# POLYAC® 64 AF

#### 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.

## **ADVANTAGES**

- 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:  $\leq 5\%$  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.

## **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

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

### Mixing

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

Dispense an amount of resin that can be processed within 15 minutes. For colouring POLYAC® 61 AF, 8 % pigment powder is added and homogeneously mixed before adding the POLYAC® CATALYST. Add 1 to 5 % curing powder. POLYAC® CATALYST must be ordered separately.

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.

## **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.

# **TECHNICAL DATA**

#### **APPEARANCE - COMPOSITION**

Liquid with low viscosity, coloured.

#### **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 $^2$  on smooth surface. 0,8 kg/m $^2$  on a broadcasted membrane or floor.

## **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/cm³ ±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				
POLYAC® 64 AF + 2 % POLYAC® CATALYST					
Density	1,4 kg/dm³				
Colour	Grey, other colours on request.				
Hardness Shore-D	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 TABLE**



Reaction to fire	B <sub>f</sub> -s1, B <sub>roof</sub> (t1-t2)	
Release of corrosive substances	SR	
Water permeability	NPD	
Wear resistance (Taber)	<60 mg CS10-1000tr - 1 kg	
Adhesive pull strength	B 1,5	
Impact resistance (DIN EN ISO 6272)	>10 Nm*	
Sound insulation	NPD	
Sound absorption	NPD	
Thermal insulation	NPD	
Resistance to chemicals	NPD	

\* On primer POLYAC® 15

## REFERENCE DOCUMENTS

Information sheet "POLYAC® ODOUR".













## **PACKAGING**

POLYAC® 64 AF	20 kg	Metal pall			
To be ordered separately:					
	0,5 kg	Plastic pall			
POLYAC® CATALYST	5 kg	Plastic pall			
	25 kg	Вох			
	1 kg	Plastic canister			
Pigment powder	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 (food, drinks) in the same workspace. Always wear personal safety equipment in accordance with the applicable local guidelines and legislation. Gloves and safety classes are mandatory.

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 Resiplast N.V. 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° Cand 50 % RH). Values that are measured on the construction sites 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 2.2 Date: 7 May 2021 8:45 am

