

POLYAC® BDM-M+

LIQUID, PUMA BASED, WATERPROOFING LAYER AS PART OF THE POLYAC® BDM SYSTEMS, TO BE USED IN APPLICATION ACCORDING TO ETAG 005



DESCRIPTION

POLYAC® BDM-M+ is a liquid, waterproofing layer and forms an elastomeric membrane after curing. It is part of the waterproofing system POLYAC® BDM SYSTEM 5 with ETA certification (ETA 17/0296) according to ETAG 005.

BENEFITS

- High reactivity
- Fast curing
- Applicable at low temperature
- Crack bridging
- High chemical resistance
- Thermal shock resistant
- Resistant to thawing salt

FIELD OF APPLICATION

Renovation, protection and waterproofing of horizontal surfaces, connections and details on balconies, terraces, galleries, flat, green, parking and industrial roofs. Ideally suited for the renovation of existing waterproofing layers.

APPLICATION

Note: The following is a typical application description. In case of other jobsite parameters, please contact our technical department.

PRELIMINARY ANALYSES

Before starting the substrate preparation and applying the products, it is important to test various parameters in order to achieve a good and sustainable result.

Compressive strength of the substrate: min. 25 N/mm²

Tensile strength of the substrate: min. 1.5 N/mm²

POLYAC® BDM-M+ must be applied on a dry surface. Moisture content in the substrate: ≤ 5% moisture. (Exception: ≤ 10% moisture if the primer POLYAC® 18 is used.)

Conditions during the application and curing: see "Application conditions" further described in this technical data sheet.

Technically studied dilatation joints must be provided. These are resumed in the synthetic resin system to be installed.

The flatness of the surface must be consistent with the desired requirements. Should this not be the case, correct measures must be taken to fill in or smooth out the unevenness with products that are complementary to the substrate and the synthetic resin system to be installed. Shrink joints and passive cracks can be coated.

This on condition that they are not used as dilatation joints or are not following other movements of the structure and the surface and that they are flattened out with products complementary to the substrate or the synthetic resin system to be installed.

REQUIRED TOOLS

- Mixer with spindle (min. 300 rpm)
- Spatula, rake or toothed trowel
- Spiked roller
- Masking tape

PREPARATION OF THE SUBSTRATE

POLYAC® BDM-M+ is always applied on a suitable primer depending on the type of substrate.

POLYAC® 12: Dry, form-retaining, mineral substrates. POLYAC® 14: Moving or less form-retaining mineral substrates, asphalt or bituminous membranes. POLYAC® 15: Metal. POLYAC® 18: Damp, form-retaining, mineral substrates. (Always consult the POLYAC® primers technical data sheets) It is not necessary to place a primer on existing POLYAC® systems before applying POLYAC® BDM-M+. Before applying the primer:

Cracks, joints and other parts that show water leaks must first be made completely water-tight and leak-proof.

The surface must be mechanically pre-treated. This can be achieved by dust-free bullet- or sandblasting or by grinding the surface. Tiles are to be degreased well and grinded with a diamond blade. These treatments ensure that an open texture surface is obtained, to remove the cement laitance from concrete and old remnants of coatings and adhesives.

High pressure water jetting is possible but then the surface must dry sufficiently before applying the primer. (Moisture content in the substrate: ≤ 5% moisture. Exception: ≤ 10% moisture if the primer POLYAC® 18 is used.)

Always apply the products on a clean surface, free from adhesion reducing materials such as dirt, oil, grease, old coatings or surface treatments, ...

The parts of the surfaces to be coated that do not meet the requirements as described above (compressive strength, tensile strength, parts that are not well connected, ...) must be treated or removed and repaired according to a correct method and with products that are complementary to the substrate and the synthetic resin system to be installed. Remove any loose parts by brushing properly and remove dust with an industrial vacuum cleaner.

The surface must be mechanically pre-treated.

This can be achieved by removing the dust by bullet- or sandblasting or by sanding the surface. The degree of roughness for metal surfaces is SA 21/2. Remove rust by sandblasting. The surface must be dry and free of impurities such as grease, oil or dust. Galvanized steel is thoroughly cleaned in advance with soap and water or sandblasted. Degrease metal surfaces immediately after the mechanical preparation with SOLVENT MEK. After the SOLVENT MEK has fully evaporated, immediately apply a layer of POLYAC® 15 to prevent the steel from re-oxidizing.

PREPARATION OF THE PRODUCT

Mixing

Mix all components of POLYAC® BDM-M+ well before use. Add one package of POLYAC® BDM-M+ Part C to 20 kg POLYAC® BDM-M+. This mixture remains stable for 8 hours.

Dose a quantity of resin that can be processed within a period of 15 minutes. Add 1 to 5% POLYAC® CATALYST.

Add POLYAC® CATALYST to POLYAC® BDM-M+.		
Temp.	In%	POLYAC® CATALYST per 1 kg POLYAC® BDM-M+
0 °C	5%	50 g
5 °C	4%	40 g
10 °C	3%	30 g
20 °C	2%	20 g
30 °C	1%	10 g

Mix the curing powder during one minute until fully dissolved.

PREPARATION OF THE EQUIPMENT

Always work with clean mixing containers and application material.

