

## Waterproofing PMMA membrane for waste water

- highly flexible and UV resistant
- fast application and curing
- applicable until  $-15\text{ }^{\circ}\text{C}$
- excellent adhesion on various surfaces

### PRODUCT DESCRIPTION

PUMACRYL MEMBRANE is a medium viscosity, urethane modified PMMA membrane system based on methyl methacrylate.

By adding PUMACRYL CATALYST, the curing reaction is initiated.

### AREAS OF APPLICATION

PUMACRYL MEMBRANE is a liquid, easy applicable, waterproofing membrane/coating for horizontal surfaces in waste water. It can be applied on concrete, metal at temperatures between  $-15\text{ }^{\circ}\text{C}$  and  $+30\text{ }^{\circ}\text{C}$ .

The main application areas are very various in structural and civil engineering, new building construction and refurbishment.

### PROPERTIES

PUMACRYL MEMBRANE is a highly flexible, crack-bridging membrane retaining its properties even when the temperatures fall below  $-20\text{ }^{\circ}\text{C}$ . Main properties:

- excellent crack-bridging characteristics even at  $-20\text{ }^{\circ}\text{C}$
- UV and weathering resistant
- waterproofing against water pressure
- good chemical resistance (detailed information upon request)
- very high impact and puncture resistance
- excellent adhesion on many types of substrates
- can be applied also at temperatures below  $0\text{ }^{\circ}\text{C}$
- fast application and curing. Subsequent layers can be applied already after 1 hour
- excellent inter-layer adhesion due to chemical bonding, thus easy to repair; can be reworked at any time

### SURFACE PREPARATION

The substrate to be treated must be sound, dry and free from dust, grease and oil. Laitance and loose particles must be removed completely e.g. by shot blasting. Grease, oil and humidity can be eliminated e.g. by flame blasting. Before the application of PUMACRYL MEMBRANE, a suitable primer must be applied, including sanding when appropriate.

### MIXING

Prior to use, PUMACRYL MEMBRANE must be carefully stirred to achieve a uniform distribution of the paraffin contained in the product. PUMACRYL MEMBRANE is then thoroughly mixed with the PUMACRYL CATALYST (50% dibenzoyl peroxide).

The amount of catalyst powder to be added depends on the temperature:

#### Addition to 1 kg PUMACRYL MEMBRANE:

Temp.	%	Addition	to 1 kg
$30\text{ }^{\circ}\text{C}$	1	10 g	PUMACRYL CATALYST
$20\text{ }^{\circ}\text{C}$	1,3	13 g	PUMACRYL CATALYST
$10\text{ }^{\circ}\text{C}$	2,3	23 g	PUMACRYL CATALYST
$0\text{ }^{\circ}\text{C}$	4	40 g	PUMACRYL CATALYST
$-5\text{ }^{\circ}\text{C}$	4	40 g	PUMACRYL CATALYST +
	0,8	8 g	PUMACRYL ACCELERATOR
$-10\text{ }^{\circ}\text{C}$	4	40 g	PUMACRYL CATALYST +
	1,2	12 g	PUMACRYL ACCELERATOR
$-15\text{ }^{\circ}\text{C}$	4	40 g	PUMACRYL CATALYST +
	1,6	16 g	PUMACRYL ACCELERATOR

Weight/volume conversion of CATALYST:

$$1\text{ cm}^3 = 0,64\text{ g}$$

$$1\text{ g} = 1,57\text{ cm}^3$$

### APPLICATION

PUMACRYL MEMBRANE is applied using a notched squeegee.

### CLEANING

The application equipment must be cleaned immediately after the use. Suitable detergents are ethyl acetate, acetone and methyl methacrylate.

### CONSUMPTION

Depending on area of application.

Please refer to PUMACRYL specifications.

### PACKAGING

25 kg metal, resealable bucket

### STORAGE

When stored in a cool and dry place in unopened, undamaged original packaging, shelf life is 6 months.

Ideal storage temperature:  $15\text{--}20\text{ }^{\circ}\text{C}$

### HEALTH AND SAFETY

Please refer to actual Safety Data Sheet on [www.vandex.com](http://www.vandex.com).

<b>TECHNICAL DATA</b>				
<b>Liquid state</b>				
Viscosity, 25 °C	[mPa*s]	300–460		DIN 53018
Density, 25 °C	[g/ml]	1,36		ISO 2811
Pot life, 20 °C	[Min.]	approx. 15		
Curing time, 20 °C	[Min.]	approx. 60		
Flash point	[°C]	+11,5		ISO 1516
<b>Cured state</b>				
		<b>at +23 °C</b>	<b>at -20 °C</b>	
Colour	[RAL]	7040		
Shore A hardness	[IRHD]	95		NFP 98285
Shore D hardness		55		DIN 53505
Tensile strength	[MPa]	7,4	7,8	ISO 527
Elongation	[%]	340	310	ISO 527
Modulus of elasticity	[MPa]	88	615	ISO 527
Abrasion 1000 cycles	[mg]	64		ISO 7784-2
Static crack bridging	[mm]	> 5	> 5	BPG
Please note that an objective comparison with other data is only possible if norms and parameters are identical.				

The information contained herein is based on our long-term experience and the best of our knowledge. We can, however, make no guarantee since for a successful outcome, all circumstances in an individual case must be taken into consideration. Indications of quantities required are only averages which in certain cases might be greater.



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