## GlobalDur GN121 Epoxy Primer



# TECHNICAL DATA SHEET

## **Epoxy Primer Tolerant High Solids**

#### PRODUCT DESCRIPTION

- ♦ GlobalDur GN121EP is an excellent economic epoxy/amine two pack anti-corrosive solvent free primer for steel. Can also be applied over concrete.
- ♦ GlobalDur GN121EP is a primer designed for excellent anticorrosive and edge retention performance.
- ♦ GlobalDur GN121EP is a primer specially designed to be applied over well tightly adherent rust and moisture or dry surfaces.
- ♦ GlobalDur GN121EP is a primer specially designed for excellent performances on hydroblasted prepared surfaces.
- ◆ GlobalDur GN121EP can be applied as a primer, intermediate or finish (however may have slight colour differences due to its particular curing properties).

#### **PERFORMANCES**

- Excellent anticorrosive performance clubing inhibitor and rust conversion properties;
- No humidity/dew point restrictions;
- Excellent resistence to impact;
- No surface profile needed;
- Good adhesion to substrate and between coats;
- \$\$\$ Surface preparation cost reduction;
- Good edge retentive properties;
- Good chemical resistance.

#### **RECOMMENDED USE**

PRIMER/INTERMEDIATE/FINISH OVER STEEL

MARINE: ballast tanks, fuel/crude oil tanks, decks, bilge and void areas, double bottoms, rigs, offshore platforms, etc..

PROTECTIVE: Bridges, machinery, railroad cars, metallic structures, lead and other coatings covered structures, fuel and water pipe lines.

PRIMER/INTERMEDIATE/FINISH OVER CONCRETE

Can be applied on floor and for concrete protection.

#### **APPROVALS**

Complies with ISO 12944-5, as being suitable for coating systems until C5-M.

COMPONENT A	COMPONENT B	COLOURS
GN121EP	H101LC / H121EP	GN121EPG7000 (Light Grey), GN121EPG3009 (Red Iron Oxide). For
		other colours, please contact GlobalNavy's office.

### Physical Properties

	H101LC: Satin. H121EP and H121EPLP: Glossy.
SOLIDS BY VOLUME	75 ±2 % .
VOC*	Max. 250g/L
FLASH POINT	> 27°C (> 81°F) Setaflash

ISSUED	Edition 03 / Mod.10 - 21/05/2018

## GlobalDur GN121 Epoxy Primer



#### **PERFORMANCE**

### **Application**

#### SURFACE PREPARATION

Painting Direct to the Substrate: GlobalDur GN121EP is suitable for surfaces prepared by hydroblasting, grit blasting (dry or wet) and mechanical, accordingly with the following standards: Grit Blasting: SA2 (ISO 8501-1:1988)

Hydroblasting: Wj2-M (SSPC SP12 – VIS4(I) / NACE №5- №7)

Mechanical Means: St3 (ISO 8501-1:1988)

Apart from the surface preparation method, the moisture tolerance of GlobalDur GN121EpoxyPrimer allow the surface to be washed with tap water before painting, ensuring a final lower salts level. By this way, it is possible to achieve a non visual standard SC2 (NACE 5 / SSPC-SP12). The rust tolerance of GlobalDur GN121EpoxyPrimer allow a painting with a flash rust until M degree (standard SSPC VIS4(I) / NACE Nº7). The anti-corrosive performance over na ST3 surface, followed by degreasing and surface wash is however not so good as the other surface preparation methods. Over coated surfaces be sure of the old coating conditions (no coating defects and corrosion- in "sound conditions") and the compatibility with the GlobalDur GN121EP. Please contact GlobalNavy office in case of any doubt or for further information.

#### APPLICATION METHOD

SPRAY: Use air less spray. Use an equipment with a compressing 60:1 ratio, an inlet 4,5 bar pressure, allowing a 240-310 bar outlet pressure. A 0,019" or 0,0 21" tip is recommended. Conventional spray equipment only on special application conditions- contact GlobalNavy for more information. 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. It is not necessary to use dehumidification equipment: GlobalDur GN121EP can be applied on dry or wet surfaces, even with 100% humidity and surface temperatures below the dew point.

#### APPLICATION CONDITIONS

The substrate temperature shall be between 10°-50°C. The ambient temperature shall be >15°C and moisture >12%. There is no dew point restrictions.

#### APPLICATION DATA

GlobalDur GN121EP EpoxyPrimer is a two pack product, so the base and hardener must be mixed on the right ratio. First, mix well component A during 2 minutes. After that, add all the hardener and stir very well until it get homogeneous. Only 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.

#### **MIX RATIO**

H101LC: 9 / 1 (by Weight) 7 / 1 (by Volume) H121EP: 4.3 / 1 (by Weight) 3 / 1 (by Volume) H121EPLP: 8,5/1(by weight) 6/1(by Volume)

#### **HARDENER**

H101LC

#### **POT LIFE**

H101LC: 6 hours (at 23°C(73°F)). H121EP: 3 hours (at 23°C(73°F)). H121EPLP: 2 hours (at 30°C (86°F)).

#### THINNER

GN001TH/GN003TH

#### SOLVENT / CLEANER

GN003TH

#### **DRY TIME**

Surface dry:

H101LC: 6 hours at 15°C (59°F); 4 hours at 20°C (68°F); 2 hours at 25°C (77°F); 1 hours at 30°C (86°F).

#### **ISSUED**

## GlobalDur GN121 Epoxy Primer



PERFORMANCE IN COATINGS

H121EP and H121EPLP: 4 hours at 15° C: 2 hours at 20° C: 1 hour at 25° C: 30 minutes at 30° Dry to recoat: Min: 24 hours at 15°C (59°F); 20 hours at 20°C (68°F); 16 hours (25°C/77°F); 12 hours at 30°C (86°F).

Max: 10 days at 15°C (59°F); 10 days at 20°C (68°F); 8 days at 25°C (77°F); 6 days at 30°C (86°F).

THE	OR	ETIC	AL (	COV	/ERA	GE

7,5 Sq.m/Lt. (305 Sq.ft/US gal) - Dry: 100 microns/Wet: 133 microns (5 mils)

#### TYPICAL PAINT SYSTEM

 GlobalDur GN121EP 1 x 100μm (DFT) • GlobalThane GN206PF 1 x 64μm (DFT). This is a typical system for structures on non immersion conditions. Please contact GlobalNavy for other applications.

#### **STORAGE**

4 years (storage on the original tightly closed containers in a dry, cool, well ventilated space, at temperatures between 5°C - 40°C).

#### **PACKING**

Two pack product, available in packs (A+B), 1L, 5L and 20 L.

#### **FURTHER INFORMATION**

The conventional air spray is only possible with a much higher dilution ratio, so it only should be used on special applications.

If exact colour matching is required, ensure that GN121EP 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.

Parque Industrial de Carrascas, Estrada Nacional 252, 2950-402 Palmela PORTUGAL

◆ Tel.:+351 265107979

♦ www.globalnavy.net
♦ email: sales@globalnavy.net