

## Riverstone® 1005

Methacrylate first layer and Casting resin  
 cold-hardening, low-viscosity,

**Application:** Riverstone® 1005 is a cold hardening, pigment able methyl methacrylate that resin can be brushed or rolled on.

**Properties:** Riverstone® 1005 is a reactive methacrylate resin which is suitable not only as a first layer but also as binding agent. Riverstone® 1005 is reactive methacrylate resin, which is suitable for layer-resin and binding-agent. The layer-resin has a thickness between 0,2 – 0,4 mm. Units that are mechanically high loadable, temperature resistant hygienically harmless, free of pores, soil-resisting, easy to work and to work with, can be produced with fin fillers. Riverstone® 1005 forms surfaces with excellent light- and weather resistance.

### Specifications:

#### Properties in conditions of delivery:

	measurement method	values	unit
Density 20°C	DIN 51757	0,99	g/cm <sup>3</sup>
Refractive index, n <sub>D</sub> 20	DIN 53491	1,43 – 1,44	
Colour number	DIN 53409	< 50	APHA
Acid number	DIN 53402	< 1	
Viscosity	DIN 51550	75 – 100	mPa·s
Draining time, ISO-beaker 4mm	DIN 2431	40 – 60	sec
Flash point	DIN 51755	+ 10	°C
Polymerisation time	20 g resin	30 – 40	min
	+0,75% B-101**		
	+1% BPO 50% conc.		
Pot life*	100 g resin	20 – 25	min
	+0,5% B-101**		
	+1% BPO 50% conc.		

\*Test in normal climate

\*\* B-101 = accelerator 101

#### Properties in hardened condition:

	measurement method	values	unit
Bulk density	DIN 53479	1,18	g/cm <sup>3</sup>
Indentation hardness	DIN 53456	≥ 130	N/mm <sup>2</sup>
Shore-hardness D	DIN 53505	≥ 80	
Water absorption	DIN 53495/C	0,1	%
Surface resistance	DIN 53482	10 <sup>13</sup> – 10 <sup>14</sup>	Ω
Current flow resistance	DIN 53482	10 <sup>15</sup> – 10 <sup>16</sup>	Ω·cm

## Riverstone® 1005

Methacrylate first layer resin  
cold-hardening, low-viscosity, non-accelerated

**Processing:** Riverstone® 1005 hardens out after admixture of 0,5 – 0,75% hardness powder in layer thickness between 0.2 – 0,4 mm (consumption 200 – 400 g/m) within 45 minutes at room temperature. Riverstone® 1005 can be painted on the mold by brush or painting – roll. You can spray it after diluting Riverstone® 1005 with maximal 30% of Riverstone® 10015 (pre-trials are necessary). Riverstone® 1005 is pigment able and it can come to a thixotropication after the admixture of max. 2% Aerosil®.

If you spread Riverstone® 1005 on molds pay attention with it the fin paraffin wax doesn't get destroyed by over coating it, otherwise there will be partial indurations – interferences.

### Processing of casting – resin

Riverstone® can not only be used as a pre-layer resin but also as binding for casting – resin.

### Formulation-recommendation for casting - mass:

#### R1005/1

Riverstone® 1005	40-60 GT
aluminium - hydroxide < 100 µm	60-40 GT
pigment - paste	0-10 GT
Degament 1020	0-10 GT
hardness - powder	
or hardness - liquor	2- 4 GT

#### R 1005/2

Riverstone® 1005	40-60 GT
calcium - carbonate < 100 µm	60-40 GT
pigment - paste	0-10 GT
Degament 1020	0-10 GT
hardness – powder	
or hardness – liquor	2- 4 GT

The mixture has to be well homogenized and it has to be degassed in a vacuum before putting the hardener to it.