

GELCOAT® VUP 4647 BES

TYPE

Gelcoat based on isophthalic acid/neopentylglycol highly thixotropic, preaccelerated, light stabilised

APPLICATION

Gelcoat for spray application

SPECIAL PROPERTIES

With optimum film clarity, good surface hardness and a great degree of toughness, high resistant against yellowing, outstanding weather-, warm water- and chemical resistance

USE

For manufacturing of clear, light gelcoat layers for moulded parts of cultured marble

PRODUCT DATA

Determined per batch:

Non-Volatile Matter DIN 55671 non-volatile matter (120 °C; 5 min)	[%]	52,5 - 56,5
Thixotropic Strength (UP-Resins) VLN 236 dynamic viscosity 50 (23 °C; 4)	[mPa.s]	1600 - 2100
dynamic viscosity 1 (23 °C; 4)	[mPa.s]	34500 - 45000
Gel Time (UP-Resins) DIN 16945 / 6.3.1.2 gel time 2 % MEKP (33 %) (20 °C)	[min]	6 - 12

Not continually determined:

Density (Liquids) DIN EN ISO 2811-2 density approx. (20 °C)	[g/cm ³]	1,09
Flash Point DIN EN ISO 1523 flash point approx.	[°C]	34

CURING

Curing is possible at room temperature by addition of keton peroxide, e.g. MethylEthylKetonPeroxide. Do not catalyze at levels below 1 % or above 3 % as this may cause curing problems. Two percent is recommended. Take care that the water content of the chosen peroxide is as low as possible. The water content of the peroxide should be below 3 %.

PROCESSING

The Gelcoat has to be well homogenised in the original packing shortly before processing, either by stirring or by rolling the drums.
The Gelcoat should be applied in a thickness of 0.4 - 0.6 mm (about 600 - 700 g Gelcoat per m²) by gelcoat-spray-equipments or overhead spray gun (nozzle diameter 2 - 3 mm, spray pressure 1 - 3 bar, air quantity about 250 l/min). Apply in several thin overlapping coats rather than a single thick coat. This will help avoid sagging and porosity. Make sure the air pressure is adjusted properly, and the spray gun and lines are free of solvent, water and oil. Observe that the gelcoat as well as the mould should have temperature of at least 20 °C.

PROCESSING TIME

The processing time may be varied with a suitable choice of peroxide concentration.

HUE

For optimal appearance it is recommended to use only one batch per moulded part. Please blend and homogenise several batches if the use of only one batch is not possible.

STORAGE GELCOAT VUP 4647 BES

At temperatures up to 25 °C storage stability packed in original containers amounts to at least 210 days.

The product should be stored under exclusion of direct sunlight in the original, undamaged and closed packaging in a dry and cool place. Gelttime and curing time can change during progressive storage. Shelf live is reduced at higher storage temperatures.

PRECAUTIONS

Please notice the information in the material safety data sheet (MSDS).

ACCELERATOR

The Gelcoat contains Co-accelerator. Prolonged storage can reduce the effect of the accelerator. An addition of 0.5 - 1.0 % accelerator Co 1 may be necessary to restore the original potlife.

DATA OF CURED BASIC RESIN

Not continually determined:

Tensile Test (Unreinforced Plastics) DIN EN ISO 527-2		
tensile strength	[MPa]	45
breaking elongation	[%]	1,5

Hardness (BARCOL) DIN EN 59	
Barcol-hardness 934-1	37 - 41

Not continually determined data do not constitute a quality description, but correspond to single values, determined on a random sample. Deviations caused by production are possible.

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