

## STOPAQ® FAST BASECOAT GRE SA

### Product Information

**Product description:** Stopaq® FAST Basecoat GRE SA is a corrosion preventative wrap material adhering extremely well to steel and factory applied pipeline coatings like PE, PP and FBE.

Stopaq® FAST Basecoat GRE SA is a non-toxic, cold-applied, prefabricated wrap coating, based on a compound containing non-crystalline, low-viscosity, non-crosslinked (fully amorphous), pure homopolymer Polyisobutene. It has a thin non-woven backing layer that suits application of mechanical protective materials.

Stopaq® FAST Basecoat GRE SA is viscous at the indicated operating temperatures. Due to its liquid nature it has a set of unique properties, like cold-flow into all irregularities of the substrate, and self-healing of the complete coating system. The compound does not cure and is unable to build up internal stress. Stopaq® FAST Basecoat GRE SA is fully resistant to water and has a low gas- and water vapour permeability.

Stopaq® FAST Basecoat GRE SA is especially designed for application as part of Factory Applied Stopaq® (FAST) coating systems and for field joint coating of pipes with parent FAST coating systems. It requires an additional rigid but flexible mechanical protective layer like Stopaq® FAST GRE (Glass-fibre Reinforced Epoxy), or Stopaq® Outerwrap tape (various types available). This improves impact resistance, abrasion resistance and indentation resistance of the coating system, and supports the self-healing ability of small damages like cracks and cuts.

#### Features:

- Controlled cold flow providing permanent inflow into the finest pores of the substrate
- Resistant to low temperatures without getting brittle
- Conforms to irregular shapes
- Low surface tension; adheres on many types of dry substrates at a molecular level
- Surface tolerant: no abrasive blasting techniques required, wire brushing is sufficient (ISO 8501-1: St 2)
- Constant film thickness
- Adhesion based on vanderWaals forces
- Self-healing of small dents, voids and cracks
- Inert to ageing and weathering
- Resistant to many chemicals like water, salts, acids, alkalis, polar solvents, etc. For additional information, please consult Seal For Life Industries.

#### Benefits:

- Safe to use. No physical, health or environmental hazards
- Very well suited for FAST machine applied coating
- Fast and easy field application
- Can be moulded onto various types of irregular shaped objects
- No osmosis or underfilm migration of moisture
- No cathodic disbondment
- Cathodic Protection (CP) of steel structures is not affected

### Application examples

**Factory Applied Coating:** Coating application in pipe mills for protection against external corrosion of buried, immersed or above ground carbon steel, alloy steel and ductile iron pipelines, structures and reservoirs.

**Pipeline Field Joints:** Field application for protection against external corrosion of buried, immersed or above ground carbon steel, alloy steel and ductile iron pipeline girth-weld joints with parent Stopaq FAST Basecoat GRE SA coating.

### Product properties of Stopaq® FAST Basecoat GRE SA

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| <b>Colour</b>   | Green  |
| <b>Thickness</b>  | 1,0 mm [40 mils] nominal <sup>A)</sup>   |
| <b>Density</b>  | 1,5 ± 0,1 g/cm <sup>3</sup> [12.5 ± 0.8 lbs/gal] (ISO 1183-1)  |
| <b>Temperature ranges</b>                                   | Operational: -45 °C to +70 °C [-49 °F to +158 °F]<br>Short term: +90 °C [+194°F]   |
| <b>Glass transition temp.</b>                               | ≤ - 65°C [-85°F] <sup>A)</sup>   |
| <b>Crystallisation temp.</b>                                | Tested range -100°C to +190°C [-148 °F to +374 °F] <sup>A)</sup><br>– No evidence of crystallization   |
| <b>Holiday detection</b>                                    | No holidays at 10 kV <sup>A)</sup>   |
| <b>Drip resistance</b>                                      | Tested 48h @ +130 °C [+266 °F] <sup>A)</sup> :<br>– No dripping of compound  |
| <b>Adhesion</b>   | Tested on steel (Sa 2½, St 2 and St 3) and plant coatings PP, PE and FBE <sup>A)</sup> . Results on all substrates:<br>– Cohesive failure, no evidence of adhesive failure<br>– Film of corrosion preventative compound is left on the substrate |
| <b>Resistance to thermal ageing and hot water immersion</b> | Ageing for 100 days at +90 °C [+194°F] <sup>A)</sup> , dry and immersed in hot water:<br>– Results of adhesion test are identical to results obtained with non-aged material.  |

