Kebutyl-System I-50 / O-50
PRODUCT DATA SHEET

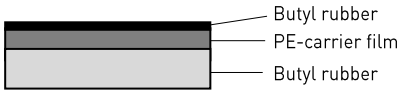
- Cost-effective tape system
- Stress class B50
- Outstanding tape elasticity
- Fully amalgamating overlapping areas
- Impermeable to oxygen and moisture
- Resistant to soil stress
- 3ply inner tape
- Superior in-ground performance

Kebutyl-System I-50 / O-50 is a two-tape system designed for corrosion protection of pipelines which meets the stress class B50 in according to EN 12068, DIN 30672 and ISO 21809-3, type 12. This Kebutyl-System consists of a liquid adhesive Kebutyl-Primer KIII, Kebulen-Tape I-50 3ply anti-corrosion and Kebulen-Tape O-50 mechanical outer layer.

The Kebutyl-System I-50 / O-50 has been developed as a cost-effective tape system for steel pipes and pipe constructions. It is a cold applied corrosion protective system used for the coating of buried or immersed steel pipelines. The Kebutyl- System I-50 / O-50 is used for the site applied coating in the area of the welded seam also for pipeline coating rehabilitation. The co-extruded inner layer Kebulen-Tape I-50 (co-extruded 3-ply) produces a strong cohesive bond to the primed steel surface and to the mechanical outer layer. At the spiral overlap it fully amalgamates and forms a sleeve-type coating.

STRUCTURE

Kebutyl-System I-50 / O-50
- Kebutyl-Primer KIII
- 2 layers Kebulen-Tape I-50 (1 wrap with 50 % overlap)
- 2 layers Kebulen-Tape O-50 (1 wrap with 50 % overlap)



Kebulen-Tape I-50
(inner layer)

Kebulen-Tape O-50
(outer layer)

COATING

The Kebutyl-System I-50 / O-50 is compatible with factory coatings of PE, PP, epoxy resin, PU and bitumen. It can be used for Field Joint Coating, Coating Rehabilitation and Coating Repair.

FORMS OF DELIVERY

Kebutyl-Primer KIII in Containers of 1 l / 5 l / 10 l

	Length of roll [m]	Width of roll [mm]	Rolls per box [-]	Content of box [m²]
Kebulen-Tape I-50	30	30	18	10.8
	30	50	12	12
	30	100	6	12
	70	100	3	21
Kebulen-Tape O-50	30	30	18	16.2
	30	50	12	18
	30	100	6	18
	70	100	3	21

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PROPERTIES TAPES OF KEBUTYL-SYSTEM I-50 / O-50

Property	Unit	Kebulen Tape I-50 typical values	Kebulen Tape O-50 typical values	Standard
Backing: colour, thickness	-, mm	black, ≈ 0.28	black, ≈ 0.35	-
Butyl coating inner: colour, thickness	-, mm	grey, ≈ 0.22	black, ≈ 0.15	-
Total thickness	mm	≈ 0.5	≈ 0,5	-
Elongation at break	%	≥ 760	≥ 640	DIN EN 12068
Tensile strength	N/mm	≥ 7	≥ 7	DIN EN 12068

PROPERTIES KEBUTYL-SYSTEM I-50 / O-50

Property	Unit	Typical values		Standard
Impact resistance	J J/mm	10 5,2		DIN EN 12068 ISO 21809-3
Indentation resistance pressure residual layer thickness	 N/mm² mm	23 °C 1 1.2	50 °C 10 0.8	 DIN EN 12068 ISO 21809-3
Peel strength		23 °C	50 °C	
- on pipe surface at 10 mm/min	N/mm	≥ 1.4	≥ 0.2	DIN EN 12068 / ISO 21809-3
- on factory coating at 10 mm/min	N/mm	≥ 1.4	≥ 0.2	DIN EN 12068 / ISO 21809-3
- outer to inner tape at 100 mm/min	N/mm	≥ 2.6	≥ 0.3	DIN EN 12068 / ISO 21809-3
- tape / tape at 100 mm/min				
- Kebulen-Tape I-50	N/mm	≥ 2.8	≥ 0.3	DIN EN 12068 / ISO 21809-3
- Kebulen-Tape O-50	N/mm	≥ 0.8	≥ 0.2	DIN EN 12068 / ISO 21809-3
Cathodic disbondment resistance	mm	23 °C 3	50 °C 14	DIN EN 12068 ISO 21809-3
Lap shear strength at 10mm/min		23 °C	50 °C	
- to pipe surface	N/mm²	≥ 0.17	≥ 0.08	DIN EN 12068 / ISO 21809-3
- to PE/PP-factory coating	N/mm²	≥ 0.17	≥ 0.08	DIN EN 12068 / ISO 21809-3

COMPLEMENTARY PRODUCTS

Kebutyl Mastic: None curing, permanently plastics butyl rubber putty, easy to form, for the padding of uneven surfaces.
Kebu Rockshield: Additional mechanical protection (non-woven PP) for coated pipes and valves or for buried plastic.
KEBUmat wrapping tool for the manual application: Simplify the helical wrapping of pipes & bends (homogeneous wrapping tension, overlapping adjustment).

The information given in this publication is based on our knowledge and experience. The hints and instructions for use given therein have been compiled to the best of our knowledge on the basis of our tests and experience. Best results will be obtained if our products are used in a proper and expert way. Any protected rights and existing laws and regulations must be complied with the recipient. In all other respects our general terms and conditions shall apply.
-- Rev.: 04_11.12.2025 --

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