hazard. Inhalation of dust or of asphalt fumes can cause a slight respiratory irritation and/or congestion.

SECTION III: COMPOSITION AND INFORMATION ON HAZARDOUS INGREDIENTS

<table>
<thead>
<tr>
<th>NAME</th>
<th>CAS #</th>
<th>% WEIGHT</th>
<th>EXPOSURE LIMIT (ACGIH)</th>
<th>TLV-TWA</th>
<th>TLV-STEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bitumen</td>
<td>8052-42-4</td>
<td>30-70</td>
<td>0.5 mg/m³ Asphalt fumes</td>
<td>Not established</td>
<td></td>
</tr>
<tr>
<td>Oxidized bitumen¹</td>
<td>64742-93-4</td>
<td>0-20</td>
<td>0.5 mg/m³ Asphalt fumes</td>
<td>Not established</td>
<td></td>
</tr>
<tr>
<td>Self-adhesive membranes contain:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highly hydrotreated naphthenic oil¹</td>
<td>64742-52-5</td>
<td>0-30</td>
<td>Not established</td>
<td>Not established</td>
<td></td>
</tr>
<tr>
<td>Calcium Carbonate¹</td>
<td>471-34-1</td>
<td>0-60</td>
<td>10 mg/m³</td>
<td>Not established</td>
<td></td>
</tr>
<tr>
<td>Styrene butadiene copolymer¹</td>
<td>9003-55-8</td>
<td>0-15</td>
<td>10 mg/m³</td>
<td>Not established</td>
<td></td>
</tr>
<tr>
<td>FR products contain:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calcium borate¹</td>
<td>1318-33-8</td>
<td>7-15</td>
<td>10 mg/m³</td>
<td>Not established</td>
<td></td>
</tr>
<tr>
<td>FR Plus products contain:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fire retardant¹</td>
<td>Proprietary</td>
<td>1-5</td>
<td>2 mg/m³</td>
<td>Not established</td>
<td></td>
</tr>
</tbody>
</table>

REINFORCEMENT
Some products may contain fibre glass, polyester or a mix of glass grid and polyester.

| Polyester mat¹        | N/A     | 1-7      | Not established | Not established |
| Fibre glass mat¹      | N/A     | 1-7      | Not established | Not established |
| Contains: Fibre glass filament¹ | 65997-17-3 | 0.5-7 | 1f/cc | Not established |
Some membranes are protected by sand, talc, mineral granule, silicone paper, polyethylene or polypropylene film, aluminium, copper or stainless steel foil.

| Silicone paper | N/A | 6-20 | Not established | Not established |
| Polypropylene film | N/A | 2-10 | Not established | Not established |
| Polyethylene film | 9002-88-4 | 2-10 | Not established | Not established |
| Aluminium, copper or stainless steel foil | N/A | 4-15 | Not established | Not established |

1. The exposure to the substance above the limits of exposure is not likely to occur considering its form (incorporated in the mixture) and/or the provided use. The limit of exposure is given for reference only.
2. A proportion of crystalline silica can be present in the sand sprinkled on the top of some membranes. The crystalline silica contained in the sand is not likely to be found in the ambient air in concentration above the limit of exposure since the sand adheres to the surface of the membrane.

| UNDERFACE AND SURFACE |
|---|---|---|---|
| Some membranes are protected by sand, talc, mineral granule, silicone paper, polyethylene or polypropylene film, aluminium, copper or stainless steel foil. |

| SECTION III: POTENTIAL HEALTH EFFECTS |
|---|---|---|---|
| **SKIN CONTACT** |
| The product can cause a mechanical irritation of the skin because of its rough surface. If the membrane is torch-applied, asphalt fumes can cause skin irritation. The asphalt fumes can cause an irritation of the skin. The contact with this product at high temperature can cause thermal burns. |
| **EYE CONTACT** |
| The product is not likely to cause effects to the eyes. If the membrane is torch-applied, asphalt fumes can be emitted of the product and cause irritations, redness and conjunctivitis to the eyes. The contact with this product at high temperature can cause thermal burns. |
| **INHALATION** |
| The product is not likely to cause effects on the respiratory system. If the membrane is torch-applied, asphalt fumes can be emitted of the product and cause irritations to the nose, the throat and the respiratory tracts, tiredness, headaches, dizziness, nausea and insomnia. |
| **INGESTION** |
| Exposure is not likely to occur by this route of entry under normal use of the product. |

