1 Identification of the substance/mixture and of the company/undertaking

Product identifier

Trade name: **Waterproofing Membrane**

MSDS ID Number: M-85875

Details of the supplier of the safety data sheet

Manufacturer/Supplier:

W.R. Grace & Co. -Conn.
62 Whittemore Avenue
Cambridge, MA 02140 USA

Grace Canada, Inc.
294 Clements Road W.
Ajax, Ontario L1S 3C6 Canada

Other Country Contact Information:
For products distributed beyond the country Manufacturer/Supplier identified above
Consult Section 16 for additional emergency contact information.

Information department:

Environmental Health & Safety
USA: +1-617-876-1400 (24 hours)
+1-800-354-5414 (8AM - 5PM) Not functional within Massachusetts
In Canada: +1-905-683-8561

Transport Emergency: Chemtrec +1-800-424-9300 (24 hours)

2 Composition/information on ingredients

Chemical characterization: Mixtures

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>8052-42-4</td>
<td>Asphalt</td>
</tr>
<tr>
<td>7783-06-4</td>
<td>hydrogen sulphide</td>
</tr>
<tr>
<td>9003-55-8</td>
<td>Styrene-butadiene rubber</td>
</tr>
</tbody>
</table>

3 Hazards identification

Classification of the substance or mixture

SDS's are not required for finished articles. nevertheless, the following information is provided to assist with safe use.

Information concerning particular hazards for human and environment:

Harmful by inhalation.

**Hazard description:** Harmful

**Inhalation:** Causes respiratory tract irritation.
Trade name: **Waterproofing Membrane**

Eye Contact: Causes eye irritation.
Skin Contact: Skin absorption of residue from adhesive may be harmful and may produce local skin tumors.
Ingestion: Harmful if swallowed.

NFPA ratings (scale 0 - 4)

- Health = 2
- Fire = 1
- Reactivity = 0

HMIS-ratings (scale 0 - 4)

- HEALTH: Health = 2
- FIRE: Flammability = 1
- REACTIVITY: Reactivity = 0

Other hazards Contact with residue from adhesive may cause eye and skin irritation.

4 First aid measures

**After inhalation:**
Adverse effects are not likely. If symptoms develop, get fresh air. If symptoms persist, consult a physician. If breathing has stopped, give artificial respiration then oxygen if needed.

**After skin contact:**
If residue remains, clean with waterless handcream or abrasive soap. Never use solvents.
If skin irritation continues, consult a doctor.

**After eye contact:**
Seek immediate medical advice.
If contact with residue causes eye irritation, flush eyes with water for at least 15 minutes while holding eyelids open.

**After swallowing:** Due to physical nature of this product, ingestion is not likely.

5 Firefighting measures

**Suitable extinguishing agents:**
CO2, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

**Special hazards arising from the substance or mixture** No further relevant information available.

**Additional information** Collect contaminated fire fighting water separately. It must not enter the sewage system.
6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.

Methods and material for containment and cleaning up:
Pick up mechanically.
Dispose contaminated material as waste according to section 13 of the MSDS.

Reference to other sections
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

7 Handling and storage

Handling:

Precautions for safe handling
Membrane is slippery when wet or covered with frost.
Avoid eye and skin contact with residue from adhesive.
Release liners are slippery. Remove from work area immediately after membrane application.
To avoid skin contact, use gloves. Clean hands after contact with adhesive residue.
Release liners may cause slip and trip hazards.
FOR PROFESSIONAL USE ONLY. KEEP OUT OF CHILDREN'S REACH.

Information about protection against explosions and fires:
Removal of release liner may generate a static electrical discharge (spark).

Storage:

Information about storage in one common storage facility: Store in original containers.
Further information about storage conditions:
Keep receptacle tightly sealed.

Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

Additional information about design of technical systems: No further data; see item 7.
Components with limit values that require monitoring at the workplace:

<table>
<thead>
<tr>
<th>Component Number</th>
<th>Limit Value (mg/m³, ppm)</th>
<th>Time Period</th>
</tr>
</thead>
<tbody>
<tr>
<td>8052-42-4 Asphal</td>
<td>Short-term value: C 5*</td>
<td>15-min</td>
</tr>
<tr>
<td></td>
<td>Short-term value: 0.5*</td>
<td>inh. fraction; as benzene-soluble aerosol; BEIp</td>
</tr>
<tr>
<td>7783-06-4 Hydrogen sulphide</td>
<td>Short-term value: C 20; 50* ppm</td>
<td>10-min peak; once per 8-hr shift</td>
</tr>
<tr>
<td></td>
<td>Short-term value: C 15*</td>
<td>10-min</td>
</tr>
<tr>
<td></td>
<td>Short-term value: (21) 7 mg/m³, (15) 5 ppm</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Long-term value: (14) 1.4 mg/m³, (10) NIC-1 ppm</td>
<td></td>
</tr>
</tbody>
</table>

Additional information: The lists that were valid during the creation were used as basis.

