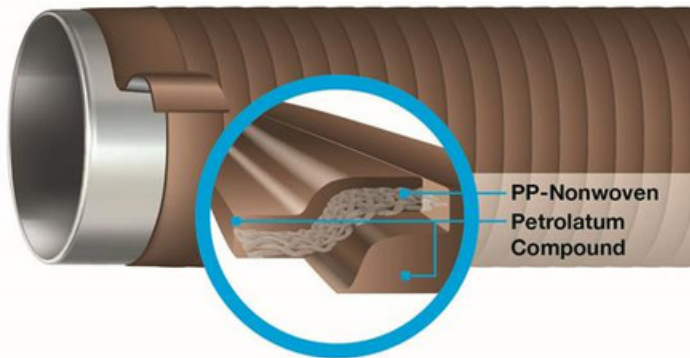







## Denso®-Feu

### Product information & application recommendation



### Special advantages:

-  For operating temperatures of -40°C (-40°F) to +70°C (+158°F).
-  For temperatures of -50°C (-58°F) to +80°C (+176°F).
-  High plasticity and flexibility.
-  No preheating of the surface required.
-  Simple manual processing.

## Petrolatum tape for sealing and for corrosion prevention at metallic components, pipes and armatures with operating temperatures up to +70°C (+158°F).

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

**DENSO®-Feu** is a cold processable corrosion prevention tape on the basis of petrolatum.

DENSO®-Feu consists of an impregnated polypropylene nonwoven carrier, which is coated on both sides with a corrosion prevention petrolatum mastic. The petrolatum mastic is stabilized by polymer additives, which means that DENSO®-Feu can be used at operating temperatures of -40°C (-40°F) to +70°C (+158 °F). DENSO®-Feu can be applied without heating the surface and it moistens the surface even at low temperatures. DENSO®-Feu is based on more than 90 years of experience of the DENSO Group Germany in the production of high quality corrosion prevention products on petrolatum basis. DENSO®-Feu is basically impermeable against water and oxygen and it is electrically insulating. Based on its excep-

tional properties combination, DENSO®-Feu is used in many applications, e.g. as

- Corrosion prevention for pipelines, pipeline components, pipe connections and armatures.
- Corrosion prevention for constructional metallic components.
- Corrosion prevention of metal parts or pipe systems inserted into concrete or screed.
- Galvanic separation layer for metallic constructions.
- Sealing of thermally insulated metal sheet encasements at cold or heat carrying pipelines and components.
- Sealing of industry glazings and greenhouse.

DENSO®-Feu will be wrapped as insulation layer at least with one layer and, as corrosion prevention encasement, at least with two layers, which means with 50% overlap. DENSO®-Feu can be processed with a layer by layer application for components that are formed complicated and for which a spiral wrapping is not possible. During processing, the tape must be pressed evenly and the mastic must be spread especially in the overlaps.

A rockshield **DEPROTEC®-DRM PP** can be applied above the tape for an increased mechanical protection.

An additional petrolatum tape is available with **DENSO®-Cal** for the use at higher temperature requirements +110°C (+230°F).

## Typical product properties

Property		Unit	Typical value	Test method
Thickness		mm	≥ 1.0	-
Carrier		-	Polypropylene nonwoven	-
Dripping point of the mastic		°C (°F)	≥+100 (+212)	
specific electrical insulation resistance		Ohm m <sup>2</sup>	≥106	EN 12068
UV stability		-	good	-
Processing temperature	Environment	°C (°F)	-20 to +50 (-4 to +122)	
	DENSO®-Feu	°C (°F)	-10 to +40 (+14 to +104)	
Operating temperature		°C (°F)	-40 to +70 (-40 to +158)	-

## Ordering information and packaging

Roll length 10 m

Roll width [mm]	Rolls per box	Tape length per box (m)	Tape surface per box (m <sup>2</sup> )	Weight per box app. [kg]
20	40	400	8,0	9,0
30	36	360	10,8	12,0
50	24	240	12,0	13,2
100	12	120	12,0	13,2
200	6	60	12,0	13,2

Additional dimensions available on request.

## Storage




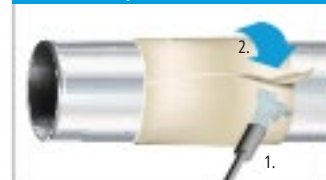
When stored in its original, unopened packaging, **DENSO®-Feu** can be stored for at least 60 months after the manufacturing date.

Storage temperature: ≤ +40°C (+104°F)





The product must be stored dry, without load on the front surface.