| SECTION IV: FIRST-AID MEASURES |
|---|---|---|---|
| **SKIN CONTACT** |
| If there is presence of dust on the skin, wash gently with water and soap. In the event of contact with the product melted, do not try to remove the product of the affected area and rinse the area affected in cold water. Obtain immediate medical attention. At the end of each working day, clean all the parts of the body which came into contact with the product and cause irritations to the nose, the throat and the respiratory tract. |

**Monitor the condition of the patient and, if necessary, call for emergency medical help.**

**Definitive Treatment:**

- If there is presence of dust on the skin, wash gently with water and soap. In the event of contact with the product melted, do not try to remove the product of the affected area and rinse the area affected in cold water. Obtain immediate medical attention. At the end of each working day, clean all the parts of the body which came into contact with the product and cause irritations to the nose, the throat and the respiratory tract.

**Further Information:**

- The Ame...
with asphalt fumes. Clean the clothing contaminated by the asphalt fumes.

**EYE CONTACT**
Flush eyes with water for at least 15 minutes while holding eyelids open. Do not attempt to remove material from affected area without medical assistance. Obtain immediate medical attention.

**INGESTION**
The ingestion of this product is not very likely to occur.

**inhaLATION**
Remove victim from contaminated place and restore breathing, if required.

**release or spill**
If hot material is spilled, allow enough time to cool completely and remove to a container for disposal. Wear appropriate breathing apparatus (if applicable) and protective clothing. Notify appropriate environmental agencies. Wash spill area with soap and water. Dispose of this material according to local environmental regulations.

**section vii: handling and storage**
**Handling**
SOPREMA's products must be applied by qualified applicators who have received an adequate training, for the prevention and the protection (in particular for the use of the extinguishers) against accidents caused by use of combustible or flammable materials, of liquefied propane gas, open flame, and their material of installation. The present recommendations must be imperatively related to the knowledge of the employees before the application of the products to the building site. Check the construction and the composition of the systems of roof and the walls before welding. Ensure of the cleanliness of the places (debris).

Precautions of the use of the torch: Use only proper torching equipment in perfect working order, C.S.A. certified. Never modify torching equipment. Use only proper hoses suited for propane gas of less than 15 m (50'). Verify and tighten all the connections before the use of the equipment. Do not light the torch if a propane odor is present. Never seek a leak with a flame. Use a torch whose gas output is adjustable with stopping device. Follow the specifications, notices and documentations of the manufacturers.

**storage**
Flashings must be stored in such a way to prevent any creasing, twisting, scratches and other damages of the roof. The materials must be protected adequately and stored permanently away from flames or welding sparks, protected from bad weather and any harmful substances. Store self-adhesive membranes away from the sun.

**section viii: exposure controls / personal protection**
**HANDS:** Wear resistant gloves.
**RESPIRATORY:** If the TLV for dust is exceeded, if use is performed in a poorly ventilated confined area, use an approved respirator in accordance with standards.
**EYES:** Wear safety goggles in accordance with standards.
**BODY:** Wear adequate protective clothes. Do not wear synthetic fabric. Remove clothing contaminated with solvents.
**OTHERS:** Eye bath and safety shower.

**section ix: physical and chemical properties**
**physical state:** Solid
**odor and appearance:** Black membrane with asphalt odor
**odor threshold:** Not available
**vapor pressure (20°C):** Not applicable
**vapor density (air = 1):** Not applicable
**evaporation rate (Butyl acetate = 1):** Not applicable
**boiling point (760 mm Hg):** Not applicable
**freezing point:** Not applicable
**specific gravity (H₂O = 1):** Variable
**solubility in water (20°C):** None
**volatile organic compound content (V.O.C.):** Not measurable (0 g/L)
**viscosity:** Not applicable

**section x: stability and reactivity**
**stability:** This material is stable.
**conditions of reactivity:** Avoid excessive heat.
**incompatibility:** Acid and strong basis and organic solvents and greasy substances.
HAZARDOUS DECOMPOSITION PRODUCTS: None identified.

