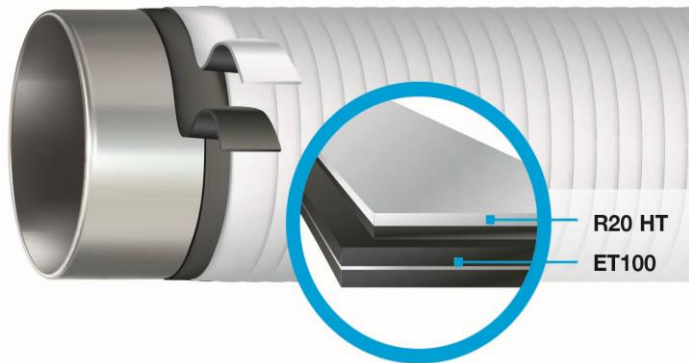


BUTYLEN-ET100/-R20 HT



Product information



Special advantages:

- ✓ Excellent corrosion prevention for pipelines with increased temperature stress.
- ✓ Especially thick and adaptable inner layer made from butyl rubber tape with a thickness of 1.0 mm.
- B70**
EN 12068 Exceeds the requirements of stress class B 70 in accordance with EN 12068.
- ✓ Compatible with factory coatings made of PE, PP, FBE, PU, CTE and bitumen.
- 🌡️ ≤ 100°C For temperatures up to +100°C (+212°F).

High temperature two-tape system for the corrosion prevention coating of metal pipes and pipelines in accordance with DIN 30672, EN 12068, ASTM and AWWA. Especially qualified for high operating temperatures for district heating pipelines, oil lines and gas compressor stations.

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.

Description

BUTYLEN-ET100/-R20 HT is a cold applied high temperature two-tape system for the corrosion prevention of metal pipes and pipelines. BUTYLEN-ET100/-R20 HT features outstanding properties and is especially suited for increased operating temperatures, e.g. for district heating pipelines, compressor stations and for oil lines.

BUTYLEN-ET100/-R20 HT is a system approved by Enagás S.A. (Spain).

Standard designation:

- EN 12068 – B 70
- DIN 30672 – B 70



BUTYLEN-ET100/-R20 HT is essentially impermeable to water vapor and oxygen and is resistant against soil bacteria and electrolytes. BUTYLEN-ET100/-R20 HT is compatible with factory coatings made of PE, PP, FBE, PU, CTE and bitumen.

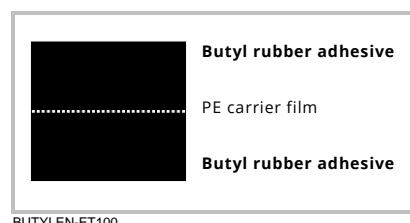
The system BUTYLEN-ET100/-R20 HT consists of:

BUTYLEN-HT Primer

A solvent containing primer in accordance with EN 12068 and DIN 30672 for the corrosion prevention with **BUTYLEN** tapes. Please refer to the separate product information of the BUTYLEN-HT Primer.

BUTYLEN-ET100

A real co-extruded 3-ply butyl rubber tape with butyl rubber adhesive on both sides of a carrier film made of stabilized polyethylene film. The special formulation of the butyl rubber adhesive in the BUTYLEN-ET100/-R20 HT gives the tape an extraordinary temperature stability up to +100°C (+212°F). BUTYLEN-ET100 has a thickness of ≥ 1.0 mm. BUTYLEN-ET100/-R20 HT fulfills the international standards DIN 30672, EN 12068, ASTM and AWWA.

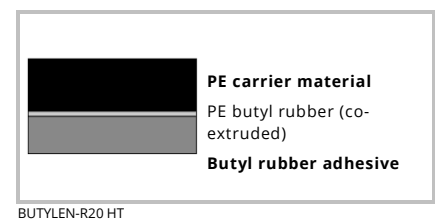


BUTYLEN-ET100

BUTYLEN-R20HT, a real co-extruded 2-ply plastic tape made from stabilized polyethylene carrier film with a butyl rubber adhesive on one side. Outstanding connection between the adhesive and the carrier film is guaranteed by the co-extruded intermediate layer. The adhesive layer grows completely together with the outside layer of BUTYLEN-ET100. BUTYLEN-R20 HT fulfills the international standards DIN 30672, EN 12068, ASTM and AWWA.

DEPROTEC®-DRM PP1000 Plus

As a mechanically protecting outside layer, we recommend the use of DEPROTEC®-DRM PP1000 Plus rockshield as an additional mechanical protection for operating temperatures above +70°C (+158 °F).



