

VEGTM

Vinyl ester Gelcoat



Building
&
Transportation



Oil, Gas
&
Industrial



Offshore
&
Onshore



Water
&
Wastewater



PRODUCT DESCRIPTION

CTech-LLC[®] VEGTM gelcoat is a high performance gelcoat based on a vinyl ester resin. This product is often preferred in the industrial field over alternative gelcoats such as polyester or epoxy resins.

CTech-LLC[®] vinyl ester gelcoat (VEGTM) provides extreme resistance to high deformation temperature (HDT), as well as optimal performance in repeated cycles of heating, UV light stability, and exposure to solvents and chemicals.

PHYSICAL PROPERTIES

	Unit	VEG TM
Chemical Base	-	Vinylester resin
Viscosity [25°C - Spindle 4 - 4 rpm]	mPa.s(cP)	10000-14000
Density	g/cm ³	1.11-1.15
Gel time: (200g - 25°C - 1,8% MEKP)	minutes	12-18
Film cure (500µ - 20°C - 2% MEKP)	minutes	30-50

MECHANICAL/PHYSICAL PROPERTIES

	Unit	Test Method	VEG TM
Tensile strength	MPa	ISO 527-1993	45
Elongation at Break	%	ISO 527-1993	3
Heat distortion temp.	°C	ISO 75-1993	116
Hardness Barco	934-1	ASTM D 2583-99	min. 35

**Post Cure 16h at 40°C

ADVANTAGES

The advanced technology of vinyl ester gelcoat (VEGTM) from CTech-LLC[®] provides them with the following properties:

- Based on a premium epoxy vinyl ester resin
- Outstanding HDT resistance
- Porosity free
- High gloss retention after several production cycles
- User friendly – ease to polish
- Good Flexibility

- Excellent UV resistance
- Controlled curing process
- Chemical resistance
- Improves gloss on finished product

TYPICAL USES

CTech-LLC[®] vinyl ester gelcoat (VEGTM) is recommended for use in the manufacture of high quality FRP composite tooling.

INSTALLATION PROCEDURE

MIXING

Mix the product slowly but thoroughly for 10 minutes prior to each shift start up.

APPLICATION

- This gel coat is ready to be applied using airless spray equipment. This product is not designed for use with a roller or brush.
- Apply the correct film thickness. A wet film thickness between 0.55 to 0.85 mm is required.
- Check that the correct level of MEKP is added. The addition of 1.3% to 1.8% hardener MEKP is recommended.
- To achieve better results minimum temperature during cure and postcure should be 18°C.

STORAGE & SHELF LIFE

- To ensure maximum stability and maintain optimum resin properties, resins should be stored in closed containers at temperatures below 24°C/75°F and away from heat ignition

sources and sunlight. All storage areas and containers should conform to local fire and building codes.

- Shelf life: 4 months

CAUTION

Vinyl ester gelcoat may cause skin and eye irritation and sensitization so use of chemical resistant gloves and safety goggles is recommended. Close container after each use. Avoid breathing vapors and dust. Get medical attention if you are breathing with difficulty. Keep out of the reach of children.

CTech-LLC[®]

CYTEC's Composite Technology
technical@ctech-llc.com
info@ctech-llc.com
www.CTech-LLC.com

IMPORTANT NOTE:

Before using any CTech-LLC[®] product, the user must review the most recent version of the product's technical data sheet, material safety data sheet and other applicable documents, available at www.ctech-llc.com.

WARANTY:

CTech-LLC[®] warrants its products to be free from manufacturing defects. Buyer determines suitability of product for use and assumes all risks. Buyer's sole remedy shall be limited to replacement of product. Any claim for breach of this warranty must be brought within one month of the date of purchase. CTech-LLC[®] shall not be liable for any consequential or special damages of any kind, resulting from any claim or breach of warranty, breach of contract, negligence or any legal theory. The Buyer, by accepting the products described herein, agrees to be responsible for thoroughly testing any application to determine its suitability before utilizing.