

GlobalEster GN601 Epoxy GlassFlake Vinyl Ester



TECHNICAL DATA SHEET



GlassFlake Composite EpoxyVinyl Ester

PRODUCT DESCRIPTION	<p>◆ GlobalEster GN601EV is a solvent free epoxy vinylester with glass flake composite to improve thickness and mechanical properties.</p> <p>◆ GlobalEster GN601EV is designed for application over recommended primer, on dry surfaces with na high resistance to a wide range of chemicals.</p>		
PERFORMANCES	<ul style="list-style-type: none"> • Excellent chemical resistance; • High thickenss by coat -2mm. • Excellent temperature resistance on operation- until 180°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	<p>Pipelines; Concrete and steel storage tanks; FGD (Flue Gas Desulfurization equipment); scrubbers, etc..</p> <p>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).</p>		
APPROVALS			
COMPONENT A	COMPONENT B	COLOURS	
GN601EV	H600AA/H600BB	GN601EVG7000 (Grey).	

Physical Properties

GLOSS	Matte.																										
SOLIDS BY VOLUME	100% (theoretical).																										
VOC*	< 50 g/L.																										
FLASH POINT	>26,1°C (Pensky-Martens closed cup).																										
PERFORMANCE	<p>Mechanical properties* measured for a 3.5mm thickness casting sample, at standard conditions of 1 day at 23°C + 2hours at 120°C :</p> <table> <tr> <td>Property Measured:</td><td>Value</td><td>Unit</td><td>Standard</td></tr> <tr> <td>Tensile Strength:</td><td>92</td><td>MPa</td><td>ASTM D638</td></tr> <tr> <td>Compressive Strength:</td><td>88</td><td>MPa</td><td>ASTM C579</td></tr> <tr> <td>Tensile Modulus:</td><td>3.6</td><td>GPa</td><td>ASTM D638</td></tr> <tr> <td>Elongation:</td><td>3.4-4.2</td><td>%</td><td>ASTM D638</td></tr> <tr> <td>Flexural Strength:</td><td>165</td><td>Mpa</td><td>ASTM D790</td></tr> </table>			Property Measured:	Value	Unit	Standard	Tensile Strength:	92	MPa	ASTM D638	Compressive Strength:	88	MPa	ASTM C579	Tensile Modulus:	3.6	GPa	ASTM D638	Elongation:	3.4-4.2	%	ASTM D638	Flexural Strength:	165	Mpa	ASTM D790
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Flexural Modulus:	4.4	Gpa	ASTM D790
Heat Distortion Temperature:	190	°C	ASTM D648
FGD Systems:	Pass	Method A (177°C)	ASTM D5499
Volumetric shrinkage:	3,2	%	ASTM D2566
Adhesion (concrete):	>2.5	Mpa	ASTM D4541
Adhesion (steel):	7.0	Mpa	ASTM D4541
Abrasion Resistance:	70mg	CS17/1000g/1000cycles	ASTM D4060
Hardness (coating):	90	Shore D	ASTM D2240
*Typical properties only, not to be construed as specifications.			
Density: ~1,0 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 GN601EV, apply a suitable primer following its Technical Data Sheet and then apply the GN601EV. Contact GlobalNavy office for further information.
APPLICATION METHOD	GlobalEster GN601EV 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 GN601EV must be applied over dry and clean surfaces. Substrate temperature should be between 10-32°C. Relative humidity 85% maximum.
APPLICATION DATA	GlobalEster GN601EpoxyVinyl 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% H600EV / 0.8% C600BB (by weight).
HARDENER	H600EV/C600EV
POT LIFE	15 minutes at 23°C (73°F).
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 123EP 1 x 200µm; • Primer (wet concrete) GlobalDur GN 114EP 1 x 200µm; • Primer (steel) GlobalDur GN 101EP 1 x 200µm, • GlobalEster GN601EV 1 x 0.40 Kg (dft) • Top Coat GlobalEster GN600EV 1 x 200µm.
STORAGE	1 year (storage on the original tightly closed containers in a dry, cool, well ventilated space, at temperatures between 5°C - 30°C).
PACKING	Two pack product, available in packs (A+B) of 5 Kg and 20 Kg.

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PERFORMANCE IN COATINGS

FURTHER INFORMATION

For the safety of the applicator and the good performance, ventilation should be provided to all portions of the enclosed area.
If exact colour matching is required, ensure that GN601EV in each area is applied from the same control batch numbers.

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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