

STOPAQ® FN 4200 – Injection Filler

Product Information

Generic type: Non toxic, single component, non-thermosetting injection filler. The FN 4200 has excellent adhesion- and penetration properties, a wide service temperature range, and is fully resistant to water.

Product Description: The corrosion protective, non curing, surface tolerant STOPAQ® FN 4200 is designed for filling and protecting poorly to clean or non cleaned corrosion sensitive areas in narrow, difficult to access above ground spaces such as gaps between flanges, around bolt threads in bolt holes and around flange seals where water can accumulate. The material is suited for application with a hand operated injection tool, equipped with a flexible nozzle (STOPAQ® supplied), does not cure and is unable to build-up internal stresses. Due to the permanent viscous properties, the STOPAQ® Injection Filler will during time, tend to flow out of the filled spaces. Therefore the filled gaps should be covered with a layer of STOPAQ® wrapping material, such as Wrappingband CZH or EZ Wrap. For above ground flange application, an additional mechanical protection layer such as STOPAQ® Flangebelt, Polyester, or UV-resistant PVC tape could be installed.

Features:

- Adheres on all dry substrates
- Easy to apply by injection equipment
- Surface tolerant
- Permanently fills the finest pores
- Resistant to temperatures down to -45°C
- Non toxic
- Seals off and stops active corrosion
- Blocks H2S gas
- Compatible with existing coatings

Benefits:

- Harmless to environment and workers
- Permanent sealing of narrow spaces
- No special equipment needed
- No special surface preparation and primers needed
- Cost- and time saving
- Unlimited shelf and pot life
- Very long service life

Application examples

Between flanges: above ground injection into the narrow spaces between flanges. Also flowing into the bolt holes, protecting the bolt threads and -shafts against corrosion.

Flange gaskets - external: For corrosion protection of the outside rims of gaskets in flange connections.

Storage tanks - chime plate gaps: For protection of steel surfaces in gaps between the tank skirts and the concrete foundations (Chime area).

Bolt connections: For protection of bolt threads and -shafts in deep bolt holes (in steel- as well as concrete constructions).

Product Properties_STOPAQ® FN 4200 Injection Filler

Colour	Green
Density	1,2 - 1,5g/cm ³ (NEN 1833)
Adhesion	No adhesion failure, cohesive break (Steel, PP, PE, Epoxy)
Moisture absorption	< 0,07% (ASTM D 570)
Temperature ranges	Temperatures in service: <ul style="list-style-type: none"> • Between -45°C and +100°C Substrate application temp.: <ul style="list-style-type: none"> • Between -10°C and +60°C Material temperature for application: <ul style="list-style-type: none"> • Between +20°C and +40°C
Resistance against thermal aging	No changes in properties (ASTM D 570)
Salt spray resistance	No corrosion detected (Tested for 720 h 5% NaCl at 85°C) (ASTM B 117)
General order information	
Product:	STOPAQ® FN 4200 is available in 0,53kg standard cartridges, 2kg "sausages" as well as in piles – 20kg.
Packaging:	The 500ml caulking-tool cartridges and 2kg "sausages" in PE-bags are packed in cardboard boxes. The 20kg units are filled in metal pails.
Handling:	Handle with care, boxes and pails always upright.
Storage:	Indoor, dry and clean. Storage temperature not critical. The material is non hazardous.

Application Instruction Preparation

Application	1: Putty knife (blade 25 - 40mm wide) 2: Tuck pointing trowel (10mm wide) 3: Twisted-in wire brush (bottle brush) 4: Abrading cloth (Schotch brite-type) 5: Masking tape (25mm wide) 6: Injection tool with flexible nozzle 7: Safety goggles, Hard hat & Gloves 8: Covering Wrap material
High humidity	STOPAQ® FN 4200 can be applied in a humid atmosphere that does not reach the dew point.
Work area and substrate	The work area and substrate should be protected against negative weather influences.
STOPAQ® conditions	The injection Filler should be dry and have a temperature, (20°C - 40°C) for the ease of injection.
Covering wrap	The dimension of the covering wrap material should include minimum 50 mm adhesion width on each side of the gap to be filled.
General	Substrate surfaces must be cleaned for grease and dirt, non-adhering coating and loose particles. (HP water-jetting).
Degreasing Salts and Bacteria	Degrease surfaces with isopropanol. No need for additional cleaning.
Condensation - water	Prior to – and during the application, the temperature of the substrate(s) must be at least 3°C above the dew point.
Steel	Clean the surfaces thoroughly by scraping and brushing in order to remove loose corrosion as much as possible.
Dust	Remove dust from the substrate by means of vacuum cleaning, dry, compressed air or a dry, clean bottle brush.
Masking	In order to keep the surroundings clean, for the later application of the STOPAQ® system, it is recommended applying masking tape on these surfaces, prior to injection.

Application instruction Brief version

Install pre-heated cartridges of FN 4200 in a manual-, electric- or pneumatic operated application tool. Apply the flexible nozzle, press the nozzle flat and start application as deep as possible in the gap to be filled. Avoid air enclosures by holding the nozzle in contact with the already injected material while building up the seal. When the FN 4200 becomes visible on both sides of the nozzle, it is an indication that the space is totally filled.

Smoothing Use the putty knife for smoothing the surface and removing of excess filler. Remove the masking tape.

Covering the gap Apply the seam sealant wrap material over the filled gap. Prevent air enclosures and firmly press or roll the wrap on each side of the gap, in order to achieve optimal adhesion on the adjacent areas.

Application instruction Quality control

Visual inspection Three QA inspections should be carried out: The first inspection after surface preparation, prior to injection, the second inspection after completed injection, prior to Seam Wrap application. The final QA inspection after completion of Seam Wrap application.

Bringing into service

Commissioning Areas filled with STOPAQ® FN 4200 Corrosion Protective Injection Filler are fully protected against corrosion from the moment of application.

Immersion, Backfilling Immersion or burial of the filled and sealed area is possible immediately after completion of the work. Backfill and compact with clean, sieved sand a fill material without sharp stones or hard lumps of fill.

STOPAQ® Information

Documentation Extensive information is available on our web-site. Application instructions, "STOPAQ® Technical Standard" can be required from our head office and/or local distributor.

Certified staff The application of STOPAQ® FN 4200 Injection Filler should always be carried out by certified personnel.



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