

# GlobalDur GN114 Epoxy Primer



## TECHNICAL DATA SHEET



### Epoxy Primer Solvent Free for Wet Concrete

<b>PRODUCT DESCRIPTION</b>	<ul style="list-style-type: none"> <li>◆ GlobalDur GN114EP is an excellent epoxy primer solvent free for wet concrete.</li> <li>◆ GlobalDur GN114EP is specially design to have excellent chemical resistance, mechanical and aesthetic properties.</li> <li>◆ GlobalDur GN114EP is a primer specially design for excellent performances on hydroblasted prepared surfaces.</li> </ul>
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<b>PERFORMANCES</b>	<ul style="list-style-type: none"> <li>• Excellent adhesion on wet and green concrete;</li> <li>• No harmful solvents- Solvent free;</li> <li>• Excellent wet ability to concrete and no dew point restrictions;</li> <li>• High mechanical properties.</li> </ul>
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<b>RECOMMENDED USE</b>	<p>PRIMER/INTERMEDIATE/FINISH OVER CONCRETE</p> <p>MARINE: Decks, Chain lockers, Tower bridge, etc.</p> <p>PROTECTIVE: Suitable for direct application on exterior and interior water pipes lines. Sewer lines. Dams and Concrete locks, concrete water tanks, Fuel or Grains storage tanks. Tunnels, etc..</p>
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<b>APPROVALS</b>	
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COMPONENT A	COMPONENT B	COLOURS
GN114EP	H114EP	GN114EPG0000 (Clear), GN114EPG9003 (white), GN114EPG7000 (light grey).

### Physical Properties

<b>GLOSS</b>	Glossy.
<b>SOLIDS BY VOLUME</b>	100 % (theoretical).
<b>VOC*</b>	Max. 30g/Lt.
<b>FLASH POINT</b>	> 105°C (> 221°F) Setaflash
<b>PHYSICAL PROPERTIES</b>	<p>Adhesion: &gt;1.5 N/mm<sup>2</sup> (cohesive rupture on concrete) (ISO4624)</p> <p>Hardness Shore D: ~82 (7d/23°C) (DIN53505)</p> <p>Abrasion Resistance: 65 mg (7d/23°C) (CS10/1000/1000; ISO7784-2)</p> <p>Density: 1,3 g/cm<sup>3</sup></p>

### Application

<b>SURFACE PREPARATION</b>	<p>Painting Direct to Substrate: GlobalDur GN114EP is suitable for concrete surfaces prepared (dry or wet) accordingly with NACE N°6/SSPC-SP13 using:</p> <p>Mechanical Surface Preparation Methods.</p> <p>Chemical Surface Preparation</p>
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Flame Cleaning and Blasting  
 Apart from the surface preparation method, the moisture tolerance of GlobalDur GN114EpoxyPrimer allow the surface to be washed with tap water and let dry before painting, ensuring a final lower salts level.  
 Over coated surfaces be sure of the old coating conditions (no coating defects and corrosion- in "sound conditions") and the compatibility with the GlobalDur GN114EP. Please contact Globalnavy office in case of any doubt or for further information.

<b>APPLICATION METHOD</b>	CONVENTIONAL METHODS: Due to the short pot life of the product, brush and roller are suitable. Care should be taken in order to achieve the DFT specified. When applying on enclosed areas ensure a good ventilation. It is not necessary to use dehumidification equipment: GlobalDur GN114EP can be applied on dry or wet surfaces, even with 100% humidity.
<b>APPLICATION CONDITIONS</b>	The substrate temperature shall be between +5°-+50°C. The ambient temperature shall be >5°C . The concrete moisture should be lower than 6%. There is no dew point restrictions.
<b>APPLICATION DATA</b>	GlobalDur GN114 Epoxy Primer, is a two pack product, so the base and hardener must be mixed on the right ratio. First, mix well component A during 1 minutes. After that, add all the hardener and stir very well until it get homogeneous. Mix completely both quantities of component A and B packs.
<b>MIX RATIO</b>	3 / 1 (by Weight)      2,7 / 1 (by Volume)
<b>HARDENER</b>	H114EP
<b>POT LIFE</b>	30 minutes (23°C/73°F).
<b>THINNER</b>	N.A.
<b>SOLVENT / CLEANER</b>	GN001TH / GN003TH
<b>DRY TIME</b>	Surface dry: 5 hours at 23°C (73°F). Dry to recoat: Min: 14 hours at 23°C (73°F). Max: 7 days at 23°C (73°F).
<b>THEORETICAL COVERAGE</b>	4.6 m2/Kg (23 Sq.ft/Lb) - Dry/Wet: 200 microns (8 mils)
<b>TYPICAL PAINT SYSTEM</b>	• GlobalDur GN114EP 1 x 150µm (dft) + GlobalDur GN101EP 1 x 150µm (dft) This is a system for water tank immersion conditions. Please contact GlobalNavy for other applications.
<b>STORAGE</b>	4 years (storage on the original tightly closed containers in a dry, cool, well ventilated space, at temperatures between 5°C - 30°C).
<b>PACKING</b>	Two pack product available in packs (A+B) 1, 5, 20 Kg.
<b>FURTHER INFORMATION</b>	When applying by air spray, care should be taken because of the short pot life of the product - For further information, please contact your Globalnavy office.
<b>HEALTH SAFETY</b>	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

