



# POLYAC® 64

## HARD, FIRE RETARDANT PMMA TOP LAYER FOR POLYAC® SYSTEMS



### Description

POLYAC® 64 AF is a fire retardant, hard, liquid-tight top layer for POLYAC® floor or membrane systems with excellent adhesion, high mechanical resistance, very high wear resistance, high reactivity and fast curing, even at low temperatures.

### Benefits

- High reactivity
- Fast curing
- Fire retardant top layer
- Applicable at low temperature
- Optimal viscosity
- Light resistant
- High impact resistance
- Hard

### Field of Application

POLYAC® 64 AF is a fire retardant top layer for POLYAC® floor and membrane systems.

### Application

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

### Preliminary analyses

POLYAC® 64 AF top layer is only placed on another POLYAC® system. Before starting the surface preparations and applying the products, it is important to check several parameters; this to obtain a good and sustainable result.

- Compressive strength of the substrate: min. 25 N/mm<sup>2</sup>
- Tensile strength of the substrate: min. 1,5 N/mm<sup>2</sup>

POLYAC® 64 AF must be applied on a dry surface. Moisture content in the substrate: ≤ 5% moisture.

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 to 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 if they do not follow other movements of the structure and the substrate and that they are flattened with products that are complementary to the substrate and to the synthetic resin system to be installed.



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## Required tools

- Mixer with spindle (min. 300 rpm)
- Rubber squeegee
- Brush or pain roller suitable for synthetic resin-based products.
- Masking tape

## Preparation of the substrate

POLYAC® 64 AF top layer is only placed on another already cured POLYAC® system. Always apply POLYAC® 64 AF on a clean substrate, free from adhesion-reducing materials such as dirt, oil, grease, etc. High pressure water jetting is possible but the surface must dry sufficiently (moisture content in the substrate:  $\leq 5\%$  moisture) before applying the primer.

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

## Preparation of the product

Mix POLYAC® 64 AF well before use. Paraffin can separate during storage.

Add the full amount of pigment powder per set and mix homogeneously with the resin.

Add the filler and mix again until a homogeneous mixture is obtained. Then add 1 to 5% curing powder. POLYAC® CATALYST must be ordered separately.

Mix pre-dosed sets according to the amount that can be processed within a period of 15 minutes.

### Add POLYAC® CATALYST to POLYAC® 64 AF

Temp.	In%	POLYAC® CATALYST per 1 kg POLYAC® 64 AF
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 until the powder is completely dissolved.

## Preparation of the equipment

Always work with clean mixing containers and application material.

## Application

POLYAC® 64 AF is evenly distributed with a rubber squeegee or a short-haired paint roller. Apply sufficient POLYAC® 64 AF to create a tight top layer. POLYAC® 64 AF processing time is 10 to 15 minutes. Do not disturb the paraffin layer that occurs during curing. After one hour (at 20°C) a second layer of POLYAC® 64 AF can be applied if necessary.



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## 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® 64 AF. Cured product residues must be mechanically removed.

For cleaning and maintenance of the installed synthetic resin systems please refer to the information sheets:

- 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 or ethyl acetate
- POLYAC® CATALYST
- Pigment powder

## Advice/focal points

POLYAC® 64 AF must always be coloured with powder pigment.

## Appearance – Composition

POLYAC® 64 AF is coloured and mixed on site:

<b>A-component</b>	Methyl methacrylate resin
<b>B-component</b>	Curing (= 50% BPO)
<b>C-component</b>	Fine inert dry filler including fire retarders
<b>D-component</b>	Pigment (colour on request)

## 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

0.5 kg/m<sup>2</sup> on smooth surface. 0.8 kg/m<sup>2</sup> on a broadcasted membrane or floor.



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## 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® 64 AF
Viscosity	600 – 800 mPa.s (20°C Brookfield, spindle III/200 rpm)
Density	1.4 g/cm <sup>3</sup> ±0.3 (20°C)
Flash point	10°C (MMA, DIN 51 755)
Hardening test (test volume)	300 g POLYAC® 64 AF with 6 g curing powder
Exothermic peak	110 – 130°C
<b>POLYAC® 64 AF + 2% POLYAC® CATALYST</b>	
Density	1.4 kg/dm <sup>3</sup>
Colour	Grey, other colours on request.
Shore D hardness	70 – 80

## 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:

<b>CE</b>
ETA 17/0296
Fire tests (in system): EN 13501-1: Bfl-s1 EN 13501-5: Broof (t1), Broof (t2), Broof (t4)

## Reference documents

Information sheet "POLYAC® ODOUR".



FM 78518



EMS 716699



ETA certificate (ETA 17/0286) according to ETAG 005.



# POLYAC® 64

## Packaging

POLYAC® 64 AF	COMPONENT A	COMPONENT C	COMPONENT D
Set 20.5 kg	11 kg	8 kg	1.5 kg
Packaging	Metal pail	Plastic pail	Plastic pail

To be ordered separately:

POLYAC® CATALYST COMPONENT B	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 or 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.

### Warranties and Disclaimers

Hychem warrants that this product shall conform to the technical specifications published in the product literature. The quality and fitness of the product is dependent upon the proper use and application of the product by the applicator. Hychem has no role in the application of the finished polymer other than to manufacture and supply its components. It is vital that the person applying this product understands the product and is fully trained and certified in the use of spray equipment and application of sol-gel materials. There are no warranties that extend beyond the description on the face of this instrument, except when provided in writing, directly by Hychem and executed under seal by a company officer.

### Field Support

Field support where provided, does not constitute supervisory responsibility. Suggestions made by HYCHEM either verbally or in writing may be followed, modified or rejected by the owner, engineer or contractor since they and not HYCHEM are responsible for carrying out procedures appropriate to a specific application.

### Customer Responsibility

The technical information and application advice given in this publication is based on the best information available at the time of print. As the information herein is of a general nature, no assumption can be made as to the product suitability for a particular use or application and no warranty as to its accuracy, reliability or completeness either expressed or implied is given other than those required by Commonwealth or State Legislation. The owner, his representative or the contractor is responsible for checking the suitability of products for their intended use.