# SAFETY DATA SHEET

**WATERPROOFING MEMBRANE**

**GHS**

<table>
<thead>
<tr>
<th>PROTECTIVE CLOTHING</th>
<th>TRANSPORT OF DANGEROUS GOODS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not regulated</td>
<td>Not regulated</td>
</tr>
</tbody>
</table>

## SECTION I: IDENTIFICATION


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

**Manufacturers:**
- Soprema Canada
  - 1675 Haggerty Street
  - Drummondville (Quebec)
  - J2C 5P7
  - CANADA
  - Tel.: 819 478-8163
- Soprema Inc.
  - 44955 Yale Road West
  - Chilliwack (B.C.)
  - V2R 4H3
  - CANADA
  - Tel.: 604 793-7100
- Soprema USA
  - 310 Quadral Drive
  - Wadsworth (Ohio)
  - 44281
  - UNITED STATES
  - Tel.: 1 800 356-3521
- Soprema Gulfport
  - 12251 Seaway Road
  - Gulfport (Mississippi)
  - 39503
  - UNITED STATES
  - Tel.: 228 701-1900

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

## SECTION II: HAZARD(S) IDENTIFICATION

**Bitumen membrane. Asphalt odour. Under normal use, this product is not expected to create any health or environmental hazard. Inhalation of dust or asphalt fumes can cause 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>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>TLV-TWA</td>
</tr>
<tr>
<td><strong>BITUMINOUS BLEND</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bitumen&lt;sup&gt;1&lt;/sup&gt;</td>
<td>8052-42-4</td>
<td>15-40</td>
<td>0.5 mg/m³</td>
</tr>
<tr>
<td>Oxidized bitumen&lt;sup&gt;1&lt;/sup&gt;</td>
<td>64742-93-4</td>
<td>0-20</td>
<td>0.5 mg/m³</td>
</tr>
<tr>
<td>Self-adhesive membranes contain:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highly hydrotreated naphthenic oil&lt;sup&gt;1&lt;/sup&gt;</td>
<td>64742-52-5</td>
<td>1-5</td>
<td>Not established</td>
</tr>
<tr>
<td>Calcium carbonate&lt;sup&gt;1&lt;/sup&gt;</td>
<td>471-34-1</td>
<td>0-30</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td>Styrene butadiene copolymer&lt;sup&gt;1&lt;/sup&gt;</td>
<td>9003-55-8</td>
<td>1-5</td>
<td>10 mg/m³</td>
</tr>
<tr>
<td><strong>REINFORCEMENT</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Polyester mat&lt;sup&gt;1&lt;/sup&gt;</td>
<td>N/A</td>
<td>0-7</td>
<td>Not established</td>
</tr>
<tr>
<td>Fibre glass mat&lt;sup&gt;1&lt;/sup&gt;</td>
<td>N/A</td>
<td>0-7</td>
<td>Not established</td>
</tr>
<tr>
<td>Contains: Fibre glass filament&lt;sup&gt;1&lt;/sup&gt;</td>
<td>65997-17-3</td>
<td>0-7</td>
<td>1f/cc</td>
</tr>
<tr>
<td><strong>UNDERFACE AND SURFACE</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Silicone paper</td>
<td>N/A</td>
<td>0-5</td>
<td>Not established</td>
</tr>
<tr>
<td>Polypylene film</td>
<td>N/A</td>
<td>0-5</td>
<td>Not established</td>
</tr>
<tr>
<td>Polyethylene film</td>
<td>9002-88-4</td>
<td>0-5</td>
<td>Not established</td>
</tr>
<tr>
<td>Aluminium, copper or stainless steel foil</td>
<td>N/A</td>
<td>0-15</td>
<td>Not established</td>
</tr>
</tbody>
</table>

<sup>1</sup> The exposure to the product above the limits of exposure is not likely to occur considering its form (incorporated in the mixture) and the provided use. The limit of exposure is given for reference only.

**Effects of short term (acute) exposure**

**SKIN CONTACT**
The product can cause a mechanical irritation of the skin because of its rough surface. The product may stain and stick to 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. The contact with this product at high temperature can cause thermal burns.

**INHALATION**
The product is not likely to cause effects to the respiratory system. If the membrane is burned, asphalt fumes can be emitted 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.
SKIN CONTACT
The repeated or prolonged contact can cause irritation. (1)

INHALATION
Under normal use, the product is not likely to cause effects to the respiratory system.

CARCINOGENICITY
Due to the product form, exposure to hazardous dusts or fumes is not expected to occur. Information on carcinogenicity is given for reference only. This product is not classifiable as a carcinogen.

Bitumen: Asphalt fumes may contain a variety of polycyclic aromatic hydrocarbons (PAH), some of which are associated with the potential of inducing skin cancer. Increasing amounts of PAH may be released if this product is heated above 200°C. Prolonged or repeated contact of PAH with skin may cause skin cancer where poor personal hygiene may be a contributing factor. Asphalt fumes contain substances such as Benzo(a)pyrene and Dibenzo(a,h)anthracene that are known to cause cancer in humans. In its 2013 monograph (Volume 103), the International Agency for Research on Cancer (IARC) conducted a review of the potential carcinogenicity of bitumen (the European term for asphalt). One of its conclusions was that the "occupational exposures to straight-run bitumens and their emissions during road paving are possibly carcinogenic to humans (group 2B)". However, due to the product form, exposure to such component is unlikely under normal conditions of use. (1,2,4)

