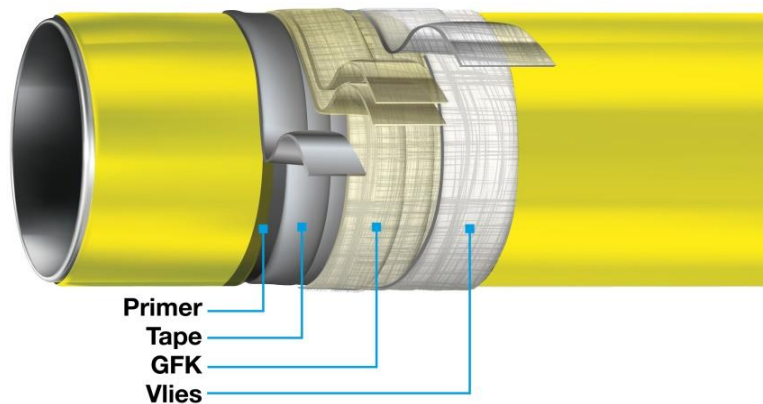







DEPROTEC®-GFK System (HDD process)



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 corrosion prevention system comprised of a BUTYLEN corrosion prevention coating and a light-curing GRP protection coating

DEKOTEC GmbH stands for experience, quality and reliability in the field of corrosion prevention and sealing technology. The success is based on the development of the Petrolatum-Tape which was already developed in 1927 as the first product worldwide for passive corrosion prevention of pipelines. We establish and guarantee the highest quality standards with technically trend-setting products. Research, development and production take place exclusively in Germany. Our employees are continuously implementing safe and individual solutions in a personal cooperation with the customer.

Product description

The **DEPROTEC®-GFK System** is a corrosion prevention system for pipeline constructions that are subject to high levels of mechanical stress during installation or operation. The system is comprised of a BUTYLEN corrosion prevention coating and additional mechanical protection provided by a high-strength fibreglass composite material. It's typical used for field

joint coating of welding seams in trenchless pipeline installations, e.g. using horizontal directional drilling processes (HDD), and if the pipeline cannot be bedded in sand. The applicable standards and guidelines must be followed when bedding and laying pipelines. The **DEPROTEC®-GFK System** is comprised of BUTYLEN-HT Primer, BUTYLEN-N60 corrosion prevention

tape and a GFK protective coating made from 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 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 | BUTYLEN-HT Primer [litres] | BUTYLEN-N60 corrosion prevention tape [sq.m] | GRP resin [kg] | Fibreglass (approx. 580 g/m ²) [sq.m] | Fleece (approx. 40g/m ²) [sq.m] | Stretch foil [sq.m] |
|--------------|-------------------------------|--|-------------------|---|---|---------------------------|
| 100 | 0.020 | 0.29 | 0.60 | 0.86 | 0.43 | 0.27 |
| 150 | 0.030 | 0.42 | 0.90 | 1.27 | 0.63 | 0.40 |
| 200 | 0.041 | 0.55 | 1.20 | 1.65 | 0.83 | 0.52 |
| 250 | 0.051 | 0.69 | 1.45 | 2.06 | 1.03 | 0.64 |
| 300 | 0.061 | 0.81 | 1.75 | 2.44 | 1.22 | 0.76 |
| 400 | 0.077 | 1.02 | 2.15 | 3.06 | 1.53 | 0.96 |
| 500 | 0.096 | 1.28 | 2.70 | 3.83 | 1.92 | 1.20 |
| 600 | 0.115 | 1.53 | 3.25 | 4.60 | 2.30 | 1.44 |
| 700 | 0.134 | 1.79 | 3.80 | 5.36 | 2.68 | 1.68 |
| 800 | 0.153 | 2.04 | 4.35 | 6.13 | 3.06 | 1.92 |
| 900 | 0.172 | 2.30 | 4.90 | 6.89 | 3.45 | 2.15 |
| 1000 | 0.192 | 2.55 | 5.45 | 7.66 | 3.83 | 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 | ≥ 6 | ≥ 1,5 | ISO 21809-3 |
| | +23°C/+73°F | ≥ 9 | ≥ 5 | |
| Indentation resistance +80°C (+176°F) | % | ≤ 1,5 | ≤ 10 | ISO 21809-3 |
| Cathodic disbondment resistance 28d / +80°C (+176°F) | mm | ≤ 9 | ≤ 15 | ISO 21809-3 |
| Hardness | Shore D | ≥ 70 | ≥ 60 | ISO 868 |
| Specific insulation resistance +23°C (+73°F) | Ωm ² | ≥ 6,2*10 ⁺⁹ (Measuring limit laboratory) | ≥ 10 ⁺⁶ | ISO 21809-3 |
| Specific insulation resistance +80°C (+176°F) | Ωm ² | ≥ 6,2*10 ⁺⁹ (Measuring limit laboratory) | n.a. | ISO 21809-3 |
| Shear resistance | N/cm ² | ≥ 150 | ≥ 50 | DVGW GW340 |

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

Ordering information and packaging

BUTYLEN-HT Primer

| Packaging | Content [l] | Gross weight [kg] |
|----------------|-------------|-------------------|
| 4 cans per box | 1 | 0,92 |
| Metal bucket | 5 | 4,70 |
| Metal bucket | 10 | 8,70 |

BUTYLEN-N60

| Roll length (m) | Roll width (mm) | Box content | | | Weight per box. approx. (kg) |
|-----------------|-----------------|-----------------|-----------------------|-----------------------------|------------------------------|
| | | Number of rolls | Total tape length (m) | Tape area (m ²) | |
| 10 | 50 | 12 | 120 | 6 | 8 |
| | 100 | 6 | 60 | 6 | 8 |

DEPROTEC®-GFK

| Product | Roll length (m) | Roll width (mm) | Tape area (m ²) | 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.

BUTYLEN-N60, BUTYLEN-HT Primer, DEPROTEC®-GFK fleece, fibre glass, stretch foil:

When stored in its original unopened packaging, **BUTYLEN-HT Primer** can be stored for 60 months after the manufacturing date.

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.

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