

STOPAQ® WRAPPINGBAND SZ

Product Information

Product description: Stopaq® Wrappingband SZ is a corrosion preventing wrap material, adhering extremely well to wet surfaces such as immersed bare and coated steel. It is based on a compound containing non-crystalline, low-viscosity, non-crosslinked, (fully amorphous) pure homopolymer Polyisobutene. Stopaq® Wrappingband SZ is viscous at the indicated operating temperatures and, due to its liquid nature, flows into all irregularities of the substrate. The compound does not cure and is unable to build up internal stress.

Stopaq® Wrappingband SZ is applied as elementary part of the Stopaq® Splash Zone Coating System and requires additional mechanical protective layers like Stopaq® Intermediate Wrap PVC and Stopaq® Outerglass Shield XT Grey. This improves impact and indentation resistance of the coating system and ensures adequate performance of the corrosion preventing properties.

Features:

- Controlled cold flow providing permanent inflow into the finest pores of the substrate
- Resistance to low temperatures without getting brittle
- Conforms to irregular shapes
- Low surface tension; adheres on many types of dry and wet substrates at a molecular level
- Surface tolerant: no blasting techniques required, wire brushing is sufficient (ISO 8501-1: St 2)
- Constant film thickness
- Adhesion based on vanderWaals forces

Benefits:

- Safe to use. No physical, health or environmental hazards
- Fast and easy to apply
- Easy to control application
- Can be moulded onto various types of irregular shaped objects

Application examples

Offshore and submerged structures: For protection against external corrosion of steel jetty-pile structures situated in the splash zone.

Immersed pipelines: For protection against external corrosion of immersed carbon steel pipelines.

Underwater pipe coating repair: For pipe coating repair, coating rehabilitation, and protection against external corrosion of immersed pipeline coating defects.

Product properties of Stopaq® Wrappingband SZ

Colour	Dark green
Thickness	3,5 mm [140 mils] ± 10% ^{A)}
Density	1,3 – 1,4 g/cm ³ [10.8 – 11.7 lb/gal] (ISO1183-1)
Temperature ranges	Operational -20 to +50 °C [-4 °F to +122 °F] Short term max. +70 °C [+158 °F]
Drip resistance	Tested 48h @ +85 °C [+185 °F] ^{A)} – No dripping of compound
Adhesion	Peel tests on carbon steel St 2 cleanliness (ISO 8501-1), and plant coating PE and Neoprene, whereby the coating was applied under the following conditions: – Dry (no detectable salt residues) – Dry with NaCl contamination approx. 1000 mg/m ² – Immersed in fresh water – Immersed in 3% NaCl solution Peel test before ageing, after thermal ageing and after hot water immersion both for 100 days at +70 °C [+158 °F] (=Tmax + 20 °C) ^{A)} – Peel strength: @ +23 °C [+73 °F] ≥ 0,04 N/mm [3.6 ozf/in] @ +50 °C [+122 °F] ≥ 0,02 N/mm [1.8 ozf/in] – In all cases: Cohesive separation mode Coverage ≥ 95%
Lap shear resistance	Tested on steel St 2 cleanliness ^{A)} – Lap shear strength: @ +23 °C [+73 °F] ≥ 0,004 N/mm ² [0.58 psi] @ +50 °C [+122 °F] ≥ 0,001 N/mm ² [0.15 psi] – In all cases: Cohesive separation mode Coverage ≥ 95%
Properties of Stopaq® Splash Zone Coating System	
Construction	1. Stopaq® Wrappingband SZ: 2 layers. 2. Stopaq® Intermediate Wrap PVC: 2 layers. 3. Stopaq® Outerglass Shield XT Grey: 3 layers.
Total thickness	approx. 8 mm [± 5/16 "] ^{A)}
Impact resistance	Tested @+23 °C [+73 °F]: ≥ 15 J [132 in.lbf] ^{A)}
Indentation resistance	Tested at indentation pressure of 10 N/mm ² [1450 psi] @ +23 °C [+73 °F] and @ +50 °C [+122 °F] ^{A)} – residual thickness ≥ 0.6 mm [24 mils]
Specific electrical insulation resistance	R _{S100} ≥ 10 ⁸ Ω.m ² [≥ 10 ⁹ Ω.ft ²] ^{A)}

