






Special advantages:

-  Rapid hardening product
-  Operating temperature from -20°C to +80°C (-4°F to +176°F)
-  Stress class B, type 3 in accordance with DIN EN 10290
-  Solvent-free
-  Tested in accordance with ISO 21809-3, class 18B

Corrosion prevention system for the field-joint coating of welded seams on pipelines laid using piling and pipe ramming processes.

For a century now, DENSO Group Germany has been representing experience, quality and reliability for corrosion prevention and sealing technology. The success of the internationally leading corporation is based on the development of the "DENSO-Tape", which was already patented in 1927 as the first product worldwide for the passive corrosion prevention of pipelines. Since then, the DENSO Group Germany has been establishing and guaranteeing the highest quality standards with technically trend-setting products. Research, development and production take place exclusively in Germany. Our employees continuously implement safe and individual solutions in a personal cooperation with the customer.

Product description

DENSOLID®-TLC is a rapid-hardening two-component polyurethane coating that provides permanent corrosion prevention of welded seams on pipes laid using piling and pipe ramming processes.

In a single work step, **DENSOLID®-TLC** is injected directly from a two-chamber cartridge into a special casing system, enabling the user to apply the product in a wide thickness range. The casing system provides a high surface quality and also protects the coated surface against the elements. Additional, the user is protected against material contact. The predetermined component mixing ratio ensures that the product is easy to apply, with consistently high-quality results. The system reliably eliminates the risk of mixing errors and bubble formation.

DENSOLID®-TLC boasts a high level of mechanical resistance combined with an

exceptionally low frictional resistance.

DENSOLID®-TLC actively helps to reduce the force required to draw the pipeline into position, yet offers the same outstanding corrosion prevention properties of the **DENSOLID®** product series.

DENSOLID®-TLC meets the requirements of DIN EN 10290 (class B, type 3) for operating temperatures up to +80°C (+176°F), enabling it to withstand highly corrosive atmospheres and high levels of mechanical stress.

DENSOLID®-TLC is also tested in accordance with ISO 21809-3, class 18B.

DENSOLID®-TLC is compatible with PE, PP, PA, PU, GRP and EP factory coatings.

Quantity required (1.5 mm layer thickness):
approx. 5 cartridges per m² of surface

Product processing:

Please refer to the separate **DENSOLID®-TLC** application instructions.

Cartridge dispensers:

DENSOMIX®-400M

Manual cartridge dispenser for 400 ml cartridges.

DENSOMIX®-400P

Pneumatic cartridge dispenser for 400 ml cartridges.

We hereby draw attention to another special product.

DENSOLID®-HDD is a further rapid-hardening, polyurethane-based corrosion prevention coating for the field-joint coating of welded seams in trenchless pipe installations using the HDD or pipe-plough method.

Typical product properties

Property	Unit	Typical value	
		DIN EN 10290	ISO 21809-3
Layer thickness	mm	≥ 1.5 mm	≥ 1.5 mm
Stress class	-	Class B, type 3	Class 18B
Free of pores at	8 kV/mm, max. 20 kV	-	Fulfilled
Impact resistance	+23°C (+73.4°F)	J/mm	≥ 5
	-5°C (+23°F)		≥ 3
Indentation resistance	dry, +23°C (+73.4°F)	mm	≤ 0.1
	dry, +80°C (+176°F)	%	≤ 30
Specific electrical insulation resistance	+23°C (+73.4°F)	Ω · m ²	≥ 10 ⁹
	+80°C (+176°F)		≥ 10 ⁴
Adhesive strength (steel surface)	+23°C (+73.4°F)	N/mm ²	≥ 12
	+80°C (+176°F)		≥ 1.5
Adhesive strength (PE factory coating)	+23°C (+73.4°F)		-
	Hot water storage 28 days/+80°C (+176°F) +23°C (+73.4°F)	N/mm ²	≥ 3.5
Adhesion after thermal aging	+100°C (+212°F), 100 days	N/mm ²	≥ 5
Cathodic disbondment resistance	+23°C (+73.4°F), 28 days	mm	≤ 5.0
	+60°C (+140°F), 2 days		≤ 5.0
Hardness	+23°C (+73.4°F)	Shore D	≥ 75
Density		g/cm ³	approx. 1.44
Operating temperature		°C (°F)	-20 to +80 (-4 to +176)

Ordering information and packaging

Cartridge sets including static mixers in box.

Component	Description	Dimensions	Packaging size
DENSOLID®-TLC	Coating material in 2K cartridges	0.575 kg (400 ml)	12 cartridges per box
DENSOLID® casing	PP casing film	1.9 mm x 500 mm x 10.5 m	1 roll
		1.9 mm x 700 mm x 10.5 m	
DENSOLID® straps	Straps to fasten casing in place	5.0 m	2 pcs
DENSOMIX®-400M	Manual cartridge dispenser for 2K cartridges	-	1 pc per box
DENSOMIX®-400P	Pneumatic cartridge dispenser for 2K cartridges	-	1 pc per box

Storage

When stored in its original, unopened packaging, **DENSOLID®-TLC** can be stored for at least 12 months after the manufacturing date.

Storage temperature: +15°C (+59°F) to +30°C (+86°F).

Short term (transport): +5°C (+41°F) to +50°C (+122°F).

The product must be stored in a location that is protected from frost.

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