

GlobalEster GN600 Epoxy GlassFlake Vinyl Ester



TECHNICAL DATA SHEET



GlassFlake Composite EpoxyVinyl Ester

PRODUCT DESCRIPTION	◆ GlobalEster GN600EV is a two pack free epoxy vinyl ester with glass flake composite to improve thickness and mechanical properties. ◆ GlobalEster GN600EV is designed for application over recommended primer, on dry surfaces with a high resistance to a wide range of chemicals.		
PERFORMANCES	• Excellent chemical resistance; • High thickness by coat -2mm. • Excellent temperature resistance on operation- until 210°C (depending on the chemical -see table); • Good flexibility; • Excellent impact resistance; • Excellent mechanical properties on mortars and as glass reinforced fiberglass; • Solvent free; • Excellent wet ability to the substrates; • High mechanical and chemical resistant properties at high temperatures- see "GN600EV/GN601EV Chemical Resistance Table".		
RECOMMENDED USE	Pipelines; Concrete and steel storage tanks; FGD chimneys and Flue Gas Desulfurization equipment; scrubbers, 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).		
APPROVALS			
COMPONENT A	COMPONENT B	COLOURS	
GN600EV	H600EV	GN600EVG0000 (Colourless); GN600EVG7035 (Grey); GN600EVG9010 (off-white). For other colours, please contact GlobalNavy's office.	

Physical Properties

GLOSS	Glossy.		
SOLIDS BY VOLUME	85 ±5% (by weight).		
VOC*	EU Legislation: 50 g/L		
FLASH POINT	>32°C (Pensky-Martens closed cup - ISSO 2719)		
PHYSICAL PROPERTIES	Mechanical properties* measured for a 3.5mm thickness casting sample, at standard conditions of 1 day at 23°C + 2 hours at 120°C :		
	Property Measured:	Value	Unit
	Tensile Strength:	82	MPa
	Compressive Strength:	85	MPa
			Standard
			ASTM D638
			ASTM C579

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Tensile Modulus:	3.7	GPa	ASTM D638
Elongation:	5.0-5.8	%	ASTM D638
Flexural Strength:	148	Mpa	ASTM D790
Flexural Modulus:	5.5	Gpa	ASTM D790
Heat Distortion Temperature:	206	°C	ASTM D648
FGD Systems:	Pass	Method A (177°C)	ASTM D5499
Volumetric shrinkage:	3.9	%	ASTM D2566
Adhesion (concrete):	>2.5	Mpa	ASTM D4541
Adhesion (steel):	10.5	Mpa	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 ³			

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 and viscosity, 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 two pack product, so both components must be mixed on the right ratio. First, add component H600EV and mixed during 1-3 minutes, 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 and Ageing: (at 20°C) 4-2% H600EV. Previous reaction test should be made on spot, before starting the application.
HARDENER	H600EV
POT LIFE	15 minutes at 23°C (73°F) (resin)(depending on the hardener and accelerator % and its ageing).
THINNER	NA
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 be 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 (dry concrete) GlobalDur GN 120ER 1 x 200µm; • Primer (wet concrete) GlobalDur GN 114EP 1 x 200µm; • Primer (steel) GlobalDur GN 133EN/GN101HT 1 x 200µm, • GlobalEster GN600EV 1 x 0.40 Kg (dft) • Top Coat GlobalEster GN600EV 1 x 200µm.

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STORAGE	ALWAYS STORE H600EV BELOW 50°C (PREFERABLY ON COOL TEMPERATURES) AND
PACKING	Two pack product, available in packs (A+B) of 5 Kg and 20 Kg.
FURTHER INFORMATION	Depending on the base and hardener aging, mixing ratio % may change, so it is advise to test a small portion in order to check pot-life and curing times. Post cure at high temperature may be recommended to maximize service life. Above 50 °C/120 °F, acid
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 is intended for professional use only. Manufacturer does not assume any liability in connection with the use of the product relative to coverage, performance or injury. This Technical Data Sheet content can be changed without notice.

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