

COLPOLY 733-90 M

July, 2017

DESCRIPTION

Unsaturated polyester resin based on dicyclopentadiene, orthophthalic acid and standard glycols dissolved in styrene.

Resin contains special silicone-ethylene oxide/propylene oxide copolymer.

APPLICATION

Resin is suitable for the production of artificial stone or polymer concrete.

FEATURES AND BENEFITS

- good mechanical properties
- low viscosity resin and high reactivity
- good wet mineral fillers

PHYSICAL CHARACTERISTICS OF THE LIQUID RESIN

Appearance	Clear		
Density at 25°C	1110 - 1130	kg/m ³	ISO 2811
Acid value	23 - 33	mg KOH/g	ISO 2114
Styrene content	32 - 35	%	MH 2034
Viscosity at 25°C, #2/20 rpm	380 - 460	mPa.s	ISO 3219 Brookfield
Flash point	34	°C	DIN 51 755
Storage life at 25°C in darkness	6	month	

CURING CHARACTERISTICS at 25°C

Gel time	18 - 22	min.	MH 3023
Time from gel to peak	8 - 14	min.	100 g resin
Exothermic temperature (peak)	170 - 190	°C	1.0 % Co Acc. 1 % 1.0 % MEKP-50

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PHYSICAL CHARACTERISTICS OF CURED NONREINFORCED RESIN

Density at 20°C	1200 - 1230	kg/m ³	ISO 1183
Barcol hardness	35 - 45		EN 59
Tensile strength	50 - 70	MPa	ISO R 527
Elongation at break	2.0 - 3.0	%	ISO R 527
Flexural strength	110 - 130	MPa	ISO 178
E - modulus in tension	3500 - 4000	MPa	ISO R 527
Impact resistance	18 - 22	kJ/m ²	ISO 179
Heat distortion temperature	95 - 105	°C	ISO 75 A
Glass transition temperature	110 - 130	°C	ISO 537

CURE

It is recommended that gel time be checked in the customer's plant as age, temperature, humidity and catalyst will produce varied gel times.

The catalyst level should not exceed 2.5% or fall below 1.0% for proper cure at 25°C. The product should not be used when temperature condition are below 18°C.

HANDLING AND SAFETY PRECAUTIONS

COLPOLY 733-90 M is flammable liquid and should be kept away from naked flames. For further details, please see the relevant Safety Data Sheet.