BUTYLEN-R20 HT

Typical product properties

Property	Unit	BUTYLEN-ET100	BUTYLEN-R20HT	Test method
Carrier film color	-	Colorless	White	-
Butyl adhesive color inside	-	Black	Black	-
Butyl adhesive color outside	-	Black	-	-
Total thickness	mm	≥ 1.0	≥ 0.5	ISO 4591 ASTM D1000
Carrier film thickness app.	mm	≥ 0.025	≥ 0.3	
Inside adhesive layer thickness app.	mm	≥ 0.5	≥ 0.2	
Outside adhesive layer thickness app.	mm	≥ 0.5	-	
Elongation at break	%	≥ 200	≥ 550	DIN 30672
Tape strength	+23°C (+73°F) N / cm	-	≥ 65	EN 12068
Dielectric strength	kV / mm	≥ 35	≥ 35	DIN 53481
Water absorption	+23°C (+73°F) 1 day / 30 days %	≤ 0.1 / ≤ 0.4	≤ 0.1 / ≤ 0.4	DIN 53495 ASTM D570
Brittleness temperature	° C (°F)	-46±4 (-50.8±7.2)	-46±4 (-50.8±7.2)	DIN 53372
		-58±4 (-72.4±7.2)	-58±4 (-72.4±7.2)	GOST 10354

BUTYLEN-ET100/-R20 HT with BUTYLEN-HT Primer

Property	Unit	Typical value					Standard
System design	Primer	BUTYLEN-HT Primer					-
	Inner tape	BUTYLEN-ET100 (2 layers)					
	Outer tape	BUTYLEN-R20 HT (2 layers)					
	Mechanical protection	BUTYLEN-DRM PP1000 Plus					
Thickness of the encasement (without BUTYLEN-DRM PP1000 Plus)	mm	3.0					-
Specific electrical insulation resistance	Ohm · m ²	> 10 ¹⁰					DIN EN 12068
Contact resistance	Ohm · cm	> 10 ¹⁵					ASTM D 257
Impact resistance	J	16					DIN EN 12068
	° C (°F)	+23°C +73°F	+50°C +122°F	+70°C +158°F	+85°C +185°F	+100°C +212°F	
Peel strength on steel	N / cm	30	5	2.5 **	1.4 **	0.8 **	DIN EN 12068
Peel strength layer to layer ET100/ET100 ET100/R20 HT	N / cm	22					DIN EN 12068
Lap shear strength	N / cm ²	15	6	5 **	4.8 **	4.5 **	DIN EN 12068
Indentation resistance. residual layer thickness of the tape system without rockshield	Extra load 10 N / mm ² Stamp-Ø 1.8 mm ²	-	2.1	1.6	0.9	-	DIN EN 12068
	Extra load 1 N / mm ² Stamp-Ø 5.65 mm ²	-	-	2.1	1.8	0.9	
Cathodic disbondment (radius)	mm	8	28	-	-	-	DIN EN 12068
		8	-	-	-	-	ASTM G 8

** Values after 7 days conditioning at the test temperature.

BUTYLEN tapes can be easily applied manually. The processing with the original **DEKOMAT**[®] wrapping devices is even more efficient. For **BUTYLEN** tapes with widths of > 50 mm, we recommend the use of the **DEKOMAT**[®] wrapping device to guarantee an excellent processing quality.

Ordering information and packaging

	Width (mm)	Tape length (m)	Tape area (m ²)	Content per box			kg (app.)
				Number of rolls	Total tape area (m ²)	Total tape length (m)	
BUTYLEN-ET100 Core Ø 41 mm	30	12,5	0,375	18	6,0	225	8.0
	50	12,5	0,625	12	7,5	150	10.0
	100	12,5	1,25	6	7,5	75	10.0
	150	12,5	1,875	6	11,25	75	15.0
BUTYLEN-R20 HT Core Ø 41 mm	30	30	0,9	18	16,2	540	10.0
	50	30	1,5	12	18	360	11.0
	100	30	3,0	6	18	180	11.0
	150	30	4,5	6	27	180	17.0

Additional lengths and widths are available on request.

Storage

When stored in its original, unopened packaging, **BUTYLEN-ET100/-R20 HT** can be stored for at least 60 months after the manufacturing date.

Storage temperature: ≤ +50°C (+122°F)

Store in a dry location and do not rest anything against the front of the product.

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Our product information, our application recommendations and other product related documents are made for your convenience only.

Since many installation factors are beyond our control, the user shall determine the suitability of the products for the intended use and assume all risks and liabilities in connection therewith.

All information contained in this document is to be used as a guide and does not constitute a warranty of specification. The information contained in the document is subject to change without notice. For this reason, no liability can be accepted for inaccurate advice or any failure to provide advice.

The user is responsible for checking the applications of the product and verifying its suitability for the intended use.

Our General Terms of Sale, which are available at www.dekotec.com, shall be decisive without any exception.

This is a translation from the original German product information.

In case of any discrepancy or any dispute arising on the interpretation of this product information, the German text of the respective German product information, which is available at www.denso-group.com, shall be decisive.

The legal relationship shall be governed by German law.

07.2019