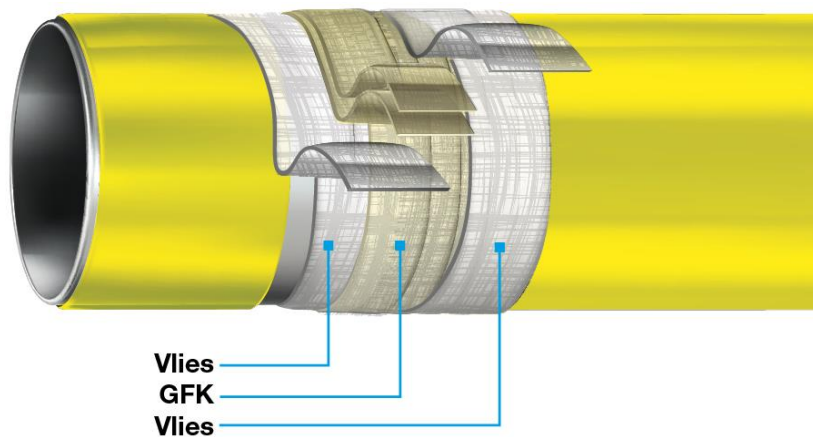







# DEPROTEC®-GFK (pipe ramming/driving methods)



## Product information



### Special advantages:

-  For temperatures up to +80°C (+176°F)
-  Abrasion and impact resistant
-  Can be applied manually
-  Single component
-  Cold application

## Highly mechanical-stress-resistant, light-cured GRP protective coating system

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

**DEPROTEC®-GFK** is a protective system for pipeline constructions that are subject to high levels of mechanical stress during installation or operation. The system is made from a high-strength fibreglass composite material. It's typical used for field joint coating of welding

seams in trenchless pipeline installations, e.g. using pipe ramming or driving methods, and if the pipeline cannot be bedded in sand. The applicable standards and guidelines must be followed when bedding and laying pipelines.

**DEPROTEC®-GFK** is comprised of a single-component light-curing vinyl ester resin, a glass fleece and a fibreglass layer.

### Product processing:

Please refer to the separate **DEPROTEC®-GFK** application recommendation.

## Consumption

The following theoretical consumption figures for the coating of a welded seam assume a standard factory coating cut-back of 150 mm and a required GRP protective coating system layer thickness of approx. 2.2 mm. If thicker layers are required, additional fibreglass and resin will be needed. As a guide, the application of two additional layers will add approximately 1 mm to thickness.

Pipe Ø DN	GRP resin [kg]	Fibreglass (approx. 580 g/m <sup>2</sup> ) [sq.m]	Fleece (approx. 40 g/m <sup>2</sup> ) [sq.m]	Stretch foil [sq.m]
100	0.64	0.86	1.00	0.27
150	0.94	1.27	1.48	0.40
200	1.23	1.65	1.93	0.52
250	1.53	2.06	2.40	0.64
300	1.82	2.44	2.85	0.76
400	2.28	3.06	3.57	0.96
500	2.85	3.83	4.47	1.20
600	3.42	4.60	5.36	1.44
700	3.99	5.36	6.26	1.68
800	4.56	6.13	7.15	1.92
900	5.13	6.89	8.04	2.15
1000	5.70	7.66	8.94	2.39

## Typical product properties

Properties		Unit	Typical value	Required value	Standard
Maximum operating temperature		°C (°F)	+80 (+176)	-	-
Impact resistance	-5°C/+23°F	J/mm	≥ 5	≥ 1,5	ISO 21809-3
	+23°C/+73°F		≥ 10	≥ 5	
Indentation resistance +80°C (+176°F)		%	≤ 1,5	≤ 10	ISO 21809-3
Cathodic disbondment resistance 2d / +60°C (+140°F)		mm	≤ 2,5	≤ 15	ISO 21809-3
Cathodic disbondment resistance 28d / +80°C (+176°F)		mm	≤ 5	≤ 15	ISO 21809-3
Hardness		Shore D	≥ 70	≥ 60	ISO 868
Specific insulation resistance +23°C (+73°F)		Ωm <sup>2</sup>	≥ 2*10 <sup>+9</sup>	≥ 10 <sup>+6</sup>	ISO 21809-3
Specific insulation resistance +80°C (+176°F)		Ωm <sup>2</sup>	≥ 3*10 <sup>+8</sup>	n.a.	ISO 21809-3
Shear resistance		N/cm <sup>2</sup>	≥ 150	≥ 50	DVGW GW340

The values listed are based on a DEPROTEC®-GFK thickness of ≥ 6,5mm

## Ordering information and packaging

### DEPROTEC®-GFK

Product	Roll length (m)	Roll width (mm)	Tape area (m²)	Weight per roll approx. (kg)
Fleece	100	100	10	0,46
Fibreglass	40	100	4	2,65
Stretchfoil	300	500	150	1,95
Stretchfoil	150	100	15	0,36

Product	Packaging	Contents [kg]	Gross weight [kg]
GRP resin	Metal bucket	10	10,94

## Storage

When stored in its unopened original packaging, **DEPROTEC®-GFK resin** can be stored for 6 months after the manufacturing date.

Storage temperature: +5°C (+41°F) to +25°C (+86°F).

Storage conditions: Do not expose to heat or direct sunlight! Store in a dry and frost-free location.

### DEPROTEC®-GFK fleece, fibreglass, stretch foil:

Storage temperature: <+50°C (<+122°F) and min. +3°C (+5.4°F) above dew point.

Storage conditions: Store in a dry and frost-free location.

### DENSO GmbH

P.O. Box 150120 | 51344 Leverkusen | Germany  
Phone: +49 214 2602-0  
[www.denso-group.com](http://www.denso-group.com) | [info@denso-group.com](mailto:info@denso-group.com)

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