# Denso® Petrolatum tapes and mastics


## For Pipes/pipelines

<p><b>1. Surface treatment</b></p>  <p>The surface must be free from dust and loose objects. Rust must be removed using a wire brush. Minimum degree of cleanliness (ISO 8501-1) St2.</p>	<p><b>2. Primer (optional)</b></p>  <p>Work DENSO® Primer into the surface thoroughly. Apply DENSO® Primer by hand or using a spatula to the surface to be coated.</p>	<p><b>3. Anti-corrosion tape (pipes &amp; bends)</b></p>  <p>Wind DENSO® Petrolatum tape around the pipe with the required overlap and with no wrinkles. Then smooth down the DENSO® Petrolatum tape with your hand and press it firmly into position.</p>	<p><b>4. Mechanical protection</b></p>  <p>Coat the areas encased in DENSO® Petrolatum-tape with a layer of DEPROTEC®-DRM PP up to the transitional point with the factory-encased surface. Fix the pipe protection mat in the overlap area by applying the heat of a flame and pressing down immediately. For additional mechanical protection, DEPROTEC®-PUR glass fibre bandage can be used.</p>
--	---	--	--

## For armatures/flange connections

<p><b>1. DENSO® Petrolatum mastics</b></p>  <p>Apply DENSO® Petrolatum mastics by hand or using a spatula in order to fill hollow spaces. Shape the mastic and then wind DENSO® Petrolatum-tape all the way around.</p>	<p><b>2. Flange connections &amp; armature housing</b></p>  <p>Depending on the operating temperature, fill the hollow space from the crack between the flange plates with DENSO®-Jet or DENSO®-Fill.</p>	<p><b>3. Flange connections &amp; armature housing</b></p>  <p>Lay DENSO® Petrolatum tape centrally on the flange and shape it over the external circumference, screw heads, nuts etc. Tape width depends on the nominal size: 250, 300 or 400 mm</p>	<p><b>4. Flange connections &amp; armature housing</b> <b>Optional: Flanges DN &gt; 4001.</b></p>  <p>Position 2 layers of DENSO® Petrolatum tape alternately on the right and left flange edge. The length of the DENSO® Petrolatum tape sections correspond to the external flange circumference plus 50 mm overlap. Cover the pipe surface adjacent to both sides of the flange with DENSO® Petrolatum tape in a sleeve formation or spiral pattern.</p>
--	--	---	--

**5. Mechanical protection**



Coat the areas encased in DENSO® Petrolatum-tape with a layer of DEPROTEC®-DRM PP up to the transitional point with the factory-encased surface. Fix the pipe protection mat in the overlap area by applying the heat of a flame and pressing down immediately. For additional mechanical protection, DEPROTEC®-PUR glass fibre bandage can be used.

Processing temperature	Primer	
	Product	DENSO®-AQ Primer HT
Material °C (°F)	DENSO®-AQ DENSO®-Cal	+5 to +50 (+41 to +122)
Surface °C (°F)		-10 to +100 (+14 to +212)

Processing temperature	Tape without lamination film						Tape with lamination film		Mastic		
	Product	DENSO®-Feu	DENSO®-Tape ET	DENSO®-Tape MT <sup>1</sup>	DENSO®-Tape ST	DENSO®-Tape HT <sup>2</sup>	DENSO®-Tec DENSO®-Verte DENSO®-Tape LT <sup>1</sup>	DENSO®-Cal <sup>2</sup>	DENSO®-Flex DENSO®-Plast	DENSO®-PF	DENSO®-Plast
Material °C (°F)	-10 to +40 (+14 to +104)	+5 to +55 (+41 to +131)	-10 to +50 (+14 to +122)	+5 to +45 (+41 to +113)	+5 to +50 (+41 to +122)	-10 to +30 (+14 to +86)	+5 to +50 (+41 to +122)	-10 to +30 (+14 to +86)	+0 to +30 (+32 to +86)	+4 to +30 (+39,2 to +86)	+40 to +85 (+104 to +185)
Surface °C (°F)	-20 to +50 (-4 to +122)	-10 to +60 (+14 to +140)	-20 to +50 (-4 to +122)	-20 to +40 (-4 to +104)	-10 to +100 (+14 to +212)	-10 to +30 (+14 to +86)	+40 to +110 (+104 to +230)	-10 to +30 (+14 to +86)	+0 to +30 (+32 to +86)	+0 to +30 (+32 to +86)	≥ +5 (≥ +41)

General	
<b>Surface preparation</b>	Use an abrasive cloth #40 in a peripheral direction to roughen adjacent work surfaces and chamfer at an angle of < 30°. Surface cleanliness: min. St2 (ISO 8501-1) dry and free from grease, dust etc.
<b>Health, safety &amp; environmental protection</b>	The installation must take place in accordance with customary and local environmental and safety standards. The safety and environmental notes which accompany DENSO products must be heeded. Personal protective equipment such as safety glasses, safety gloves and fastened work garments must be worn.

- 1) Only for use with DENSO®-AQ Primer
- 2) At low temperatures DENSO®-Cal Primer can be used (surface -10 °C to +50 °C (+14 °F to +122 °F))
- 3) Only for use with DENSO®-AQ Primer HT