



MATERIAL SAFETY DATA SHEET (MSDS)

APP Modified Bitumen Waterproofing Membrane

Product Name: APP Modified Bitumen Waterproofing Membrane

Product Type: Polymer Modified Bituminous Waterproofing Sheet

Chemical Family: Bituminous / Hydrocarbon-based membrane

Recommended Use: Waterproofing and roofing applications

Application: Torch-applied or other approved installation method, depending on product type

Revision Date: August 2026

SECTION 1 – IDENTIFICATION

Product Identifier: APP Modified Bitumen Waterproofing Membrane

Other Names:

- APP Bitumen Membrane
- APP Modified Bituminous Membrane
- APP Waterproofing Membrane
- APP Roofing Membrane
- Torch-On Bitumen Membrane

Recommended Uses:

Waterproofing of roofs, foundations, basements, retaining walls, tunnels, bridges, wet areas, concrete structures and other building applications.

Restrictions on Use:

Use only for intended construction and waterproofing applications and according to the manufacturer's installation instructions.

SECTION 2 – HAZARD IDENTIFICATION

GHS Classification

The finished membrane is generally **not classified as hazardous under normal conditions of handling, storage and use.**

Main Hazards

Under normal ambient conditions, the membrane is a stable solid material and presents minimal health hazards.

During torch application, overheating, cutting or burning:

- Hot bitumen may cause severe thermal burns.
- Bitumen/asphalt fumes may cause irritation of the eyes and respiratory tract.
- Combustion may produce smoke, carbon monoxide, carbon dioxide and other decomposition products.
- Molten bituminous material may adhere strongly to the skin.
- Open-flame installation creates a fire hazard if appropriate precautions are not followed.

Potential Health Effects

Eyes:

Smoke, dust or fumes generated during installation may cause temporary eye irritation.

**Skin:**

Normal contact with the solid membrane is not expected to cause significant irritation. Contact with heated or molten bitumen may cause severe thermal burns.

Inhalation:

Fumes generated by excessive heating may cause irritation of the nose, throat and respiratory system.

Ingestion:

Not considered a likely route of exposure under normal industrial use.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

The APP modified bitumen membrane is a manufactured article consisting typically of the following components:

Component	Typical Content	CAS Number
Bitumen / Asphalt	40–70%	8052-42-4
APP Polymer (Atactic Polypropylene)	5–20%	Proprietary / mixture
Mineral Fillers	10–40%	Various
Polyester / Fiberglass Reinforcement	1–10%	N/A / varies
Polyethylene Film	<5%	9002-88-4
Mineral Granules / Sand, if applicable	0–20%	Various

Note: Percentages are approximate and vary according to membrane thickness, reinforcement, surface finish and product formulation.

SECTION 4 – FIRST-AID MEASURES**Eye Contact**

If dust, smoke or fumes enter the eyes, rinse cautiously with clean water for at least 15 minutes. Remove contact lenses if easy to do. Seek medical attention if irritation persists.

Skin Contact

For contact with the membrane at ambient temperature, wash exposed skin with soap and water.

For hot or molten bitumen:

Immediately cool the affected area with plenty of cool running water. Do not attempt to remove solidified bitumen adhering to the skin. Do not use solvents to remove bitumen. Seek immediate medical attention for significant burns.

Inhalation

Move the affected person to fresh air. Keep at rest in a position comfortable for breathing. Seek medical attention if coughing, dizziness or respiratory irritation persists.

Ingestion

Ingestion is unlikely during normal use. Rinse mouth with water. Do not induce vomiting. Seek medical advice if a significant quantity has been swallowed.

SECTION 5 – FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media**

- Dry chemical powder
- Carbon dioxide (CO₂)
- Foam
- Water fog or fine spray

Unsuitable Extinguishing Media

Do not direct a high-pressure water jet onto hot or molten bitumen.

Specific Fire Hazards

The product is combustible when exposed to sufficient heat or flame.

