POLYAC® 19

INTERMEDIATE ADHESIVE LAYER FOR POLYAC® WATERPROOFING SYSTEMS WITH A PROTECTION LAYER OF HRA, AC OR ÅAB8 ASPHALT TYPES

DESCRIPTION

POLYAC® 19 is a fast hardening, hot-applied modified bitumen to be used as an intermediate adhesive layer in a number of POLYAC® waterproofing systems under specific asphalt-based protective layers or wear layers with limited thickness and aggregate skeleton. POLYAC® 19 has been developed to be able to heat up with a minimum of energy.

BENEFITS

- High adhesive capacity
- Increase adhesion and shear resistance of Polyac systems for multiple asphalt types
- Easy to apply
- UV and weather resistant
- To be heated in standard bitumen boiler
- Energy-efficient - limited heat supply to reach operating temperature

FIELD OF APPLICATION

POLYAC® 19 has been developed to ensure increased adhesion and shear resistance with protective layers of Hot Rolled Asphalt (HRA), Concrete Asphalt (AC) such as APO-D and APO-B, or ÅAB8 (Denmark) on POLYAC® waterproofing membranes.
Always ask for advice to our Technical Department.

APPLICATION

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

PRELIMINARY ANALYSES

Before starting with the surface preparations and the application of the products, it is important to test various parameters and this in order to achieve a good and sustainable result.
Compressive strength of the subsurface: min. 25 N/mm²
Tensile strength of the substrate: min. 1.5 N/mm²
POLYAC® 19 should be applied to a broadcasted and dry surface.
Moisture content in the subsoil: ≤ 5% moisture.

REQUIRED TOOLS

- Thermostatically controlled bitumen boiler (melting)
- Floor scraper on stem with flexible metal blade (spread out)

PREPARATION OF THE SUBSTRATE

POLYAC® 19 is placed on a sanded MMA-based primer and adhesive layer POLYAC® 61 with a consumption of 0.35-0.5 kg/m², which is applied to a cured membrane layer POLYAC® BDM. The sanding in the wet adhesive layer POLYAC® 61 is done with a fire-dried quartz sand with grain size 0.2-0.8 mm to saturate the surface at a rate of +/- 0.8-1.0 kg/m². Read carefully the product sheets of the complementary products.
Always apply the products to a clean surface, free of adhesion-reducing materials such as dirt, oil, grease, old coatings or other surface treatments, etc. High pressure water jets are possible but then the surface must dry sufficiently (Moisture content on surface: ≤ 5% moisture) before applying the adhesive layer.

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

PREPARATION OF THE PRODUCT

POLYAC® 19 should be broken into small pieces, placed in a bitumen boiler and stirred to prevent local overheating. More can be added until there is enough melted product for the necessary application and the bitumen has reached its working or operating temperature of 200 °C. The use of a thermostatically controlled boiler is recommended to ensure that the bitumen does not overheat.
Do not heat POLYAC® 19 above 220 °C (flash point = 270 °C)!

PREPARATION OF THE EQUIPMENT

Always work with clean mixing containers and application material.

APPLICATION

POLYAC® 19 is quickly poured and spread using a floor scraper on stem with flexible metal blade, possibly with adjustable flow height of +/- 1 mm, to a continuous layer. The consumption of POLYAC® 19 is approximately 0.8 -1.25 kg/m² (depending on surface profile and unevenness; on average +/- 1.0 to 1.1 kg/m²). Only trained applicators are allowed to use hot bitumen. Always wear gloves and appropriate personal protective equipment!

FINISHING

Lowering with a suitable type of asphalt mixture.

APPLICATION CONDITIONS

Conditions during 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 below +5 °C please contact KORACHEM NV.
Relative humidity: Max. 85%
Dew point: The temperature of the substrate and of the product not yet fully cured must be at least 3 °C higher than the dew point. Avoid condensation on the surface from the moment preparations start until the complete curing of the products. Ensure adequate ventilation and low relative humidity during curing.

CLEANING AND MAINTENANCE

Clean the tools used with asphalt or tar removal products.
Cured product residues must be removed mechanically.

COMPLIMENTARY PRODUCTS

- POLYAC® 61, incl. POLYAC® CATALYST
- Rhine sand 0.2-0.8 mm or 0.7-1.2 mm
- All other products of the system structure for the POLYAC® Bridge Deck Waterproofing System under asphalt.

ADVICE

Commissioning depends on the type of asphalt used.

RESIPLAST
Korachem NV is part of Koramic Chemicals
Gulkenrodestraat 3 - B-2160 Wommelgem - België
info@korachem.com - www.korachem.com - Tel.+32 3 320 02 11

TECHNICAL DATA

APPEARANCE - COMPOSITION
Black modified bitumen.

REACTION TIMES
Very fast drying by solidification upon application.

CONSUMPTION
0.85 – 1.25 kg/m²

TECHNICAL DATA

Smell	Bitumen
Softening point	90 – 100 °C
Penetration 0.1 mm	20-30
Flash point:	270 °C

Bond and shear strength with the following system structure:

- ⇨ Concrete substrate primer POLYAC® 14 (or 18) or steel with POLYAC® 15
- ⇨ POLYAC® BDM membrane (system structure according to separately available technical data sheet)
- ⇨ POLYAC® 61 + scattering with quartz (see section "Preparation of the substrate")
- ⇨ POLYAC® 19 (see section "Consumption")
- ⇨ 1 of the following protective layers:
  - HRA with installation temperature 160 °C ± 10 °C
  - AC (EN 13375) with installation temperature 160 °C ± 10 °C
  - ÅAB8 with installation temperature 130 °C ± 5 °C

Protection layer	HRA	AC	ÅAB8
Bond strength EN 13596	≥ 1.0 N/mm²	≥ 1.0 N/mm²	
Shear strength EN 13653	≥ 0.3 N/mm² (at 40 °C)	≥ 0.7 N/mm² (at 23 °C)	≥ 0.3 N/mm² (at 40 °C)

REFERENCE DOCUMENTS

bsi. ISO 9001:2015 Quality Management FM 78518

bsi. ISO 14001:2015 Environmental Management EMS 716699

REACH COMPLIANT - COMPLIANT

PACKAGING

POLYAC® 19	10 kg per block / 80 pieces per pallet	Blocks in plastic packaging

STORAGE AND SHELF LIFE

POLYAC® 19 products in original, sealed packaging, in cool, dry conditions. Unlimited shelf life if stored correctly.

SAFETY PRECAUTIONS

Carefully read the safety data sheets for the use of POLYAC® 19 and complementary products. During processing, a characteristic smell is created. Ensure adequate ventilation, keep away from ignition sources and do not smoke. Avoid skin contact. Eye irritation and/or hypersensitivity may occur with heavy vapour concentration, inhalation and/or skin contact. Always wear personal protective equipment according to 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 Korachem 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: 2 June 2025 3:31 pm

RESIPLAST
Korachem NV is part of Koramic Chemicals
Gulkenrodestraat 3 - B-2160 Wommelgem - België
info@korachem.com - www.korachem.com - Tel.+32 3 320 02 11