

HITEC[®] DW EPDM



Constantly increasing requirements in the drinking water and food sectors mean that in the future it will no longer be possible to use a single material for both industries. In the drinking water sector, for example, good mechanical properties are particularly in demand, as seals often must fulfill their sealing function over several decades, while in the food sector the purity of the materials plays a central role. In the drinking water sector, the requirements with regard to positive lists and migration values are becoming much stricter, for example in the new KTW-BWGL or the 4 Member States.

Angst + Pfister developed and produced with HITEC[®] DW EPDM, DW means „Drinking Water“, a new high-tech compound specially designed for the requirements in the drinking water environment for the future.

In order to be able to comply with the positive lists, many additives for the efficient production of seals may not be used or may only be used to a limited extent. Nevertheless, Angst+Pfister has succeeded in developing a drinking water compound that meets the requirements in the drinking water sector of and partially for the food and beverage sector, providing excellent mechanical properties as well.

Features

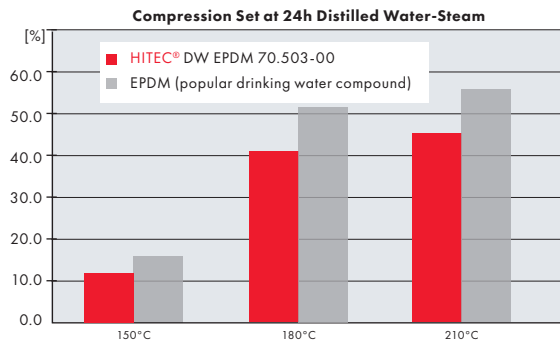
- Good mechanical properties within the wide temperature range of -57°C up to +150°C (short term in water and steam even higher)
- Suitable for the production of complex engineered moulded parts as well as for O-Rings
- For static and dynamic applications
- Crosslinking agent: peroxide

Benefits

- Black EPDM compound that complies with PAH Category 1
- Good mechanical properties
- Degradation resistant in contact with copper and brass
- Complies with almost all drinking water regulations worldwide beyond February 2025 including KTW-BWGL
- Possibility of surface treatment for lower friction according KTW-BWGL

Our contact details

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This graph shows that the new HITEC® DW EPDM material from Angst+Pfister performs well in the limits.

Mechanical properties

HITEC® DW EPDM 70.503-00	
Hardness nominal	70 ±5 Shore A
Density nominal	1.18 ±0.03g/cm ³ ISO 2781-A
Tensile strenght	15.5 N/mm ² ISO 37-Typ 1
Elongation at break	218% ISO 37-Typ 1
Compression set	12% ISO 815-A 22h, 150°C

Certificates

HITEC® DW EPDM complies with almost all drinking water regulations worldwide, where conformities will be available for:

Drinking Water

- ACS (DGS/VS4 n° 2000/232)
- AS/NZS 4020:2018
- D.M. 06/04/04 n° 174
- DVGW EN 681-1 WA-WB-WC-WD
- DVGW W534 cold and warm water
- KIWA (BRL-K17504)
- KTW-BWGL cold and hot water
- NSF 61 cold and hot water up to +82°C
- ÖNORM (B5014-1)
- WRAS (BS 6920 cold and warm water up to +85°C)
- DIN EN 16421 (former DVGW W270)


Others

- USP Class VI Chapter 87 and 88 at +121°C
- PAH Class I (AfPS GS 2019:01)
- ADI free
- DEHP free of Phtalates
- DVGW CERT ZP 5101:2021-12

Food & Beverage

- 3-A Sanitary Standard N° 18-03 Class II
- BfR XXI (Migration test BfR XXI Category 3)
- Dlgs 25.01.1992 n. 108 Art. 2
- D.M. 21/03/1973 (Migration test)
- EC 1935/2004 (excl. article 15)
- FDA CFR 21-177.2600 a) - f)
- GB 4806.11-2016 (Migration test)
- LFGB §30/31
- NSF 51 for food
- SR 817.023.21
- Mercosur GMS/RS N° 54/97 (Migration test)

For more details regarding conformities and approvals please request the data sheet.

Industries/Segments	Typical Products
<p>Drinking water</p> 	<ul style="list-style-type: none"> O-rings Moulded parts Membranes