<sup>A)</sup> According to ISO 21809-3:2016 coating type 13

### General order information

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| <b>Product</b>  | Stopaq® FAST Basecoat GRE SA is available in rolls of various widths and lengths.<br><br><u>Art. Nr.:</u> <b>Product dimensions and contents:</b><br>69951-01500 100mm x 15m [4'x49'], 6 pcs/box, 180 pcs/pallet<br>69953-03500 200mm x 35m [8'x115'], 2 pcs/box, 96 pcs/pallet<br>69954-03500 300mm x 35m [12'x115'], 2 pcs/box, 80 pcs/pallet<br>Other sizes on request. |
| <b>Handling</b> | Handle with care. Keep boxes upright.  |
| <b>Storage</b>  | Store indoor, clean and dry, away from direct sunlight in a cool place below +45 °C [113 °F].<br>Unlimited shelf life.   |

| Application instruction - Job preparation |   |
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| <b>Tools, equipment and auxiliaries</b>   | <ul style="list-style-type: none"> <li>– Temperature probe, Dew point tester, High voltage holiday tester</li> <li>– Scissors, Knife, Putty knife, Measuring tape</li> <li>– Abrasive cleaning pads, Wire brushes</li> <li>– SFL Cleaning Wipes, SFL Substrate Cleaner, or Isopropyl alcohol, cas. nr. 67-63-0</li> <li>– Personal protective gear</li> </ul>   |
| <b>Additional coating materials</b>       | <p>Stopaq® FAST Basecoat GRE SA is applied as part of factory- or field applied coating system. It must be used with one of the following additional mechanical protective layers:</p> <ul style="list-style-type: none"> <li>– Stopaq® FAST GRE, consisting of:                             <ul style="list-style-type: none"> <li>▪ Powercrete® FAST GRE Part A (Epoxy)</li> <li>▪ Powercrete® FAST GRE Part B (Hardener)</li> <li>▪ Powercrete® FAST GRE Part C (Hardener)</li> <li>▪ Powercrete® FAST GRE Pigment Blue</li> <li>▪ Powercrete® FAST GRE Pigment Green</li> <li>▪ Stopaq® FAST GRE Fabric</li> <li>▪ Stopaq® FAST GRE Surface veil</li> </ul> </li> <li>– Stopaq® Outerwrap tape (various types)</li> </ul> <p>Please consult Seal For Life Industries for further details.</p> |
| <b>High humidity</b>                      | Stopaq® FAST Basecoat GRE SA can be applied in a humid atmosphere. The substrate must be free from condensing water which can be reached by keeping the temperature at least 3 °C [6 °F] above dew point.   |
| <b>Work area and substrate</b>            | The substrate must be dry, clean and protected against negative weather influences.   |
| <b>Product conditions</b>                 | Stopaq® FAST Basecoat GRE SA must be dry and the temperature should preferably be between +20 °C and +40 °C [68 to 104 °F] for the ease of application.   |