Combustion and thermal decomposition may produce:

- Carbon monoxide (CO)
- Carbon dioxide (CO₂)
- Hydrocarbon fumes
- Dense smoke
- Irritating organic decomposition products

Firefighter Protection

Firefighters should wear appropriate protective clothing and self-contained breathing apparatus (SCBA) when fighting significant fires.

Cool nearby rolls and materials with water spray where safe to do so.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

The product is supplied as a solid roll and accidental release is generally not applicable.

For damaged or scattered material:

- Collect mechanically.
- Keep material away from ignition sources.
- Avoid generating unnecessary dust when cutting or handling mineral-surfaced products.
- Dispose of waste according to applicable local regulations.

For molten bitumen, allow the material to cool and solidify before mechanical collection.

SECTION 7 – HANDLING AND STORAGE**Safe Handling**

- Use suitable gloves when handling membrane rolls.
- Avoid excessive heating during torch application.
- Keep open flames away from combustible construction materials.
- Ensure adequate ventilation during installation.
- Do not inhale fumes generated during heating.
- Do not eat, drink or smoke while installing the product.
- Wash hands after handling.
- Follow appropriate hot-work and fire-safety procedures during torch application.

Storage

- Store rolls upright unless otherwise specified by the manufacturer.
- Store in a cool, dry and well-ventilated location.
- Protect from direct sunlight and excessive heat.



- Keep away from flames, sparks and other ignition sources.
- Protect from moisture and physical damage.
- Do not stack rolls higher than recommended by the manufacturer.

Recommended Storage Temperature: Ambient conditions, away from excessive heat.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure

During torch application, control exposure to bitumen fumes according to applicable occupational exposure limits.

As a reference, an occupational exposure limit of **0.5 mg/m³ for asphalt/bitumen fumes as inhalable benzene-soluble aerosol** has been used in industry guidance.

Engineering Controls

Provide adequate natural or mechanical ventilation, particularly in confined or poorly ventilated areas.

Personal Protective Equipment

Eye Protection:

Safety glasses or goggles, especially during cutting and torch application.

Hand Protection:

Heat-resistant protective gloves during installation.

Skin Protection:

Long sleeves, long trousers and appropriate work clothing.

Respiratory Protection:

Normally not required outdoors with adequate ventilation. Where fumes accumulate or ventilation is insufficient, use suitable respiratory protection according to local occupational safety requirements.

Foot Protection:

Safety footwear appropriate for construction sites.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Property	Typical Information
Physical State	Solid flexible sheet / roll
Appearance	Black bituminous membrane
Color	Black; upper surface may have mineral granules, sand, foil or film
Odor	Mild characteristic bituminous odor
Odor Threshold	Not established
pH	Not applicable
Melting / Softening	Product softens when heated
Boiling Point	Not applicable
Flash Point	Not applicable to finished solid membrane under normal conditions



Property	Typical Information
Flammability	Combustible when exposed to sufficient heat or flame
Vapor Pressure	Negligible at ambient temperature
Vapor Density	Not applicable
Relative Density	Typically approximately 1.0–1.5, depending on formulation
Water Solubility	Insoluble
Solubility in Organic Solvents	Bituminous component may be soluble in certain hydrocarbon solvents
Auto-Ignition Temperature	Not determined
Decomposition Temperature	Not determined
Explosive Properties	Not considered explosive
Oxidizing Properties	Not oxidizing

SECTION 10 – STABILITY AND REACTIVITY

Reactivity

Not expected to be reactive under normal conditions of use.

Chemical Stability

Stable under recommended handling and storage conditions.

Possibility of Hazardous Reactions

No hazardous polymerization or hazardous reaction expected under normal conditions.

Conditions to Avoid

- Excessive heat
- Open flames
- Sparks
- Prolonged exposure to very high temperatures
- Uncontrolled torch heating

Incompatible Materials

Avoid contact with strong oxidizing agents.