^{A)} In accordance with ISO 21809-3:2016

General order information

Product	Stopaq® Wrappingband SZ is available in rolls with following dimensions (W x L): Art. Nr.: <u>Product dimensions and contents:</u> 4401 100mm x 6m [4" x 19'7"], 6 pcs/box
Handling	Handle with care. Keep boxes upright.
Storage	Store indoor, clean and dry, away from direct sunlight in a cool place below +45 °C [113 °F]. Unlimited shelf life.

Application instruction - Job preparation	
General	Underwater application of Stopaq® Wrappingband SZ and additional Stopaq® materials should only be carried out by professional divers certified for application of Stopaq® products.
Tools, equipment and auxiliaries	<ul style="list-style-type: none"> – Surface preparation tools like water jetting equipment or power tooled wire brushes – Scissors, Knife, Measuring tape, Perforation roller – Personal protective gear and diving gear
Additional coating materials	<p>Additional materials are required as described in the specific coating instructions. For example, the following Stopaq® materials are needed for completing the installation of the Stopaq® Splash Zone Coating System:</p> <ul style="list-style-type: none"> – Stopaq® Intermediate Wrap PVC – Stopaq® Outerglass Shield XT Grey – Stopaq® Compression Foil <p>Depending on the type of application, the use of other materials may be required.</p>
Application conditions	The water and substrate temperature during application should be > +5°C [+41°F].

Application instruction - Surface preparation	
General	All substrates must be free from marine growth. Mill-scale, loose rust, loose remainders of old coating, oil, grease and other adhering matter need to be removed. Water jetting equipment may be used to obtain a sufficient clean substrate.
Steel substrate	<p>The entire steel substrate should at least be cleaned to St 2 cleanliness grade (ISO 8501-1). Start and end section of the area to be coated should be thoroughly cleaned to bare steel e.g. by using high pressure water jet cleaning. Roughness profile is not essential for adhesion. Areas with existing coating should be cleaned and de-glossed.</p>

Application instruction – Brief version	
See specific Stopaq coating instructions for e.g. Stopaq® Splash Zone Coating System	
Wrapping	Start with removal of a small part of the transparent release liner and apply the Stopaq® Wrappingband SZ onto the substrate. Apply the Wrappingband by moulding it to the substrate and minimize air- or water entrapment underneath the Wrappingband. Avoid strong pulling force on the roll of material and the Wrappingband.
Release liner	Do not remove the transparent release liner completely before application of the Stopaq® Wrappingband SZ. Remove just prior to application onto the substrate.
Overlap of wraps	Side-by-side overlap: 50% Consecutive rolls: ≥ 100 mm [4"]
Visual inspection	The appearance of Stopaq® Wrappingband SZ should look smooth and tight, and should cover all details with at least two layers of Wrappingband.
Mechanical protection	Stopaq® Wrappingband SZ must be protected against impacts, indentations, water pressure and other influences within the shortest period of time possible after finishing application. This is obtained by subsequent application of additional coating materials as per the specific application instruction, e.g. by application of Stopaq® Intermediate Wrap PVC and Stopaq® Outerglass Shield XT.

Handling and commissioning	
Exposure to loads	Objects coated with Stopaq® Wrappingband SZ should not be exposed to loads e.g. from supports- or lifting equipment.
Commissioning	Commissioning is possible immediately after completion of the coating application. Consult data sheets for specific instructions of additional materials used.

Information	
Documentation	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 info@stopaq.com
Certified staff	Application of the described coating system should be carried out by certified personnel.