

# GlobalDur GN101 High Temperature Epoxy



## TECHNICAL DATA SHEET



### Epoxy Silicon 2K for High Temperatures

<b>PRODUCT DESCRIPTION</b>	<ul style="list-style-type: none"> <li>◆ GlobalDur GN101HT is an excellent special hybrid epoxy/silicone two pack anticorrosive solvent free primer for steel.</li> <li>◆ GlobalDur GN101HT is a primer design for excellent anticorrosive performances.</li> <li>◆ GlobalDur GN101HT is a primer specially design to be applied over hot surfaces until 180°C.</li> <li>◆ GlobalDur GN101HT is specially design for excellent edge retentive properties.</li> <li>◆ GlobalDur GN101HT is a primer specially design for excellent performances on hot steel surfaces with operational temperatures until 220°C.</li> <li>◆ GlobalDur GN101HT can be applied as a primer, intermediate or finish (however may have slight colour differences due to its particular curing properties).</li> </ul>	
<b>PERFORMANCES</b>	<ul style="list-style-type: none"> <li>• Unique solvent free epoxy for application on hot surfaces (until 180°C) and with operational properties on high temperatures (220°C);</li> <li>• Excellent anticorrosive performance clubing inhibitor and conversion properties;</li> <li>• No humidity/dew point restrictions.</li> <li>• Excellent resistance to wearing and impact;</li> <li>• Absence of health harm solvents;</li> <li>• Excellent adhesion to substrate and between coats;</li> <li>• \$\$\$ Operational maintenance cost reductions;</li> <li>• Excellent edge retentive properties;</li> <li>• Good chemical resistance.</li> </ul>	
<b>RECOMMENDED USE</b>	<p>PRIMER/INTERMEDIATE/FINISH OVER STEEL  MARINE: fuel/crude oil tanks, rigs, offshore platforms, etc..  PROTECTIVE: Machinery, metallic structures, storage tanks, chimneys, hot pipe lines.  PRIMER/INTERMEDIATE/FINISH OVER CONCRETE  Can be applied on floor and for concrete protection on special conditions - Please contact your local GlobalNavy office for more information.</p>	
<b>APPROVALS</b>	<p>Complies with ISO 12944-5, as being suitable for coating systems until C5-M.</p>	
<b>COMPONENT A</b>	<b>COMPONENT B</b>	<b>COLOURS</b>
GN101HT	H101HT	GN101HTG7000 (Light Grey), GN101HTG3009 (Red Iron Oxide). For other colours, please contact GlobalNavy's office.

### Physical Properties

<b>GLOSS</b>	Semi gloss.
<b>SOLIDS BY VOLUME</b>	100 % (theoretical).
<b>VOC*</b>	

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<b>FLASH POINT</b>	> 180°C (>356°F) Setaflash
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<b>PHYSICAL PROPERTIES</b>	Density: 1,4 g/cm <sup>3</sup>
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## Application

<b>SURFACE PREPARATION</b>	<p>Painting Direct to Metal: GlobalDur GN101HT is suitable for surfaces prepared by hydroblasting, grit blasting (dry or wet) and mechanical, accordingly with the following standards:            Grit Blasting: SA2 (ISSO 8501-1:1988)            Wet Blasting: WAB-6 M (NACE 6G198, NACE Vis 9)            Hydroblasting: Wj2-M (SSPC SP12 – VIS4(I) / NACE N<sup>o</sup>5- N<sup>o</sup>7)            Mechanical Means: St3 (ISSO 8501-1:1988)</p> <p>Apart from the surface preparation method, the moisture tolerance of GlobalDur GN101HT 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 GN101High Temperature allow a painting with a flash rust until M degree (standard SSPC VIS4(I) / NACE N<sup>o</sup>7). 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 GN101HT. Please contact GlobalNavy office in case of any doubt or for further information.</p>
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<b>APPLICATION METHOD</b>	<p>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 DFT specified. When applying on enclosed areas ensure a good ventilation. It is not necessary to use dehumidification equipment: GlobalDur GN101HT can be applied on dry or wet surfaces, even with 100% humidity and surface temperatures below the dew point.</p>
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<b>APPLICATION CONDITIONS</b>	The substrate temperature shall be 40°-180°C. The ambient temperature shall be >25°C. There is no dew point restrictions.
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<b>APPLICATION DATA</b>	GlobalDur GN101 High Temperature 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.
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<b>MIX RATIO</b>	2,8 / 1 (by Weight) 2 / 1 (by Volume)
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<b>HARDENER</b>	H101HT
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<b>POT LIFE</b>	90 minutes (at 23°C(73°F)).
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<b>THINNER</b>	GN001TH
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<b>SOLVENT / CLEANER</b>	GN003TH
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<b>DRY TIME</b>	<p>Surface dry: 6 hours at 60°C (140°F); 1 hour at 80°C (176°F); 15 minutes at 180°C (320°F).            Dry to recoat:            Minimum: 24 hours at 60°C (140°F); 2 hours at 80°C (176°F); 30 minutes at 180°C (356°F).            Maximum: 3 days at 60°C (140°F); 2 days at 80°C (176°F); 1 day at 180°C (356°F).</p>
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<b>THEORETICAL COVERAGE:</b>	6.6 Sq.m/Lt. (268,62 Sq.ft/US gal) - Dry/Wet: 150 microns (6 mils)
<b>TYPICAL PAINT SYSTEM</b>	• GlobalDur GN101HT 2 x 200µm (dft) • GlobalDur GN005HT 1 x 50µm (dft). This is a system for external storage tanks and pipelones with excellent anticorrosive and weather resistance conditions. Please contact GlobalNavy for other applications.
<b>STORAGE</b>	2 years (storage on the original tightly closed containers in a dry, cool, well ventilated space, at temperatures between 5°C - 30°C).
<b>PACKING</b>	Two pack product, available in packs (A+B) 5 L and 20 L.
<b>FURTHER INFORMATION</b>	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 GN101HT in each area is applied from the same control batch numbers.
<b>HEALTH SAFETY</b>	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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