GlobalDur GN101 Epoxy Primer



TECHNICAL DATA SHEET



Epoxy Primer Solvent-free Converter/Inhibitor/Moisture Tolerant for Low Temperature and Potable Water

PRODUCT DESCRIPTION

- ♦ GlobalDur GN101EP is an excellent epoxy/amine two pack anticorrosive solvent free primer for steel. Can also be applied over concrete and on one coat.
- ◆ GlobalDur GN101EP is an excellent primer specially design to cure at very low temperatures.
- ♦ GlobalDur GN101EP is a primer specially design to be applied over well tightly adherent rust and moisture or dry surfaces.
- ◆ GlobalDur GN101EP is a primer specially design for excellent performances on hydroblasted prepared surfaces.
- ◆ GlobalDur GN101EP can be applied as a primer, intermediate or finish (however may have slight colour differences due to its particular properties).
- ♦ GlobalDur GN101EP_3/1 is a version of 3/1 by volume design for easy application on plural airless equipment.

PERFORMANCES

- Excellent anticorrosion performance allying conversion and inhibitor properties;
- Suitable for coating surfaces for potable water tanks and pipelines;
- No humidity/dew point restrictions;
- Curing temperature until -10° C (14°F);
- Fast overcoating time (4hours/30°C) and operation time (48hours/30°C) for immersion conditions.
- Excellent resistance to wearing and impact;
- High film thickness- coating system on one coat with 625 microns (25 mils).
- No surface profile needed;
- Absence of health harm solvents;
- Excellent adhesion to substrate and between coats;
- Surface preparation cost reduction;
- Excellent edge retention over 70%;
- Good chemical resistance.

RECOMMENDED USE

PRIMER/INTERMEDIATE/FINISH OVER STEEL

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

PROTECTIVE: Potable water tanks, bridges, machinery, railroad cars, metallic structures, lead and other coatings covered structures, interior/exterior of fuel and water pipe lines.

APPROVALS

Certified for potable water accordingly UNE-EN ISSO 12873-2.

Complies with ISSO 12944, as being suitable for coating systems until C5-M, Im3 and systems for environment of corrosivity category CX (off-shore).

COMPONENT A

COMPONENT B

COLOURS

GN101EP/GN101EP 3/1

H101EP/H101EP_3/1

GN101EPG7000 (Light Grey), GN101EPG3009 (Red Iron Oxide), GN101EPNCS0530R80B (light blue), GN101EPR9010 (Offwhite). For other colours, please contact GlobalNavy's office.

GlobalDur GN101 Epoxy Primer



	Ph	ysical	Pro	perties
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GLOSS	Glossy.
SOLIDS BY VOLUME	100 % (theoretical).
VOC*	30g/L.
FLASH POINT	> 121°C (> 250°F) Setaflash
PERFORMANCE	Density: 1,3 g/cm³

Application

SURFACE PREPARATION

Painting Direct to Metal: GlobalDur GN101EP, 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)

Wet Blasting:WAB-6 M (NACE 6G198, NACE Vis 9)

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

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

Apart from the surface preparation method, the moisture tolerance of GlobalDur GN101EpoxyPrimer 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 GN101EpoxyPrimer 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 GN101EP. 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 23" tip is recommended. For GN101EP 3/1 Version, plural equipment is recomended for reduce losses on product consumption. 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 DFT specified. When applying on enclosed areas ensure a good ventilation. It is not necessary to use dehumidification equipment: GlobalDur GN101EP 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 -10°-+50°C. The ambient temperature shall be >-10°C and moisture >12%. There is no dew point restrictions. However the surface must be without ice.

APPLICATION DATA

GlobalDur GN101 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 a application adjustment, the product can be diluted until 5 % (v/v) with GN001TH. Mix completely both quantities of component A and B packs.

For GN101EP_3/1 version, when using plural equipment, mix each component before use it or every after 24 hours.

MIX RATIO

4,3 / 1 (by Weight) 3,3 / 1 (by Volume)(GN101EP version)

GlobalDur GN101 Epoxy Primer



	3,8 / 1 (by Weight) 3 / 1 (by Volume)(GN101EP_3/1 version)
HARDENER	H101EP/H101EP_3/1
POT LIFE	1 hour (23°C).
THINNER	GN001TH/GN003TH
SOLVENT / CLEANER	GN003TH
DRY TIME	Surface dry: 2 hours at 30°C (86°F); 3 hours at 23°C (73°F); 24 hours at -10°C (+14°F). Dry to recoat: Min: 3 hours at 30°C (86°F); 4 hours at 23° C (73°F); 24 hours at -10°C (+14°F). Max: 3 days at 30°C (86°F); 7 days at 23°C (73°F); 10 days at -10°C (+14°F).
THEORETICAL COVERAGE	6.6 Sq.m/Lt. (268,62 Sq.ft/US gal - Dry/Wet: 150 microns (6 mils)
TYPICAL PAINT SYSTEM	• GlobalDur GN101EP 2 x 200µm (DFT). This is a system for a tank on water 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) 1 L, 5 L and 20 L. For GN101EP_3/1 version available also in 700 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 GN101EP 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.

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