

GlobalThane GN206 Polyurethane Finish



TECHNICAL DATA SHEET



High Solids Polyurethane Finish

PRODUCT DESCRIPTION	<ul style="list-style-type: none"> ◆ GlobalThane GN206PF is an excellent high solids two pack polyurethane finish. ◆ GlobalThane GN206PF is designed for harsh marine and industrial environments. ◆ GlobalThane GN206PF is na high glossy finish accordingly with Petrobras standard N-2677. 	
PERFORMANCES	<ul style="list-style-type: none"> • Excellent gloss and colour retention; • Excellent glossy finish and easy to apply; • High Solids; • Good edge retention. 	
RECOMMENDED USE	<p>FINISH OVER STEEL MARINE: Offshore structures, Shiplside's, Superstructures, etc.. PROTECTIVE: Bridges, machinery, railroad cars, metallic structures, exterior of pipe lines. FINISH OVER OTHER SUBSTRATES Recommended for application on Aluminium, Wood and Fiberglass, when properly primed.</p>	
APPROVALS	<p>Complies with EU Directive 2010/42/EC: subcategory j (VOC< 500 g/l). Complies with ISO 12944-5, as being suitable for coating systems until C5-M.</p>	
COMPONENT A	COMPONENT B	COLOURS
GN206PF	H200P	GN206PFG9003 (White), GN206PFG9005 (Black). For other colours, please contact GlobalNavy's office.

Physical Properties

GLOSS	>70 GU (ISSO 2813:2014/ 60°).
SOLIDS BY VOLUME	64 % (theoretical) ± 2 %
VOC*	<p><287 g/L EU Directive 2010/75/EU (ISO11890:1) <287 g/L China (GB/T 23985:2009) <325 g/L (2.71 lb/g) (EPA method 24)</p>
FLASH POINT	> 32°C (> 90°F) (ISO3679:1)
PHYSICAL PROPERTIES	<p>Density: 1,25-1,40 g/cm³ Coating Operation Temperature: -20°C (-4°F) to 120°C (248°F). Chemical Resistance (ASTM D3912): Pass. Adhesion- Tape test (ASTM D3359) Rate - 5B Hardness Shore D: ~82 (7d/23°C) (DIN53505) Abrasion Resistance: 38 mg (7d/23°C) (CS10/1000/1000; ISSO 7784-2) Deformation/Impact test (ASTM D2794) 1.30 Kgf.m (12,7 Joules)</p> <p>Coating System Properties (GN101LCEP/GN206PF) Adhesion - Pull Off (ASTM D4541) Dry surface: >100 Kg/cm² (Mpa) (1450 psi) (or >1,5 Kg/cm²)</p>

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(Mpa) cohesive on the concrete)
 Adhesion- Tape test (ASTM D3359) Rate - 5B (between finish coat GN2##PF and GN101LCEP)
 Abrasion Strength (ISO7784-2) 38 mg (1000 cycles / 1000 g / CS10)
 Barcol Resistance(ASTM D2583) 24
 Maximum Elongation (ISO/R 527) 2%
 Elasticity Modulus (ISO/R 527) 92,000 KgF/cm2
 Compressive Strength (ISSO 844) 1.020 KgF/cm2 (14,570 psi)
 Flexural Strength (ISSO 178) 620 KgF/cm2 (8818 psi.)
 Impact Resistance (EN ISSO 6272) IR4
 Deformation/Impact test (ASTM D2794) 1.20 Kgf.m (11,8 Joules)
 Exterior Exposure (ASTM D1014) 2 years- (Chalking) (ASTM D659): Rate 1
 QUV (ASTM G53) 3000 hours – (Chalking) (ASTM D659): Rate 1
 Absorption (ASTM D570) 0,1%
 Salt spray chamber (ASTM B117):2000 H (Pass).
 Performance accordingly ISO12944- C%-M: 10 years (Coating System S9.12)
 Fire Reaction (EN 13501-1) Bfl-s1

Coating System Properties (GN220US/GN206PF)
 Tensile Strength (ASTM D412): > 5MPa
 Elongation ASTM D412): >50%

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 GlobalThaneNavy office for more information. Other Surfaces: Check the suitability of GN206PF, apply a suitable primer following its Technical Data Sheet and then apply the GN206PF. Contact GlobalThaneNavy office for further information.
APPLICATION METHOD	SPRAY: Use air less spray. Use an equipment with a 170-200 bar outlet pressure. A 0,012" - 0,017" tip is recommended. On conventional air spray equipment, it is advisable to use a pressure vessel adding the less possible thinner. CONVENTIONAL METHODS: Brush and roller are suitable for "stripe-coat" and small areas, care should be taken in order to achieve the specified DFT. When applying on enclosed areas ensure a good ventilation with dehumidified air.
APPLICATION CONDITIONS	The substrate temperature should be minimum 0°C (32°F) and at least 4°C (39°F) above the dew point of the air, measured in the vicinity of the surface. The moisture should be <85%. Assure a good ventilation with dry air in confined areas.
APPLICATION DATA	Global GN206 Polyurethane Finish is a two pack product, so the base and hardener must be mixed on the right ratio. First, mix well component A during 1 minute. After that, add all the hardener and stir very well until it get homogeneous. If necessary, for na application optimization adjustment, the product can be diluted until 10 % (v/v) with GN001TH. Mix completely both quantities of component A and B packs. Low temperature cause higher pot life, and higher temperatures decrease mixture pot life.
MIX RATIO	4 / 1 (by Weight) 3 / 1 (by Volume)
HARDENER	H200P
POT LIFE	2 hours (23°C/73°F).

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THINNER	GN001TH
SOLVENT / CLEANER	GN001TH/GN010TH
DRY TIME	Surface dry: 2 hours at 23°C (73°F); 1 hour at 30°C (86°F). Dry to recoat: Min: 16 hours at 23°C (73°F).
THEORETICAL COVERAGE	12,8 m2/Lt (520,96 Sq.ft/US gal) - Dft: 50 µm (2 mils) • Wet: 78 µm (3 mils)
TYPICAL PAINT SYSTEM	<ul style="list-style-type: none"> • GlobalDur GN101LCEP 2 x 125µm (DFT) • GlobalThane GN206FP 1 x 64µm (DFT). This is a typical system for marine structures on non immersion conditions. Please contact GlobalNavy for other applications. If exact colour matching is required, ensure that GN206PF in each area is applied from the same control batch numbers.
STORAGE	4 years (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) 1L, 5L and 20L.
FURTHER INFORMATION	The ventilation should be done with dehumidified air.
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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