Hazardous Decomposition Products

Thermal decomposition or combustion may generate:

- Carbon monoxide
- Carbon dioxide
- Hydrocarbon vapors
- Smoke
- Irritating organic compounds

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity

The finished membrane is not expected to present significant acute toxicity under normal



handling conditions.

Skin Corrosion / Irritation

Not expected under normal conditions. Heated material can cause severe thermal burns.

Serious Eye Damage / Irritation

Fumes and smoke generated during excessive heating may cause temporary eye irritation.

Respiratory Effects

Prolonged or excessive inhalation of bitumen fumes may cause respiratory irritation, headache, nausea or discomfort.

Sensitization

No significant sensitizing effects expected from normal handling of the finished membrane.

Carcinogenicity

The finished solid membrane is not normally expected to present a carcinogenic exposure hazard during ordinary handling. Occupational exposure to fumes generated during heating should nevertheless be minimized and controlled.

Aspiration Hazard

Not applicable to the finished solid product.

SECTION 12 – ECOLOGICAL INFORMATION**Ecotoxicity**

The finished solid membrane is not expected to present significant acute aquatic toxicity under normal use.

Persistence and Degradability

Bituminous components are expected to degrade slowly in the environment.

Bioaccumulative Potential

No specific data available for the finished membrane.

Mobility in Soil

Low mobility due to the solid, water-insoluble nature of the product.

Environmental Precautions

Avoid uncontrolled disposal into:

- Waterways
- Drainage systems
- Soil
- Sewers

Dispose of construction waste responsibly.

SECTION 13 – DISPOSAL CONSIDERATIONS

Dispose of unused membrane, off-cuts and packaging according to applicable local, regional and national regulations.

Where permitted, uncontaminated membrane waste may be handled as non-hazardous construction waste.

Do not burn waste membrane in uncontrolled conditions.

Recycling or energy recovery should be considered where appropriate facilities are available.



SECTION 14 – TRANSPORT INFORMATION

Under normal transport conditions, APP Modified Bitumen Waterproofing Membrane is generally **not regulated as dangerous goods**.

UN Number: Not applicable

UN Proper Shipping Name: Not applicable

Transport Hazard Class: Not applicable

Packing Group: Not applicable

Marine Pollutant: No / Not expected

Environmental Hazard: Not classified

Applicable to normal transportation by:

- ADR/RID – Road/Rail
- IMDG – Sea
- IATA/ICAO – Air

Protect rolls from physical damage, excessive heat and direct sunlight during transport.

SECTION 15 – REGULATORY INFORMATION

The product should be handled according to applicable occupational health, safety, environmental, construction and fire regulations in the country where it is supplied or installed.

The finished membrane is generally considered a manufactured article and is not normally classified as a hazardous chemical mixture under normal conditions of use.

Torch application must comply with applicable hot-work, fire-prevention and occupational safety requirements.

SECTION 16 – OTHER INFORMATION

Product Description

APP Modified Bitumen Waterproofing Membrane is a prefabricated waterproofing sheet manufactured from bitumen modified with **Atactic Polypropylene (APP)** and reinforced typically with polyester, fiberglass or composite reinforcement.

Depending on the product grade, the membrane may be surfaced with polyethylene film, sand, mineral granules, aluminum foil or other protective finishes.

Typical Applications

- Flat and pitched roofs
- Foundations
- Basements
- Retaining walls
- Concrete structures
- Tunnels
- Bridges
- Wet areas
- Underground waterproofing
- Industrial and commercial roofing systems

Disclaimer

The information contained in this Material Safety Data Sheet is based on currently available



technical and safety information and is intended to provide general guidance for the safe handling, storage, transportation and use of APP Modified Bitumen Waterproofing Membrane. Actual product composition and properties may vary according to grade, thickness, reinforcement and surface finish. Users should verify this MSDS against the actual product formulation and applicable local regulations before issuing it as an official manufacturer or supplier Safety Data Sheet.