| Application instruction - Surface preparation |  |
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| <b>General</b>                                | The area to be coated must be clean, dry, and free from oil, grease and dust. All contamination including mill-scale must be removed.  |
| <b>Degreasing</b>                             | Degrease surfaces with SFL Cleaning Wipes, SFL Substrate Cleaner, or Isopropyl alcohol and e.g. a lint-free cloth.   |
| <b>Preventing condensation of water</b>       | Prior to and during the application, the temperature of the substrate(s) must be at least 3 °C [6 °F] above the dew point.   |
| <b>Substrate temperature</b>                  | Temperature of the substrate should preferably be between +20 °C and +40 °C [68 to 104 °F] for fast and easy application. Preheating may be required.  |
| <b>Carbon Steel</b>                           | Minimum requirement for surface preparation is St 2 according to ISO 8501-1. Roughness profile is not essential for adhesion.  |
| <b>Other substrates</b>                       | De-gloss and degrease the surfaces with SFL™ Cleaning Wipes, or with SFL™ Substrate cleaner or isopropyl alcohol and an abrasive pad.  |
| <b>Cleanliness check</b>                      | Take a piece of Stopaq® FAST Basecoat GRE SA of ± 150 mm [6"] length, remove the release foil and fold it back for about 25 mm [1"]. Put the Basecoat onto the surface, press it firmly and leave it for 5 minutes. Pull the Basecoat from the substrate with an angle of app. 135 deg. and a speed of 100 mm/min [4"/min]. Cohesive separation mode should occur and coverage of the surface with remaining material should be ≥ 95%. If this is less, surface cleaning is insufficient. At too low substrate temperatures this test may not be successful. Preheat the substrate to preferred temperature and repeat the test. |

| Application instruction – Brief version   |   |
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| See specific Stopaq coating instructions for application of Stopaq FAST Basecoat GRE SA |   |
| <b>Substrate unevenness</b>   | Excessive substrate unevenness – e.g. longitudinal and spiral pipe welds, and protruding parts – should be levelled using appropriate Stopaq materials prior to wrapping. These anomalies could otherwise cause incomplete coverage of the substrate, and leave possible risk of tenting.                               |
| <b>Wrapping</b>   | Start with removal of a small part of the release liner and apply the Stopaq® FAST Basecoat GRE SA on the substrate. Apply Stopaq® FAST Basecoat GRE SA preferably without tension and mould it to the substrate using slight pressure. In case of machine processing slight tension may be used. Avoid air inclusions. |
| <b>Release foil</b>   | Do not remove the release foil before application of the Stopaq® FAST Basecoat GRE SA. Remove just prior to application of Stopaq® FAST Basecoat GRE SA to the surface.   |
| <b>Overlap of wraps</b>   | Side-by-side overlap: ≥ 10 mm [3/8"]<br>Consecutive rolls: ≥ 50 mm [2"]<br>Overlap on existing coatings: See specific Stopaq coating instructions.  |
| <b>Visual inspection</b>  | The appearance of Stopaq® FAST Basecoat GRE SA must look smooth and tight, and should be shaped around all details and into corners.  |
| <b>Holiday detection</b>  | The coated surface must be checked for holidays using a high voltage holiday detector at 10 kV equipped with a brush probe prior to application of any outer mechanical protective layers.  |
| <b>Mechanical protective materials</b>  | Stopaq® FAST Basecoat GRE SA must be protected against impacts, indentations, soil pressure and other influences by application of Stopaq® FAST GRE epoxy coating system or suitable Stopaq® Outerwrap tape.  |

| Handling and commissioning  |   |
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| <b>Exposure to loads</b>    | Objects coated with Stopaq® FAST Basecoat GRE SA should not be exposed to loads e.g. from supports- or lifting equipment.   |
| <b>Immersion or burying</b> | Immersion or burying is possible immediately after completion of the coating application. Consult data sheets for specific instructions of additional materials used. Backfill and compact with clean sand and filling material without sharp stones or hard lumps of soil. |

| Information            |  |
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| <b>Documentation</b>   | Extensive information is available on our web-site. Application instructions and other documentation can be obtained by contacting our head office, from our local distributor or by sending email to <a href="mailto:info@sealforlife.com">info@sealforlife.com</a> |
| <b>Certified staff</b> | Application of the described coating system should be carried out by certified personnel.  |