

GlobalThane GN206 Polyurethane Finish LC



TECHNICAL DATA SHEET

Polyurethane Finish Long Cycle

PRODUCT DESCRIPTION	<ul style="list-style-type: none">◆ GlobalThane GN206PFLC is a finish two pack polyurethane finish.◆ GlobalThane GN206PFLC is a high glossy finish low cost polyurethane ideal for steel structures not subject to harsh environments.	
PERFORMANCES	<ul style="list-style-type: none">• Good weather resistance and gloss retention;• Fast surface dry;• Excellent glossy finish and easy to apply.	
RECOMMENDED USE	FINISH OVER STEEL PROTECTIVE: Bridges, machinery, railroad cars, metallic structures, exterior of pipe lines. FINISH OVER OTHER SUBSTRATES Recommended for application on Concrete, 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
GN206PFLC	H206PFLC	GN206PFLCG9003 (White), GN206PFLCG9005 (grey). For other RAL colors, please contact GlobalNavy office.

Physical Properties

GLOSS	Glossy
SOLIDS BY VOLUME	50 % ± 2 %
VOC*	Max. 480g/L
FLASH POINT	-4°C (16°F) Setaflash
PHYSICAL PROPERTIES	Density: 1,2 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 GN206PFLC, apply a suitable primer following its Technical Data Sheet and then apply the GN206PFLC. 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

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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	GlobalThane GN206 Polyurethane Finish LC 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 5 % (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	4,2 / 1 (by Weight) 3 / 1 (by Volume)
HARDENER	H206PFLC
POT LIFE	4 hours (23°C/73°F). The temperature and the use of the accelerator GN200CA lower the pot life.
THINNER	GN001TH
SOLVENT / CLEANER	GN001TH/GN077TH
DRY TIME	Surface dry: 45 minutes at 23°C (73°F); 1/2 hour at 30°C (86°F). Dry to recoat: Min: 16 hours at 23°C (73°F). The use of the accelerator thinner should be carefully done accordingly with the temperature, because an higher % means a lower paint pot life.
THEORETICAL COVERAGE	10,0 m2/Lt (520,96 Sq.ft/US gal) - Dft: 50 µm (2 mils) • Wet: 100 µm (4 mils)
TYPICAL PAINT SYSTEM	• GlobalDur GN125EP 2 x 100µm (DFT) • GlobalThane GN206PFLC 1 x 50µm (DFT). This is a typical system for steel strucutres on non immersion conditions. Please contact GlobalNavy for other applications. If exact colour matching is required, ensure that GN206LCPF in each area is applied from the same control batch numbers.
STORAGE	2 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 20 L.
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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GN101 + GN206PFLC - Additional Information

CURING TIME TABLE

GN101EP		0°C	5°C	10°C	15°C	20°C	25°C
Pot Life		220 minutes	160 minutes	120 minutes	90 minutes	60 minutes	40 minutes
Dry to touch (Max.)		24 h	20 h	16 h	12 h	4 h	3,5 h
Foot traffic		48 h	32 h	24 h	22 h	20 h	18 h
Recoating period	Min.	48 h	24 h	16 h	8 h	4 h	4 h
	Max.	16 days	12 days	7 days	7 days	7 days	5 days

GN206PFLC			10°C	15°C	20°C	25°C	30°C
Pot Life			12 h	6 h	5 h	4 h	3 h
Dry to touch (Max.)			140 minutes	90 minutes	50 minutes	40 minutes	30 minutes
Foot traffic			30 minutes	20 minutes	15 minutes	12 minutes	10 minutes
Recoating period	Min.		48 h	24 h	16 h	14 h	12 h
	Max.		-	-	-	-	-

PHYSICAL PROPERTIES - Globalnavy R&D Laboratory

Adhesion - Pull Off (ASTM D4541)	Wet surface: 120 Kg/cm ² (1706 psi) Dry surface: 170 Kg/cm ² (2417 psi)
Abrasion Strength (ASTM D4060)	55 mg (1000 cycles / 1000 g / CS10)
Coefficient of Thermal Expansion	15 x 10 ⁻⁶ /°C
Barcol Resistance (ASTM D2583)	28
Elasticity Modulus (ISO/R 527)	100,000 KgF/cm ²
Salt spray resistance (ASTM B117)	Without defects - 4000 hours
Humidity (ASTM D2247)	Without defects
Minimum - Maximum elongation (ISO/R 527)	3% - 14%
Compressive Strength (ISO 844)	1.050 KgF/cm ² (15,000 psi)
Flexural Strength (ISO 178)	650 KgF/cm ² (9245 psi.)
Condensation Resistance (ASTM D4585)	2000 hours – Without defects
Exterior Exposure (ASTM D1014)	2 years- Chalking (ASTM D659): rating 0
Immersion in water (ASTM D870)	Without defects - 4000 hours
Immersion in artificial salt water (ASTM D870)	Without defects - 4000 hours
QUV (Using A340 & B313 bulbs)	2000 hours – Chalking (ASTM D659): rating 0
Adhesion- Tape test (ASTM D3359)	Rating - 5B
Deformation/Impact test (ASTM D2794)	2.0 Kgf.m (19,6 Joules)
Flexibility - Mandrel (ASTM D522)	Without defects
Absorption (ASTM D570)	0,30%
Prohesion (ASTM G85)	Without defects - 2000 hours