

POLYAC® 100

HIGHLY FLEXIBLE, CASTABLE, PMMA BASED JOINT FILLER



DESCRIPTION

POLYAC® 100 is a PMMA (polymethyl methacrylate) based, permanently highly flexible, castable joint filler.

BENEFITS

- High reactivity
- Large joint width and layer thickness in one pass
- Fast curing
- Applicable at low temperature
- Good flow
- Can be applied inside and outside
- Can be coloured

FIELD OF APPLICATION

Permanently highly flexible, castable joint filler.

In layer thickness of 2 cm for a joint width of 4 cm and more this flexible mass can be walked on after 1 hour. For larger layer thickness or joint width POLYAC® 100 must be poured in several layers. Minimum joint width is 5 mm.

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.

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

REQUIRED TOOLS

- Mixer with spindle (min. 300 rpm)
- Mixing and pouring containers
- Masking tape

PREPARATION OF THE SUBSTRATE

To ensure optimum movement of the joint, place a round backing rod of closed cell foam that does not adhere to MMA-resin.

A suitable primer according to the substrate must be applied to the joint edges. The primer must be applied over the entire surface that will be in contact with the joint filler. Please refer to the separately available product data sheets of the POLYAC® primers.

Concrete substrates:

The concrete substrate needs to be in place at least 28 days and have the following properties:

- Minimum compressive strength of the substrate: min. 25 N/mm²
- Minimum tensile strength of the substrate: min. 1.5 N/mm²

Both POLYAC® 12 and POLYAC® 14 are suitable up to a residual moisture content of the substrate of no more than 5%. For humid, mineral substrates with a moisture content up to 10%, POLYAC® 18 may be used.

Metal substrates:

POLYAC® 15 may be used for steel substrates. For other metal substrates contact Resiplast NV. for advice.

Concrete and metal substrate must be pretreated mechanically.

Consult the technical fact sheets of the POLYAC® primers for the methods to be adopted and the application of these primers.

Always apply POLYAC® 100 on a clean substrate, free from adhesion-reducing materials such as grime, oil, fat, old coatings or surface treatment products, etc.

Treat or remove and repair the sections of the surface areas that are to be overlaid and which do not comply with the requirements outlined above (compressive strength, tensile strength, sections that are poorly connected, etc.), in accordance with the proper method and using products that are complementary to the substrate and the synthetic resin system to be applied. Remove loose-laying parts by properly brushing these surfaces and remove dust using an industrial vacuum cleaner.

PREPARATION OF THE PRODUCT

Mix POLYAC® 100 well before use. Paraffin can separate during storage. Dispense an amount of resin that can be processed within 15 minutes. POLYAC® 100 can be coloured. Mix 5% pigment powder in the POLYAC® 100 resin and mix until a homogeneous mixture is obtained. Add 1 to 5% of hardening powder POLYAC® CATALYST. POLYAC® CATALYST must be ordered separately.

Temp:	Quantity POLYAC® CATALYST per 1 kg POLYAC® 100
0 °C	50 g
5 °C	40 g
10 °C	30 g
20 °C	20 g
30 °C	10 g

Mix until the powder is completely dissolved.

PREPARATION OF THE EQUIPMENT

Always work with clean mixing containers and application material.

APPLICATION

Pour POLYAC® 100 in the joint before the temperature of the mixture increases. Maximum pouring height is 2 cm. For larger layer thickness, POLYAC® 100 is poured in several times. Wait until the previous layer has sufficiently cooled down before pouring on the next layer.

FINISHING

POLYAC® 100 had a slightly sticky surface, the sticking can be neutralized by sprinkling with quartz grain.

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 POLYAC® CLEANER before the curing of POLYAC® 100. Cured products residues must be removed mechanically.

COMPLIMENTARY PRODUCTS

- Cleaning solvent for tools: SOLVENT MEK or POLYAC® CLEANER
- POLYAC® CATALYST
- Pigment powder
- Backing rod in closed cells foam

TECHNICAL DATA

APPEARANCE - COMPOSITION

Viscous liquid, cloudy.

REACTION TIMES

Processing time after mixing: 10 to 15 min.

Walkable: after 1 hour

Recoatable: 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

0.1 litre per linear meter for a joint section of 1 cm².

1 kg = 1 litre = 1 dm³


TECHNICAL DATA

Odour	Methyl methacrylate
Initiator: POLYAC® CATALYST	BPO 50%, depending on the temperature from 1% to 5 weight% calculated on the proportion of POLYAC® 100
Viscosity	4.5 +/- 1 Pa.s (20 °C Brookfield, spindle V/50 rpm)
Density	1.1 g/cm ³ ±0,3 (20 °C)
Flash point	10 °C (MMA, DIN 51 755)
Peak exothermic	95 - 120 °C
POLYAC® 100 + 2% POLYAC® CATALYST	
Density	0.98 kg/dm ³
Colour	Yellow brown transparent
Hardness Shore-A	17
Abrasion resistance (Taber CS10/1000/1000)	30 mg
Impact resistance EN ISO 6272	10 Nm
Elongation at break EN ISO 527-2	> 500% and 0,35 N/mm ² at +20°C > 200% bij -10°C

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

	
KORAC NV, Gulkenrodestraat 3, 2160 Wommelgem, Belgium	
12	
EN 13813	
Synthetic resin floor/coating for indoor use in buildings	
Release of corrosive substances	SR
Abrasion resistance	≤ ARO,5
Bond strength	≥ B1,5
Impact resistance	≥ IR10
Reaction to fire	E _{fl}

REFERENCE DOCUMENTS

Information sheet "POLYAC® ODOUR".



PACKAGING

POLYAC® 100	20 kg	Metal pall
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To be ordered separately:

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

Pigment powder	1 kg	Plastic canister
	5 kg	Plastic bucket
	25 kg	Bag

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: 24 October 2023 9:06 am