APPLICATION

Spread a layer of POLYAC® BDM-M+ on the surface (approx. 1 mm thick). Immediately (wet in wet) apply the fleece in the resin without creases or bulbs and pour another sufficient amount (wet in wet) of POLYAC® BDM-M+ onto this and spread out (approx. 1.5 mm thick). Venting with a dot roller is recommended. Processing time is 20 to 35 minutes.

FINISHING

After this waterproofing layer has cured, the next layer of the POLYAC® waterproofing system can be applied (POLYAC® BDM-AL / BDM-HD)

APPLICATION CONDITIONS

Conditions during the application and curing of the products. The recommended processing temperature for substrate, environment, material and products is between +5 °C and +35 °C. For temperatures lower than +5 °C please contact RESIPLAST NV. Relative humidity: Max. 85%

Dew point: The temperature of the substrate and of the not fully cured product must be at least 3 °C higher than the dew point. Avoid condensation on the surface from the Moment that the preparations start until the complete curing of the products. Ensure adequate ventilation and a low relative humidity during curing.

CLEANING AND MAINTENANCE

Clean the used tools with SOLVENT MEK or ethyl acetate before the curing of POLYAC® BDM-M+. Cured products residues must be removed mechanically. For the cleaning and maintenance of the installed synthetic resin system, please refer to the information leaflets: Cleaning and maintenance of synthetic resin floor systems - INDUSTRY Cleaning and maintenance of synthetic resin floor systems - PUBLIC AND PRIVATE BUILDINGS.

COMPLIMENTARY PRODUCTS

- Cleaning solvent for tools: SOLVENT MEK
- Hardener POLYAC® CATALYST
- Reinforcement fleece POLYAC® REINFORCEMENT FLEECE

ADVICE / FOCAL POINTS

Always consult all technical and safety data sheets of the products concerned.

TECHNICAL DATA

APPEARANCE - COMPOSITION

Liquid, transparent.

REACTION TIMES

Processing time after mixing: 20 to 35 min.
Walkable: after 1 hour
Recoatible: after 1 hour
Fully mechanical load: after 2 hours
Full chemical resistance: after 2 hours
Times measured at 20 °C; lower temperatures extend the curing time.

CONSUMPTION

Approx. 2.5 kg/m²

TECHNICAL DATA

Odour	Methyl methacrylate (See also information sheet "POLYAC® ODOUR")
Initiator: POLYAC® CATALYST	BPO, depending on the temperature from 1% to 5 weight% calculated on the proportion of POLYAC® BDM-M+
Viscosity	350 +/- 150 mPa.s (20 °C Brookfield, spindle III/200 rpm)
Density	1.0 g/cm ³ ±0.1 (20 °C)
Flash point	10 °C (MMA, DIN 51 755)
Elongation at break	> 300%
Exothermic peak	110 - 140 °C
POLYAC® BDM-M+ + 2.4% POLYAC® PTC + 2% POLYAC® CATALYST	
Soortelijke massa	1.0 kg/dm ³
Colour	Transparent
Shore D hardness	30 - 40

CHEMICAL RESISTANCES

Polymerized POLYAC® resins have good chemical resistance to alkalis, petroleum derivatives, acid, salts and maintenance products. For more information please contact RESIPLAST NV.

CE MARKING

Part of:



ETA 17/0296

REFERENCE DOCUMENTS

Information sheet "POLYAC® ODOUR".



ETA certificate (ETA 17/0296) according to ETAG 005

Cahier des clauses techniques de mise en Oeuvre - Système d'étanchéité liquide POLYAC® STANDARD et POLYAC® BDM SYSTEM 5 - SAS ALPHA CONTROLE - (FR)

PACKAGING

POLYAC® BDM-M+	20.6 kg	20 kg Metal can
		0.6 kg Plastic bottle

To be ordered separately:

POLYAC® CATALYST	0.5 kg	Plastic pail
	5 kg	Plastic pail
	25 kg	Box

STORAGE AND SHELF LIFE

Store POLYAC® products in a dry, well-ventilated storage area between +5 and +35 °C.

Shelf life: 12 months after production date.

In case of doubt, please contact RESIPLAST NV and state the batch number on the packaging. Do not discharge into groundwater, surface water of sewers. Dispose of contaminated packaging and residues in accordance with the applicable legal requirements.

SAFETY PRECAUTIONS

Carefully read the safety data sheets before using POLYAC® products. A characteristic odour arises during processing. Ensure adequate ventilation, keep away from sources of ignition and do not smoke. Avoid skin contact.

Eye irritation and/or hypersensitivity may occur with severe vapour concentration, inhalation and/or skin contact. Do not store food or drinks in the same workspace. Always wear personal safety equipment in accordance with the applicable local guidelines and legislation. Gloves and safety glasses are mandatory.

The above information is provided in good faith, but without any guarantees. The application, use and processing of the products are beyond our control and are, as such, the sole responsibility of the user/processor. In the event that KorAC NV is still held liable for damages, then the claim will still be limited to the value of the goods delivered. We always aim to deliver consistently high quality goods. All values on this technical sheet are average values that result from tests carried out under laboratory conditions (20 °C and 50% RH). Values that are measured on the construction site may show a slight deviation since the environmental conditions, the application, and the way of processing our products are beyond our control. Do not add any products other than those indicated on the technical documentation. This version replaces all previous versions. Version 2.0 Date: 22 March 2023 11:04 am