Oxidized bitumen: In its 2013 monograph (Volume 103), IARC conducted a review of the potential carcinogenicity of bitumen (the European term for asphalt). One of its conclusions was "occupational exposures to oxidized bitumens and their emissions during roofing are classified in IARC Group 2A, probably carcinogenic to humans.". However, due to the product form, exposure to such component is unlikely under normal conditions of use. (4)

Fibreglass filament: Fibreglass is not expected to be released. In October 2001, the IARC classified fibre glass as Group 3 “not classifiable as to its carcinogenicity to humans”. The 2001 decision was based on current human and animal researches that showed no association between inhalation exposure to dust from fibreglass wool and the development of respiratory disease. This is a reversal of a study of the American Conference of Governmental Industrial Hygienists (ACGIH) and the National Toxicology Program (NTP) in 1987 that classified the product in Group 2B (possibly carcinogenic to humans). Those results were based on studies in which animals were injected with large quantities of fibreglass.

No information is available about other products.

TERATOGENICITY, EMBRIOOTOXICITY, FETOTOXICITY
No information available

REPRODUCTIVE TOXICITY
No information available

MUTAGENICITY
No information available

TOXICOLOGICALLY SYNERGISTIC MATERIALS
No information available

POTENTIAL ACCUMULATION
No information available

SECTION IV: FIRST-AID MEASURES

SKIN CONTACT
If there is presence of dust or stains on the skin, wash gently with water and soap. In the event of contact with the product melted, do not try to remove it from the affected area. Rinse in cold water. Obtain immediate medical attention.

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.

INHALATION
Remove victim from contaminated place and restore breathing if required.

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

SECTION V: FIRE-FIGHTING MEASURES

FLAMMABILITY: Not applicable
EXPLOSION DATA: Not applicable
FLASH POINT: Not applicable
AUTO-IGNITION TEMPERATURE: Not applicable
FLAMMABILITY LIMITS IN AIR: Not applicable

FIRE AND EXPLOSION HAZARDS
If the product is heated, take note that asphalt fumes are flammable. Do not use water on an asphalt fire.

COMBUSTION PRODUCTS
Burning of this material will produce thick black smoke. Irritating and/or toxic gases (including hydrogen sulphide and sulphur dioxide) and traces of metallic fumes may be generated by thermal decomposition or combustion.

FIRE FIGHTING INSTRUCTIONS
Evacuate the area. Wear self-contained breathing apparatus and appropriate protective clothing. Notify appropriate environmental agencies. Wash spill area with soap and water. Dispose of the material (if applicable) and protective clothing. Notify appropriate environmental agencies. Wash spill area with soap and water. Dispose of the material according to local environmental regulations.

SECTION VI: ACCIDENTAL RELEASE MEASURES

RELEASE OR SPILL
If hot material is spilled, allow enough time to cool completely and place it in 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 the material according to local environmental regulations.

SECTION VII: HANDLING AND STORAGE

HANDLING
Avoid contact with skin, eyes and clothes. Do not ingest. Wash hands after manipulation.

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. Self-adhesive membranes must be stored away from the sun.

SECTION VIII: EXPOSURE CONTROLS AND PERSONAL PROTECTION

HANDS: Wear resistant gloves.
RESPIRATORY: If the threshold limit value (TLV) for dust is exceeded and if use is performed in a poorly ventilated confined area, use an approved respirator that is in accordance with standards.
EYES: Wear safety goggles that are in accordance with standards.
BODY: Wear adequate protective clothes.
OTHERS: Eye bath and safety shower.
SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Solid
ODOUR AND APPEARANCE: Black membrane with asphalt odour
ODOUR THRESHOLD: Not available
VAPOUR PRESSURE (20°C): Not applicable
VAPOUR 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
VOLATIL 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: Avoid strong acids and strong alkalis, oxidizers organic solvents, and greasy substances
HAZARDOUS DECOMPOSITION PRODUCTS: None identified
HAZARDOUS POLYMERISATION: None

SECTION XI: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA
No information is available.

Effects of Short-Term (Acute) Exposure
No information available

Effects of Long-Term (Chronic) Exposure
No information available

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

Highly hydrotreated naphthenic oil: No study on the human and the animals made it possible to classify naphthenic oils highly hydrotreated as carcinogen (IARC, 1984). (1)

No information is available about other products.

REPRODUCTIVE EFFECTS
No information available

TERATOGENICITY, EMBRYOTOXICITY, FETOTOXICITY
No information available

MUTAGENICITY
No information is available.

SECTION XII: ECOLOGICAL INFORMATION

ENVIRONMENTAL EFFECTS
No data available

BIODEGRADABILITY
This product is not biodegradable. There is no possible bioaccumulation and unlikely bioconcentration 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 EPA waste numbers are applicable for this product.

SECTION XIV: TRANSPORT INFORMATION

This product is not regulated by the 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 (DSL) of Canada.

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

Prop. 65: This product does not contain chemicals known to the State of California to cause cancer or reproductive toxicity.

SECTION XVI: OTHER INFORMATION

GLOSSARY
CAS: Chemical Abstract Services
CSA: Canadian Standardization Association
GHS: Globally Harmonized System
LD₅₀/CL₅₀: Less high lethal dose and lethal concentration published
TLV-TWA: Threshold Limit Value – Time-weighted average

References:
(1) Safety Data Sheet from the supplier
(3) CHEMINFO (2019) Canadian Centre of Occupational Health and Safety, Hamilton (Ontario) Canada

Code of SDS: CA U DRU SS FS 043

The Safety Data Sheets of RESISTO are available on Internet at the following site: www.resisto.ca.

Update justification:
• Triennial update.

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