# **GlobalEster GN600 Epoxy VinylEster**



PERFORMANCE IN COATINGS

# TECHNICAL DATA SHEET

### EpoxyVinyl Ester Solvent free

PRODUCT DESCRIPTION	<ul> <li>GlobalEster GN600EV is a solvent free novolac modify epoxy vinylester resin.</li> <li>GlobalEster GN600EV is designed for application over recommended primer, on dry surfaces with a high resistance to a wide range of chemicals.</li> </ul>					
PERFORMANCES	<ul> <li>Excellent chemical resistance;</li> <li>Excellent temperature resistance on operation- until 210°C (depending on the chemical -see table);</li> <li>Good flexibility;</li> <li>Excellent impact resistance;</li> <li>Excellent mechanical properties on mortars and glass reinforced fiberglass;</li> <li>Solvent free;</li> <li>Excellent wet ability to the substrates;</li> <li>High mechanical and chemical resistant properties at high temperatures-see</li> <li>"GN600EV/GN601EV Chemical Resistance Table".</li> </ul>					
RECOMMENDED USE	Pipelines; Concrete and steel storage tanks; FGD (Flue Gas Desulfurization equipment); scrubers, etc Resistant at high operation temperatures to alkali, organic acids, inorganic acids, vegetable oils, etc (see Chemical Resistance Table for chemicals and temperatures for more details).					
COMPONENT A	COMPONENT B	COLOURS				
GN600EV	H600EV/C600EV	GN600EVG0000 (Colourless).				

#### **Physical Properties**

GLOSS	Glossy.						
SOLIDS BY VOLUME	100% (theoretical).						
VOC*	< 50 g/L.						
FLASH POINT	102°C without styrene.						
PERFORMANCE	Mechanical properties* measured for a 3mm thickness casting sample, at standard conditions of 1 day at 23°C + 2hours at 120°C :						
	Property Measured:	Value	Unit	Standard			
	Tensile Strength:	82	MPa	ASTM D638			
	Compressive Strength:	85	MPa	ASTM C579			
	Tensile Modulus:	3.7	GPa	ASTM D638			
	Elongation:	5.0-5.8	%	ASTM D638			
	Flexural Strength:	148	Мра	ASTM D790			
	Flexural Modulus:	5.5	Gpa	ASTM D790			
	Heat Distortion Temperature:	206	°C	ASTM D648			

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	FGD Systems:	Pass	Method A (177°C)	ASTM D5499				
	Volumetric shrinkage:	3,9	%	ASTM D2566				
	Adhesion (concrete):	>2.5	Мра	ASTM D4541				
	Adhesion (steel):	10.5	Мра	ASTM D4541				
	Abrasion Resistance:	75mg	CS17/1000g/1000cycles	ASTM D4060				
	Hardness (coating):	84	Shore D	ASTM D2240				
	*Typical properties only, not to be construed as specifications. Density: ~1,1 g/cm <sup>3</sup>							
Application	Application							
SURFACE PREPARATION	All the surfaces have to be clean, dry and without contamination. The surface should be evaluated and treated accordingly with ISO8504. Coated Surface: Clean, undamaged and dry compatible primer. Contact GlobalNavy office for more information. Other Surfaces: Check the suitability of GN600EV, apply a suitable primer following its Technical Data Sheet and then apply the GN600EV. Contact GlobalNavy office for further information.							
APPLICATION METHOD	GlobalEster GN600EV can be applied by roller, brush, trowel, squeegee. Due to its short pot-life, the application by air spray it is not advisable.							
APPLICATION CONDITIONS	GlobalEster GN600EV must be applied over dry and clean surfaces. Substrate temperature should be between 10-32°C. Relative humidity 85% maximum.							
APPLICATION DATA	GlobalEster GN600EpoxyVinyl Ester is a three pack product, so all components must be mixed on the right ratio. First, add component H600AA and mixed during 1 minute. After that, add component H600BB and stir very well for 1 minute until it get homogeneous. If over agitated, Pot Life will be reduced. High temperatures will reduce pot-life and low temperatures will increase pot-life.							
MIX RATIO	Depending on Temperature: at 20°C, 8% H600AA / 0.8%H600BB (by weight).							
HARDENER	H600EV/C600EV							
POT LIFE	15 minutes at 23°C (73°F) (resin)(depending on the accelerator %).							
THINNER								
SOLVENT / CLEANER	GlobalThin GN001TH/GN077TH.							
DRY TIME	Surface dry: Approx. 6 hours at 23°C (73°F) and 50% Rh; Recoat: Min: 8 hours at 23°C (73°F); Max: 7 days at 23°C at (73°F). After that surface must e reactivated sweep blasting or sanding.							
THEORETICAL COVERAGE	4.4 Sq.m/Kg. (18.1 Sq.ft/ Lb.) Dry/Wet: 200 microns (8 mils).							
TYPICAL PAINT SYSTEM	• Primer(dryconcrete)GlobalDurGN120ER 1x200µm; • Primer (wet concrete)GlobalDurGN 114EP 1x200µm; • Primer(steel)GlobalDurGN101HT 1x200µm, • GlobalEsterGN600EV 1 x 0.80 Kg (dft) Lining, • Top Coat GlobalEsterGN600EV 1 x 200 µm. <b>Can apply until 1200 microns per coat.</b>							
STORAGE	1 year (storage on the original tightly closed containers in a dry, cool, well ventilated space, at temperatures between $5^{\circ}$ C - $30^{\circ}$ C).							
PACKING	Two pack product, available in packs (A+B+C) of 5 Kg and 20 Kg.							
FURTHER INFORMATION	For the safety of the applicator and the good performance, ventilation should be							

## **GlobalEster GN600 Epoxy VinylEster**



 Provided to all portions of the enclosed area.

 HEALTH SAFETY

 Please take the necessary measures in order to accomplish the national laws and regulations regarding the environmental, health and safety at work. Please observe the safety information displayed on the container. Please refer to the Safety Data Sheet for detailed information on the health, safety hazards and precautions for the use of this product.

 The information on this data sheet is given to the best of our knowledge based on laboratory testing and practical experience. This is not a specification and all information is given in good faith. Every values presented as Theoretical were calculated from the product formula, so can have deviation from laboratory measurements using standard methods that may be not applicable. However, since the product can be used under conditions beyond our control, the manner of use is the sole responsibility of the user. The product relative to coverage, performance or injury. This Technical Data Sheet content can be changed without notice.

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