Personal protective equipment:

General protective and hygienic measures: Avoid contact with the eyes and skin.

Breathing equipment:
Respiratory protection is not normally required. If exposures exceed PELs use a NIOSH approved organic vapor respirator.

Protection of hands:
Gloves should be worn to prevent skin contact and should be impermeable and resistant to the product.

Material of gloves
Gloves should be impermeable and resistant to the product. Selection of material should be considered before use.

Eye protection: Not required for normal use.

Body protection: Protective work clothing

9 Physical and chemical properties

General Information
Appearance:
Form: Solid
Color: According to product specification
Odor: Characteristic
Odour threshold: Not determined.

pH-value: Not applicable.

Change in condition
Melting point/Melting range: Undetermined.
Flash point: 151°C (304 °F)

Flammability (solid, gaseous): Not determined.

Decomposition temperature: Not determined.
**Trade name:** Waterproofing Membrane

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Auto igniting:</strong></td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td><strong>Danger of explosion:</strong></td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td><strong>Explosion limits:</strong></td>
<td></td>
</tr>
<tr>
<td>Lower</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Upper</td>
<td>Not determined.</td>
</tr>
<tr>
<td>VOC Content (max)</td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Vapor pressure:</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Density at 20°C (68 °F):</strong></td>
<td>~1.1 g/cm³ (~9.18 lbs/gal)</td>
</tr>
<tr>
<td><strong>Vapour density</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Evaporation rate</strong></td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Solubility in / Miscibility with Water:</strong></td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td><strong>Segregation coefficient (n-octonol/water):</strong></td>
<td>Not determined.</td>
</tr>
<tr>
<td><strong>Viscosity:</strong></td>
<td></td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Kinematic</td>
<td>Not applicable.</td>
</tr>
<tr>
<td><strong>Other information</strong></td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

**10 Stability and reactivity**

**Thermal decomposition:** No decomposition if used according to specifications.

**Incompatible materials:** No further relevant information available.

**Hazardous decomposition products:** Carbon monoxide and carbon dioxide

**Additional information:** See section 7 for information on handling, storage and conditions to be avoided.

**11 Toxicological information**

**Acute toxicity:**

**Primary irritant effect:**

**on the skin:** May be irritating to the skin on prolonged contact

**Additional toxicological information:**

The product is not subject to classification according to internally approved calculation methods for preparations:

**12 Ecological information**

**Acquatic toxicity:** No further relevant information available.

**Persistence and degradability** No further relevant information available.
Trade name: **Waterproofing Membrane**

**Behavior in environmental systems:**

Bioaccumulative potential: No further relevant information available.

Additional ecological information:

General notes: Slightly hazardous for water

13 **Disposal considerations**

**Waste treatment methods** Comply with Federal, State and local regulations.

Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Uncleaned packagings:

Recommendation: Disposal must be made according to official regulations.

14 **Transport information**

**DOT regulations:**

Hazard class: -

Remarks: Not Regulated.

**Land Transport ADR/RID (cross-border):**

Remarks: Not Regulated.

**Inland shipping ADN:**

ADN/R Class: -

Remarks: Not regulated

**Maritime Transport IMDG:**

IMDG Class: -

Marine pollutant: No

Remarks: Not Regulated.

**Air Transport ICAO-TI and IATA-DGR:**

ICAO/IATA Class: -

Remarks: Not Regulated.
15 Regulatory information

SARA (Superfund Amendments and Reauthorization Act)

Section 302/304 (extremely hazardous substances):

<table>
<thead>
<tr>
<th>Compound</th>
<th>CAS Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>hydrogen sulphide</td>
<td>7783-06-4</td>
</tr>
</tbody>
</table>

Section 313 Reportable Ingredients (Chemicals present below reporting threshold are exempt):

<table>
<thead>
<tr>
<th>Compound</th>
<th>CAS Number</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>hydrogen sulphide</td>
<td>7783-06-4</td>
<td>0.6%</td>
</tr>
</tbody>
</table>

SARA Section 312/Tier I & II Hazardard Catagories:

<table>
<thead>
<tr>
<th>Category</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Immediate (acute)</td>
<td>Yes</td>
</tr>
<tr>
<td>Health Delayed (chronic)</td>
<td>Yes</td>
</tr>
<tr>
<td>Flammable</td>
<td>No</td>
</tr>
<tr>
<td>Reactive</td>
<td>No</td>
</tr>
<tr>
<td>Pressure</td>
<td>No</td>
</tr>
</tbody>
</table>

National Chemical Inventory Status

TSCA (Toxic Substances Control Act - United States):

All ingredients are listed or exempt from listing unless otherwise noted below.

