

GlobalThane GN205 Polyurethane Finish



TECHNICAL DATA SHEET



High Abrasion Resistance Polyurethane Finish

PRODUCT DESCRIPTION	<ul style="list-style-type: none">◆ GlobalThane GN205PF is a good weathering resistance two pack polyurethane finish.◆ GlobalThane GN205PF has a high gloss finish and it is specially design to have high abrasion resistance for flooring systems.		
PERFORMANCES	<ul style="list-style-type: none">• Excellent gloss and colour retention.• Excellent impact and abrasion resistance.• Good chemical resistance.• Good adhesion between coats.		
RECOMMENDED USE	FINISH OVER STEEL MARINE: Deck, Offshore structures, Shiplside's, Superstructures, etc.. PROTECTIVE: Bridges, walkways, machinery, railroad cars, metallic structures, exterior of pipe lines. FINISH OVER CONCRETE FLOORING: Excellent abrasion resistance on industrial flooring, parking, walk ways, etc.. FINISH OVER OTHER SUBSTRATES Recommended for application on Aluminium, Wood and Fiberglass, when properly primed.		
APPROVALS	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.		
COMPONENT A	COMPONENT B	COLOURS	
GN205PFG (Glossy)/GN20	H200P	GN205PF#G9003 (White), GN205PF#G9005 (Black), RAL colours. For other colours, please contact GlobalNavy's office.	

Physical Properties

GLOSS	GN205PFG (Glossy) GN205PFS (Satin) GN205PFM(Mate)
SOLIDS BY VOLUME	50 ± 2 %
VOC*	< 500g/L.
FLASH POINT	>25°C (> 77°F) Setaflash
PHYSICAL PROPERTIES	Density: 1,35 g/cm ³ Coating System Properties (GN120ER/GN132EFSL/GN205PF) Adhesion - Pull Off (ASTM D4541) Dry surface: >50 Kg/cm ² (MPa) (710 psi) (or >1,5 Kg/cm ² (MPa) cohesive on the concrete) Adhesion- Tape test (ASTM D3359) Rate - 5B (between finish coat GN2##PF and GN132EFSL) Abrasion Strength (ISO7784-2) 24 mg (1000 cycles / 1000 g / CS10)

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Barcol Resistance (ASTM D2583) 30
 Maximum Elongation (ISO/R 527) 2%
 Elasticity Modulus (ISO/R 527) 100,000 KgF/cm²
 Compressive Strength (ISO 844) 1.050 KgF/cm² (15,000 psi)
 Flexural Strength (ISO 178) 650 KgF/cm² (9245 psi.)
 Impact Resistance (EN ISO 6272) IR4
 Deformation/Impact test (ASTM D2794) 1.22 KgF.m (12,0 Joules)
 Exterior Exposure (ASTM D1014) 2 years- (Chalking) (ASTM D659): Rate 1
 QUV (Using A340 & B313 bulbs) 2000 hours – (Chalking) (ASTM D659): Rate 1
 Absorption (ASTM D570) 0,1%
 Fire Reaction (EN 13501-1) Bfl-s1

Application

SURFACE PREPARATION	<p>All the surfaces have to be clean, dry and without contamination. The surface should be evaluated and treated accordingly with ISO8504.</p> <p>Coated Surface: Clean, undamaged and dry compatible primer. Contact GlobalNavy office for more information.</p> <p>Other Surfaces: Check the suitability of GN205PF, apply a suitable primer following its Technical Data Sheet and then apply the GN205PF. Contact GlobalNavy office for further information.</p>
APPLICATION METHOD	<p>SPRAY: Use air less spray. Use na 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 is suitable for "stripe-coat" and small areas; roller is suitable for flooring applications- care should be taken in order to achieve the specified DFT. When applying on enclosed areas ensure a good ventilation with dehumidified air.</p>
APPLICATION CONDITIONS	<p>The substrate temperature should be minimum 10°C (32°F) and at least 4°C (7°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.</p>
APPLICATION DATA	<p>GlobalThane GN205 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 an application optimization adjustment or to get a better levelling, the product can be diluted until 5 % (v/v) with GN010TH. Mix completely both quantities of component A and B packs. Low temperature cause higher pot life, and higher temperatures decrease mixture pot life.</p>
MIX RATIO	4 / 1 (by Weight) 3 / 1 (by Volume)
HARDENER	H200P
POT LIFE	4 hours (23°C/73°F).
THINNER	GlobalThyn GN010TH.
SOLVENT / CLEANER	GlobalThyn GN010TH.
DRY TIME	<p>Surface dry: 3 hours at 23°C (73°F); 2 hour at 30°C (86°F).</p> <p>Dry to recoat: Min: 16 hours at 23°C (73°F).</p>
THEORETICAL COVERAGE	10,0 m ² /Lt (407 Sq.ft/US gal) Dry: 46 µm (2 mils) • Wet: 100 µm (4mils).
TYPICAL PAINT SYSTEM	• GlobalDur GN120ER 1 x 200gr. (DFT) • GlobalDur GN132EFSL 1 x 300gr. (DFT) •

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GlobalThane GN205PF# 1 x 100 gr. (WFT). This is a typical system for flooring systems. Please contact GlobalNavy for other applications.
If exact colour matching is required, ensure that GN205PF 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, 5 L and 20L.

FURTHER INFORMATION

For the safety of the applicator and the good performance, ventilation should be provided to all portions of the enclosed area. Dry air IS VERY IMPORTANT. Product CAN NOT be applied with humidity over 85%.

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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