

TECHNICAL INFORMATION

GELCOAT TVE colour FP

Application

Gelcoat TVE colour FP is tooling gelcoat designed for creation a mold coating, made from polyester – glass laminate, intended for making products from unsaturated polyester resins and concrete products.

It also serves as creation colorful coating of the products made of unsaturated polyester resins and resinous-mineral casts.

Characteristics

Gelcoat TVE colour FP is chemical – proof gelcoat, based on vinyl ester resin intended for spray lay-up. It creates stable surface, resistant on chemical media action, including acids and solvents.

Gelcoat TVE colour FP is offered in basic colours:

Gelcoat TVE black P

Gelcoat TVE green P

Gelcoat TVE blue P

Gelcoat TVE blue 523 P

and also in any colour of RAL system on client demand.

Advantages of gelcoat:

- low polymerization shrinkage,
- good deaeration,
- excellent flow, smoothing of brush trails,
- favourable curing characteristics,
- possibility of using standard MEKP,
- high aging, UV, water and chemical media resistance,
- ability for regeneration (repairing of surface),
- high mechanical parameters,
- elimination of toxic amine.

Typical parameters

Parameter	Unit	Value
Viscosity at 25°C, Brookfield, sp.27/rpm 1	cP	40 000 – 80 000
Gel time* at 25°C	min	20-45

*Curing system: 1kg of Gelcoat + 20g of Luperox K-1 S

Storage conditions

Gelcoat TVE colour FP should be stored in close package in a dry, shady and cool places, adapted for storing flammable materials at temperatures not exceeding 25°C.

Processing conditions

The gelcoat should be mixed before use. The use of gelcoat for processing requires its temperature of at least 16°C. Good curing required ambient temperature above 18°C and low air humidity.

Preparation gelcoat for processing:

- mix gelcoat in the package, take the needed quantity,
- add and mix precisely proper quantity of hardener MEKP.

The best curing conditions are obtained using 2% MEKP as hardener. It is possible to adjust gel time by varying of amount of hardener, the best within in the range of 1 – 2%. Mold made of tooling gelcoat should be postcure to obtain full mechanical properties. For example it can be 10 - 14 days of seasoning at ambient temperature.

Luperox® is the trade name registered for products of **ARKEMA** company.

Data and suggestions included in this document are on the basis of our own tests and are considered by us as reliable. However, we cannot take any responsibility for actions and losses directly or indirectly resulted from using our products. User should check the product quality, safety and properties before its using.

Note:

The information does not substitute Material Safety Data Sheet or Technical Specification, which are superior documents and are available on the customer's request.

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Examples of mechanical parameters of Gelcoat TVE

Parameter	Unit	Gelcoat TVE green	Gelcoat TVE black
Flexural strength acc. to ISO 178	MPa	94	105
Flexural modulus acc. to ISO 178	MPa	3800	3600
Stress at break acc. to ISO 527	MPa	44	49
Tensile modulus acc. to ISO 527	MPa	4000	3700
Impact strength acc. to ISO 179	kJ/m ²	8	8
Heat deflection temperature, HDT acc. to ISO 75	°C	85	85
Barcol hardness, postcuring for 2h at 110 °C acc. to ASTM 2583-07	°B	49	48
Water absorption after 24 hours	%	0,1	0,12
Water absorption after 7 days	%	0,25	0,33
Volume shrinkage	%	1,6	1,5

Examples of reactivity of Gelcoat TVE