Remarks:

CEPA (Canadian DSL):

All ingredients are listed or exempt from listing unless otherwise noted below.

California Proposition 65

Chemicals known to cause cancer:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

WHMIS Classification(s):

D2B - Toxic material causing other toxic effects

Carcinogenicity Categories

<table>
<thead>
<tr>
<th>Agency</th>
<th>Compound</th>
<th>CAS Number</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPA (Environmental Protection Agency)</td>
<td>hydrogen sulphide</td>
<td>7783-06-4</td>
<td>1</td>
</tr>
<tr>
<td>IARC (International Agency for Research on Cancer) Human Carcinogenicity:</td>
<td>Asphalt</td>
<td>8052-42-4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Styrene-butadiene rubber</td>
<td>9003-55-8</td>
<td>3</td>
</tr>
</tbody>
</table>

(Cont. on page 8)
## Trade name: Waterproofing Membrane

<table>
<thead>
<tr>
<th>Material Code</th>
<th>Trade Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>14807-96-6</td>
<td>Talc</td>
</tr>
</tbody>
</table>

**NTP (National Toxicology Program)**
- K—Known to be carcinogenic, R—May reasonably be anticipated to be carcinogenic
  - None of the ingredients is listed.

**TLV-ACGIH (THE American Conference of Governmental Industrial Hygienists)**
- Human Carcinogen - A1 Confirmed, A2 Suspected, A3 Unknown Relevance, A4 Not Classifiable
  - 8052-42-4 Asphalt (A4)
  - 14807-96-6 Talc (A4)

**NIOSH-Cancer (National Institute for Occupational Safety and Health)**
- 8052-42-4 Asphalt

**OSHA-Cancer (Occupational Safety & Health Administration)**
- None of the ingredients is listed.

**Volatile Organic Compounds (VOC) reported per the Emission Standards for Architectural Coatings:**
- If no g/L value is provided this product is not subject to above standard.

### European EINECS
- All ingredients are listed.

### Philippines Inventory of Chemicals and Chemical Substances PICCS
- All ingredients are listed.

### Inventory of Existing Chemical Substances manufactured or imported in China IECSC
- All ingredients are listed.

### Australian Inventory of Chemical Substances AICS
- All ingredients are listed.

### Existing and New Chemical Substance List ENCS
- All ingredients are listed.

### Korean Existing Chemical Inventory
- All ingredients are listed.

### Other information

"The data included herein are presented in accordance with various environment, health and safety regulations. It is the responsibility of a recipient of the data to remain currently informed on chemical hazard information, to design and update its own program and to comply with all national, federal, state and local laws and regulations applicable to safety, occupational health, right-to-know and environmental protection."

**Department issuing MSDS:**

**Other Information:**
- BITUTHENE® LOW TEMPERATURE WATERPROOFING MEMBRANE, MEMBRANE STRIPS
- BITUTHENE® SYSTEM 4000 WATERPROOFING MEMBRANE, MEMBRANE STRIPS
- PERM-A-BARRIER® WALL FLASHING, PERM-A-BARRIER® WALL MEMBRANE,
- PERM-A-BARRIER® LOW TEMPERATURE MEMBRANE, PERM-A-BARRIER
- DETAIL MEMBRANE, GRACE ICE & WATER SHIELD®,
- GRACE ROOF DETAIL MEMBRANE, PITTWRAP CW, GRACE® SELECT, VYCOR® V40 WEATHER
- BARRIER STRIPS, GRACE VYCOR® PLUS TAPES, GRACE® BASIK™, GRACE VYCOR DECK
- PROTECTOR,
- GRACE VYCOR ALL PURPOSE FLASHING, GRACE VYCOR ALUMINUM FLASHING,
Trade name: Waterproofing Membrane

PREPRUFE SCS DETAIL TAPE, GENERIC 40-MIL FLASHING LOG, PERM-A-BARRIER ALUMINUM FLASHING,
PERM-A-BARRIER ALUMINUM MEMBRANE, PERM-A-BARRIER ALUMINUM MEMBRANE LOWTEMP USA