

PlastiSeal PUMMA EWM SL

Self-levelling elastomeric waterproofing membrane

A 100% solids, two component, highly elastic, reactive polyurethane methyl methacrylate, solvent free, self-levelling coating with high flexibility and elasticity in very cold temperatures. To initiate curing PLASTILINE® MMA BP Hardening powder must be added. Resistant to water migration, salts, chemicals, gasoline, oils, and anti-freeze.

Intended Uses:

Designed as a liquid applied waterproofing membrane as a base layer with outstanding self-levelling properties for horizontal surfaces.

The cured coating exhibits very good crack bridging capability and elasticity even when temperatures reach -30°C. The use of PlastiSeal PUMMA Topcoat provides enhanced UV, Chemical and mechanical resistance.

Used in Many Waterproofing Applications:

- Below Grade Waterproofing
 - Planters, roof gardens, flower beds.
 - Flashings, detailing, penetrations or windows.
 - Retaining walls.
 - Paver systems and vegetated roofs.
 - Asphalt overlay systems.
- Trafficked areas
 - Balconies, terraces & roof tops.
 - Decorative waterproofing for both residential and heavy commercial applications requiring extreme durability.
 - Pedestrian applications such as pool decks, stadiums, bridges & walkways.
 - Vehicular application such as car parking decks.
 - Water parks.
- High Performance
 - Helipads.
 - Heavy duty areas such as loading bays, dumpster areas heavy vehicles.
- Specialty
 - Under tile waterproofing.
 - Water features & water fountains.
 - Gutters.
 - Pool decks.
- Rooftop
 - General waterproofing of flat roofs.
- Containment
 - Waterproofing of dam structures, canals, reservoirs, and tanks.

Properties:

- Impermeable.
- High flexibility.
- Long durability.
- High mechanical load bearing capacity.
- Abrasion resistant.
- High acid, caustic, and chemical resistance.
- Outstanding adhesion when recoating.
- Rapid curing times = short down times – ready for immediate chemical and mechanical load bearing.
- Weathering and age resistant.

Waterproofing: Liquid Waterproofing Coatings

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Technical Data:

Composition	Polyurethane MMA
Colour	Dark grey
Pack Size	10 Kg 20 Kg
Comp. A	PlastiSeal PUMMA EWM SL Dark Grey Comp. A
Comp. B	PLASTILINE® MMA BP Hardening Powder
Density Comp. A (Kg/ Lt)	1.15
Volume Solids Comp. A	100%
Hardness Shore D	35 – 40
Tensile Strength (MPa)	2
Elongation at break (%)	250
Pot Life @ 25°C	Approximately 20 minutes
Hardening Time @ 25°C	Approximately 45 minutes
Thickness	A minimum thickness of 1mm
Coverage	At 1mm thickness 1.15 Kg/ m ² / mm
Method of Application	Toothed rakes, trowels, rollers, or brush
Storage	Store out of direct sunlight in dry conditions between 15°C and 25°C
Shelf Life	12 months when stored as recommended in original un-opened containers
Clean Up Solvent	Solvent EA or Acetone

Pot Life & Hardening Times at Different Temperatures:

Temperature [°C] **)	Hardener [% by wt.] *)	Hardener to add for each 10 Kg container	Pot Life [min]	Hardening Time [min]
5	4.0	400 gm	approx. 25	approx. 70
10	3.2	320 gm	approx. 25	approx. 60
20	1.6	160 gm	approx. 20	approx. 45
30	0.8	80 gm	approx. 25	approx. 50

*) Hardener quantity calculated on net weight of PlastiSeal PUMMA EWM SL

***) Temperature statements refer to resin, floor and air-temperature.

Note: All values are derived from laboratory tests. Deviations caused by environmental factors might occur.

Surface Preparation:

All formulations must be applied on pre-primed surfaces. always refer to document “**Analysis & Preparation of Substrate**”. Good ventilation of rooms during processing guarantees good curing results.

In general, the following guidelines for preparation should be adhered to

- The areas to be coated should be dry, firm, solid and free from dust, oil, fats, and other contaminants.
- Laitance and loose particles must be removed thoroughly i.e. grinding / abrasive blast cleaning.
- Oils and fats, humidity can be removed by flame treating.

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Mixing:

When opening the container, you will notice a clear layer on the surface of the resin. This is paraffin, it must be well incorporated by electrical mixer prior to addition of PLASTILINE® MMA BP Hardening Powder (50% dibenzoyl peroxide). After adding hardening powder, mix thoroughly for 1 minute.

Application:

- PlastiSeal PUMMA EWM SL is a low viscosity, self-levelling material. Mixed material should be promptly poured onto surface and spread with a toothed rake, the rake selected to achieve correct thickness (a 5mm rake will pull a 2mm thick floor, "40% of tooth").
- Mixed material should be used well within the pot life.
- A trowel or roller can also be used but it will be more difficult to control even thickness.

Caution:

- For exposed surfaces PlastiSeal PUMMA Topcoat should be applied.
- No direct sunlight during application.
- Surface should always be 3°C above the dew point.
- Application always requires a suitable primer.
- Don't work from the bucket, empty entire contents.
- Always consult with technical department if unsure.
- Refer to product MSDS for health & safety prior to using products.
- Always wear safety clothing / protection. Respirators, eye protection and skin protection.

Systems:

Consult with Specialized Coating System for application specific recommendations.



This product has been awarded with a certified Environmental Product Declaration according to ISO 14025. This declaration describes the specific environmental performance of building products listed herein and supports the development of environmentally and health friendly buildings. The validated declaration authorizes the use of the sign of the Institut Bauen und Umwelt e.V.

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