HAZARDOUS POLYMERISATION: None.

SECTION XI: TOXICOLOGICAL INFORMATION

Effects of Short-Term (Acute) Exposure

No information available.

Effects of Long-Term (Chronic) Exposure

CARCINOGENICITY

Bitumen: Data from experimental studies in animals and cultured mammalian cells indicate that laboratory-generated roofing asphalt fume condensates are genotoxic and cause skin tumours. (2)

Crystalline Silica: Several studies have shown an increased incidence of lung tumours in rats exposed to quartz by inhalation for up to 2 years. IARC has determined that there is sufficient evidence that quartz is carcinogenic to experimental animals. (3)

The other ingredients were not found to be carcinogenic or no information is available on that matter.

REPRODUCTIVE EFFECTS

No information available.

TERATOGENICITY, EMBRYOTOXICITY, FETOTOXICITY

No information available.

MUTAGENICITY

Crystalline Silica: None according to the available information.

No information available about the other ingredients.

SYNERGISTIC MATERIALS

Tobacco smoke increases the effects of silica dust on respiratory system. Simultaneous exposure to known carcinogens as benzo (a), pyrene, can increase the carcinogenicity of crystalline silica.

SECTION XII: ECOLOGICAL INFORMATION

ENVIRONMENTAL EFFECTS

No data.

BIODEGRADABILITY

This product is not biodegradable. No possible bioaccumulation and unlikely biocentrination in the food chain.

SECTION XIII: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

This product is not hazardous waste. Consult local, provincial, territory or state authorities to know disposal methods. This material is not listed by the EPA as hazardous waste according to the Resource Conservation and Recovery Act (RCRA) of the United States. No Environmental Protection Agency (EPA) waste numbers are applicable for this product.

SECTION XIV: TRANSPORT INFORMATION

This product is not regulated by Department of Transportation (DOT) and Transportation Dangerous Goods (TDG).

SECTION XV: REGULATORY INFORMATION

DSL: All constituents of this product are included in the Domestic Substances List (Canada).

TSCA: All constituents of this product are listed on the Toxic Substances Control Act Inventory (TSCA – United States).

Prop. 65: This product contains chemicals known to the State of California to cause cancer or reproductive toxicity.

GLOSSARY

ACGIH: American Conference of Governmental Industrial Hygienists (United States)

ANSI: American National Standards Institute (United States)

ASTM: American Society for Testing and Materials (United States)

CAS: Chemical Abstract Services

CFR: Code of Federal Regulations (United States)

CSA: Canadian Standardization Association

DOT: Department of Transportation (United States)

DSL: Domestic Substances List (Canada)

EPA: Environmental Protection Agency (United States)

GHS: Globally Harmonized System

IARC: International Agency for Research on Cancer

LD₅₀/LC₅₀: Less high lethal dose and lethal concentration published

NFPA: National Fire Protection Association (United States)

NIOSH: National Institute for Occupational Safety and Health (United States)

NTP: National Toxicology Program (United States)

OSHA: Occupational Safety & Health Administration (United States)

RCRA: Resource Conservation and Recovery Act (United States)

TDG: Transportation of Dangerous Goods (Canada)

TLV-TWA: Threshold Limit Value – Time-Weighted Average

TSCA: Toxic Substances Control Act (United States)

REFERENCES:

(1) Safety Data Sheet from the supplier


Code of SDS: CA U DRU SS FS 044

For information: 1-800-356-3521 (U.S.A.)

1 800 567-1492 (Canada)

The Safety Data Sheets of SOPREMA are available on Internet at the following site: www.soprema.us and www.soprema.ca

Update justification:

- Oxidized bitumen added (sections II and III).
- GHS Format.

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