



PRODUCT DATA SHEET

BEMALASTIC 1213 BDM *Waterproofing Membrane*

DESCRIPTION

BEMALASTIC 1213 BDM is a hot-applied, flexible, polymer-modified asphalt waterproofing/roofing membrane. It is composed of a unique blend of engineered asphalts, virgin polymers, synthetic rubbers and reinforcing mineral fillers. **BEMALASTIC 1213 BDM** has excellent adhesive and cohesive properties which combine to eliminate any lateral movement of water between the membrane and the substrate. **BEMALASTIC 1213 BDM** forms a seamless continuous monolithic waterproofing membrane which is impermeable to moisture penetration and remains flexible over a wide range of temperatures.

RECOMMENDED USE

BEMALASTIC 1213 BDM is designed to protect structures from costly damage caused by water infiltration. Typical applications include:

- Waterproofing concrete slab construction on highway bridge decks, parking garages, roof terraces, plaza decks, pedestrian concourses and podiums.
- Single course construction such as tunnels, reservoirs, planters, foundation walls and reflective pools utilizing two course construction.
- Protected, inverted membrane roofing systems.

BEMALASTIC 1213 BDM is suitable for use between concrete substrate and asphaltic concrete overlays on vehicular travelled ramps or bridge decks with excessive grade or superelevation <5%. Manufacturers should be consulted on grades in excess of 15%.

APPLICABLE SPECIFICATIONS

BEMALASTIC 1213 BDM meets or exceeds:

- Applicable ASTM, AASHTO Standards
- CGSB-37.50 M89 (Canadian General Standards Board)
- Various Provincial, State and D.O.T. specifications

APPLICATION TEMPERATURES

- **Recommended Roofing Temperature 185 C (365 F)**
- **Maximum Safe Heating Temperature 200 C (392 F)**

APPLICATION GUIDELINES

Manufacturer should be consulted for detailed specifications on membrane application.
CGSB-37.51 – M89 application for hot-applied rubberised asphalt.

LIMITATIONS

- Do not apply over any type of lightweight or insulating concrete without written approval.
- Not for exposed application.
- Not for application in totally enclosed areas with no ventilation.
- Melt-only in oil-jacket agitated kettles.

BEMALASTIC

1213 BDM

Physical Properties:

Bemalastic 1213 BDM Flexible Waterproofing and Roofing Membrane

PROPERTIES	TEST METHODS	SPECIFICATION REQUIREMENTS	TYPICAL RESULTS
Flash Point	CGSB-37.50-M89 ASTM D-92		275 °C
Penetration	CGSB-37.50 M89 ASTM D-1191	@25 °C max. 110 @50 °C max. 160	50 110
<i>Flow @ 60 °C</i>	CGSB-37.50 M89 ASTM D-1191	3 mm max.	0
Toughness	CGSB-37.50 M89 Toughness min.	5.5 Joules	20 Joules
Toughness/Peak Load Ratio	Toughness/Peak Force Ratio	min. 0.040	0.065
Water Vapour Permeability	CGSB-37.50 M89 ASTM E-96	1.7 ng/pa.s.m ²	1.5
Water Absorption	CGSB-37.50 M89 96 HRS, @ 50 °C		0.06%
Low Temperature Crack Bridging Capability	CGSB-37.50 M89 @ -25 °C		No adhesion loss, cracking or splitting
Heat Stability (5 HRS)	CGSB-37.50		No change
Viscosity	CGSB-37.50 M89	2 – 15 seconds	8 seconds
Softening Point	ASTM D-36		85 °C
Minimum Ambient Temperature for Application	-		-18 °C
Pin Holing	Max. 1		0
Relative Density			1.20



Material Safety Data Sheet

Bemalastic 1213BDM

1. PRODUCT MANUFACTURER / MSDS PREPARATION INFORMATION

Product Manufacturer/ Supplier: McAsphalt Industries Ltd.
8800 Sheppard Ave. East
Scarborough, Ontario
M1B 5R4
(416) 281-8181

MSDS Prepared By: Operations Dept

Product: Bemalastic 1213 B.D.M.

Product Use: Flexible roofing and waterproofing membrane

Revision Date: February 5, 2010 **Supercedes:** January 7, 2008

EMERGENCY NUMBER: CANUTEC – (613) 996-6666

WHMIS: Not Controlled

TDG: Not Regulated

Workplace Label: Health-2 Fire-0 Reactivity – 0 Compliance Center

2. INGREDIENTS / COMPOSITION

COMPONENT(S)	CAS #	% (w/w)	LD ₅₀	LC ₅₀
Asphalt	8052-42-4	30-60	N/A	N/A
Ground Rubber	N/Av	5-20	N/A	N/A
Oil	64742-04-7	10-30	N/A	N/A
Filler	N/Av	15-40	N/A	N/A

3. PHYSICAL DATA

Physical State: Solid	Appearance: Black
Specific Gravity: 1.25	Odour: Tar
Freezing Point: 0°C	Odour Threshold: N/A
Boiling Point: N/A	Solubility: N/Av
Vapour Pressure: N/A	Evaporation Rate: N/Av
Vapour Density: N/A	pH: N/A

4. FIRE & EXPLOSION HAZARD

Flash Point & Method: 260°C **Lower Flammability Limit:** N/A

Auto-Ignition Temperature: >400°C **Upper Flammability Limit:** N/A

Fire Fighting Media: Foam, Dry Chemical, Water spray with caution

Explosion/Flammability: N/A

Hazardous Combustion Products: CO, NO_x, SO_x, sulphur products

5. REACTIVITY DATA

Stability: Stable

Incompatible Materials: Water, or materials with low flash points

Conditions of Reactivity: N/A

Hazardous Decomposition Products: CO, SO_x, NO_x, other Sulphur compounds

Synergistic Products: None

6. HEALTH HAZARD INFORMATION

Skin: can cause skin irritation, dermatitis. Skin defatting with chronic exposure

Eyes: danger when hot

Inhalation: yes

Exposure Limit: 5mg/M³ Asphalt fumes, caution in confined spaces

Ingestion: unlikely, should be avoided

No known carcinogenic, teratogenic or reproductive effects.

7. PREVENTATIVE MEASURES

Personal Protective Equipment: Gloves, goggles, face shield

Handling/Shipping/Storage: Containers cleaned thoroughly before use.

Ventilation: Ensure adequate ventilation

Disposal: See appropriate federal, provincial, municipal regulations

LEAKS AND SPILLS: Contain with earth or sand, allow to cool and harden. Eliminate sources of ignition.

Notify authorities when in water, or large spills.

8. FIRST AID

SKIN: DO NOT REMOVE HOT ASPHALT FROM BURN! Cool in water and if irritation persists seek medical aid

EYES: Gently flush with lots of water. Seek Medical Help.

INHALATION: Remove victim to fresh air. Seek Medical Help.

INGESTION: Give lots of water to drink. Seek Medical Help.

9. NOTE

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