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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.

Parque Industrial de Carrascas, Estrada Nacional 252, 2950-402 Palmela PORTUGAL  
◆ Tel.:+351 265107979 ◆ www.globalnavy.net ◆ email: sales@globalnavy.net

<b>GlobalDur GN114EP - Additional Information</b>						
<b>CURING TIME TABLE</b>						
<b>GN114EP</b>	<b>5°C</b>	<b>10°C</b>	<b>15°C</b>	<b>20°C</b>	<b>25°C</b>	<b>30°C</b>
Pot Life		90 minutes	60 minutes	40 minutes	25 minutes	15 minutes
Dry to touch (Max.)		18 h	14 h	10 h	8 h	6 h
Foot traffic		28 h	20 h	14 h	12 h	10 h
Recoating period	Min.	28 h	20 h	14 h	12 h	10 h
	Max.	10 days	7 days	6 days	5 days	4 days
		<b>10°C</b>	<b>15°C</b>	<b>20°C</b>	<b>25°C</b>	<b>30°C</b>
Pot Life						
Dry to touch (Max.)						
Foot traffic						
Recoating period	Min.					
	Max.					
			<b>15°C</b>	<b>20°C</b>	<b>25°C</b>	<b>30°C</b>
Pot Life						
Dry to touch (Max.)						
Foot traffic						
Recoating period	Min.					
	Max.					

<b>PHYSICAL PROPERTIES - COATING SYSTEM ON CONCRETE</b>	
<b>Adhesion - Pull Off (ASTM D4541)</b>	Dry surface: >50 Kg/cm <sup>2</sup> (MPa) (710 psi) (or >1,5 Kg/cm <sup>2</sup> (MPa) cohesive on the concrete)
<b>Abrasion Strength (ASTM D4060)</b>	64 mg (1000 cycles / 1000 g / CS10)
<b>Coefficient of Thermal Expansion</b>	15 x 10 <sup>-6</sup> /°C
<b>Impact Resistance</b>	853 KgF/cm <sup>2</sup> (12,132 psi.)
<b>Barcol Resistance (ASTM D2583)</b>	30
<b>Elasticity Modulus (ISO/R 527)</b>	100,000 KgF/cm <sup>2</sup>
<b>Fire Reaction (EN 13501-1)</b>	B <sub>f</sub> -s1
<b>Classification</b>	SR – Bfl-s1 – B2
<b>Dangerous Components (EN 13813)</b>	SR
<b>Compressive Strength (ISO 844)</b>	1.050 KgF/cm <sup>2</sup> ( 15,000 psi )
<b>Flexural Strength (ISO 178)</b>	650 KgF/cm <sup>2</sup> (9245 psi.)
<b>Condensation Resistance (ASTM D4585)</b>	2000 hours – Without defects
<b>Exterior Exposure (ASTM D1014)</b>	2 years- Chalking (ASTM D659): rating 5
<b>Maximum elongation (ISO/R 527)</b>	2%
<b>Absorption (ASTM D570)</b>	0,30%
<b>QUV (Using A340 &amp; B313 bulbs)</b>	2000 hours – Chalking (ASTM D659): rating 5
<b>Adhesion- Tape test (ASTM D3359)</b>	Rating - 5B
<b>Deformation/Impact test (ASTM D2794)</b>	1.22 Kgf.m (12,0 Joules)
<b>Impact Resistance (EN ISO 6272)</b>	IR 4