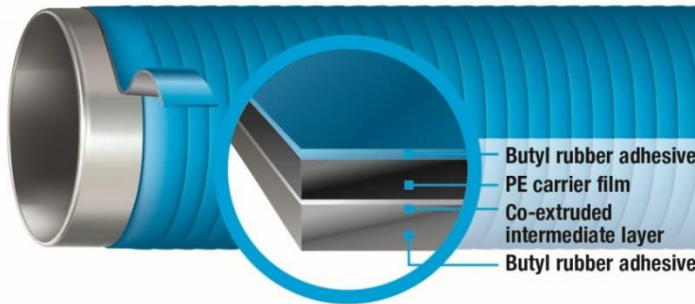


# DENSOLEN®-AS50

## Product information



### Special advantages:



For operating temperatures up to +50 °C (+122° F).



Fulfills EN 12068-B50 and DIN 30672-B50.



Fulfills class B 50 in accordance with EN 12068, already with one wrapping with 50% overlapping.



Fulfills ISO 21809-3, Type 12A-1.



Extremely cost efficient and easy application.



Especially qualified for the requirements of the water pipe construction.

## Single tape system for outstanding corrosion prevention of metal pipes and pipelines in accordance with DIN 30672, EN 12068, ASTM and AWWA. For extreme corrosion conditions and mechanical stresses.

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.

## Description

**DENSOLEN®-AS50** is a cold applied single tape system for outstanding corrosion prevention of metal pipes with outstanding economic and qualitative properties.

Due to the innovative formula, the tapes grow completely together in the overlapping area and create a long-lasting hose-type coating.

DENSOLEN®-AS50 significantly exceeds the requirements of the stress class **B 50** in accordance with EN 12068 and DIN 30672, using only one wrapping process with 50% overlap.

The DENSOLEN®-AS50 is basically impermeable against water vapor and

oxygen and it is resistant against soil bacteria and soil electrolytes.

DENSOLEN®-AS50 is compatible with factory coatings made from PE, PP, FBE, PU and bitumen.

The system DENSOLEN®-AS50 consists of:

### **DENSOLEN®-HT Primer**

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

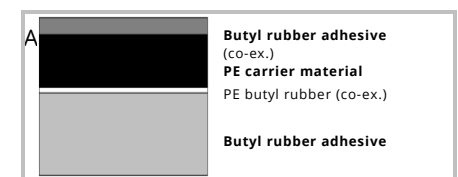
### **DENSOLEN®-AS50**

A real co-extruded 3-ply plastic tape made from stabilized polyethylene

carrier materials with butyl rubber adhesive on both sides.

Due to its intermediate layer, DENSOLEN®-AS50 features an outstanding connection between adhesive and carrier film.

DENSOLEN®-AS50 fulfills the international standards DIN 30672, EN 12068, ASTM and.



## Typical product properties

Property	Unit	Typical value	Test method
Carrier film color	-	black	-
Butyl adhesive color inside	-	grey	-
Butyl adhesive color outside	-	black, blue	-
Total thickness	mm	≥ 1.1	ISO 4591 ASTM D1000
Carrier film thickness app.	mm	≥ 0.6	
Inside adhesive layer thickness app.	mm	≥ 0.5	
Outside adhesive layer thickness app.	mm	≥ 0.08	
Elongation at break	%	≥ 550	DIN 30672
Tape strength	+23°C (+73°F) N / cm	≥ 95	EN 12068
Dielectric strength	kV / mm	≥ 40	DIN 53481
Water absorption	+23°C (+73°F) 1 day / 30 days %	≤ 0.1 / ≤ 0.4	DIN 53495 ASTM D570
Brittleness temperature	°C (°F)	-46±4 (-50.8±7.2)	DIN 53372
		-58±4 (-72.4±7.2)	GOST 10354

### DENSOLEN®-AS50 with DENSOLEN®-HT Primer

Property	Unit	Typical value		Required value	Test method
Specific electrical insulation resistance	Ohm m <sup>2</sup>	≥ 10 <sup>10</sup>		≥ 10 <sup>8</sup>	EN 12068
Contact resistance	Ohm cm	≥ 10 <sup>15</sup>		Not stated	DIN 53482 ASTM D257
Peel resistance metal/prime coat/tape	N / cm	<b>+23°C (+73°F)</b> ≥ 30	<b>+50°C (+122°F)</b> ≥ 2,5	≥ 4   ≥ 0,4	EN 12068
		≥ 33	≥ 2.5	Not stated	ASTM D1000
Peel resistance layer to layer AS50 / AS50	N / cm	<b>+23°C (+73°F)</b> ≥ 30	<b>+50°C (+122°F)</b> ≥ 4	≥ 8   ≥ 2	EN 12068
Indentation resistance - residual layer thickness at stamp load (10 N/mm <sup>2</sup> Stamp-diameter 5.65 mm)	mm	<b>+50°C (+122°F)</b> ≥ 0.8		> 0,6	EN 12068
Impact resistance	J	≥ 10		≥ 8	EN 12068
Cathodic disbondment resistance	mm	≤ 6		Not stated	ASTM G8
Lap shear strength	N / cm <sup>2</sup>	<b>+23°C (+73°F)</b>		5	EN 12068
on steel		≥ 15			
on factory coating		≥ 15		5	

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

## Ordering information and packaging

	Core diameter (mm)	Width (mm)	Tape length (m)	Tape area per roll (m <sup>2</sup> )	Content per box			App. weight (kg)
					Number of rolls	Total tape area (m <sup>2</sup> )	Total tape length (m)	
DENSOLEN®-AS50	41	30	10	0.3	18	5.4	180	9.5
		50	10	0.5	12	6	120	9.5
		100	10	1.0	6	6	60	8
		150	10	1.5	6	9	180	12
	78	100	50	5	3	15	150	18.5
		150	50	7.5	2	15	100	18.5

Additional lengths and widths are available on request.

## Storage

When stored in its original, unopened packaging, DENSOLEN®-AS50 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.

### DENSO GmbH

Felderstrasse 24 | 51371 Leverkusen | Germany  
Phone: +49 214 2602-0 | [info@denso-group.com](mailto:info@denso-group.com)  
[www.denso-group.com](http://www.denso-group.com)

Our product information, application recommendations and other printed publications provide advice to the best of our knowledge and indicate our level of knowledge at the time of printing. The content is not legally binding. Therefore, no liability is assumed for incorrect and missing advice. The applicator is obliged to check the suitability and possibility of application for the intended purpose. Unless otherwise specified, all of the brands named are trademarks of DENSO, at least registered in Germany, which are protected by law.

Only our general terms and conditions of sale, which you will find at [www.denso-group.com](http://www.denso-group.com), apply. This is a translation from the original German product information. In case of any discrepancy or any dispute arising on the interpretation, the German text of the respective German product information, which is available at [www.denso-group.com](http://www.denso-group.com), shall be decisive. The legal relationship shall be governed by German law.