

The New Generation of EPDM Materials:

Proven Safety for the Food and Beverage and Pharmaceutical Industries



Their outstanding performance in critical media makes our new EPDM materials the first choice for a broad range of O-ring, moulded part and diaphragm applications in the food and beverage and pharmaceutical industries, compliant with all essential national and international standards.

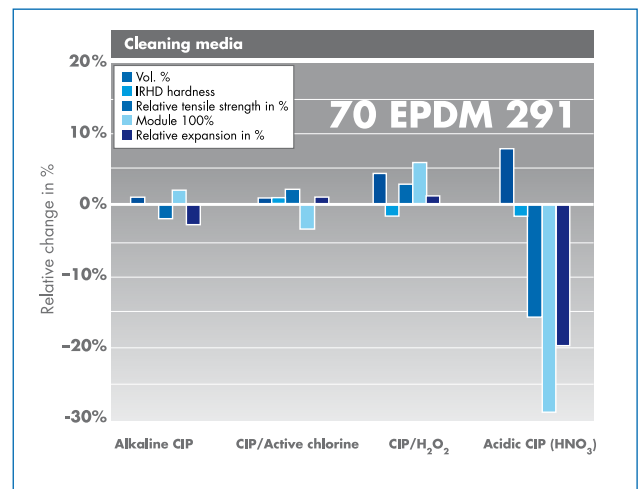
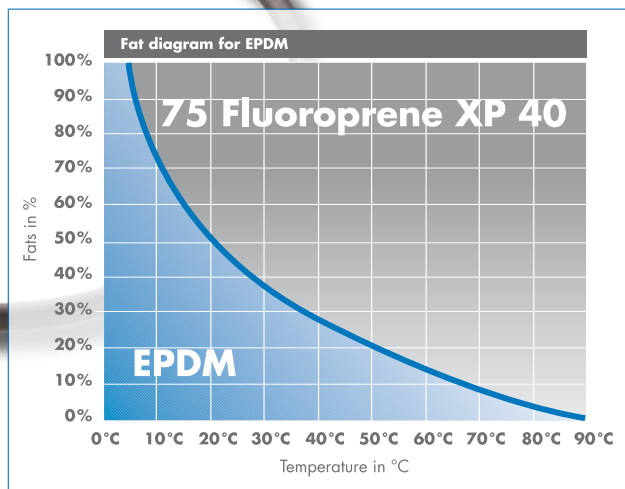
Knowing what counts: as the market specialist for demanding sealing applications in process industries, Freudenberg Process Seals has expanded its range of EPDM materials and optimised it for use in the most critical application scenarios, allowing us to offer you uncompromising functionality for smoothly running production processes in an even broader spectrum of applications.

Enhanced Temperature and Media Resistance

In comparison to conventional EPDM compounds, the new EPDM displays considerably higher water steam resistance, in addition to its exceptional durability in CIP/SIP media (Cleaning-in-Place/ Sterilisation-in-Place). Depending on the individual application and design, our EPDM is available in the following hardness ratings:

- 60 EPDM 290
- 70 EPDM 291
- 85 EPDM 292

We recommend 70 EPDM 291 as the standard material, which can be employed e.g. as a reliable O-ring seal for static applications. This version can also be optimised for dynamic applications by means of a friction-reducing RFNT™ coating. Otherwise, the compound 85 EPDM 292 is the right choice for dynamic applications. Given its specific performance profile, 60 EPDM 290 is especially well-suited for use in diaphragms.



Outstanding Performance in Critical Media

Water Steam	CIP/SIP Media	Ozone Resistance (40 °C)
Up to 180 °C (short-term to 210 °C) (a substantially higher resistance to water steam compared to other EPDM compounds)	Very good resistance to nearly all conventional cleaning media. Cleaning at 82 °C in CIP media and sterilisation at 149 °C is possible (3-A® Sanitary Standard Class II)	At 1000 pphm, EPDM 291 and 292 offer the highest level of ozone resistance in comparison with other elastomers

Certifications & Authorisations

Given its compliance with all essential national and international standards, EPDM can be universally employed nearly anywhere in the world. The materials are approved for use with a variety of drinking water standards and meet the requirements of the food and beverage and pharmaceutical industries.

Drinking Water Certifications

Standard	Country	60 EPDM 290	70 EPDM 291	85 EPDM 292
NSF 61	USA	x	x	x
WRAS	GB	x	x	x
ACS	France		x	
KTW	Germany	x	x	x
W270	Germany	x	x	x
kiwa	The Netherlands		x	
WQC	Australien		x	

Certifications for Food and Beverage and Pharmaceutical Production

Standard	Country	60 EPDM 290	70 EPDM 291	85 EPDM 292
FDA	USA	x	x	x
EG 1935/2004	Europe	x	x	x
3-A® Sanitary Standards Class II	USA	x	x	x
USP Class VI	USA		x	x
ADI free®		x	x	x

Standard Commercial Dimensions

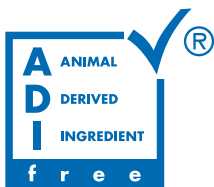
We normally stock the following standard dimensions:

- Inch sizes: ARP 001–ARP 932
- Metric: ID 3 mm–193 mm
Thicknesses: 1.00 mm–8.00 mm
- Other dimensions available upon request

Your Advantages at a Glance

- Materials compliant with national and international standards
- Very good resistance to water steam and CIP/SIP media
- Especially good heat resistance in water up to 180 °C
- Available as O-rings, moulded parts and diaphragms
- Clamp gaskets in accordance with DIN 32676
- We stock a broad range of inch and metric O-ring sizes

We would be pleased to provide you an individual offer.



Freudenberg Process Seals GmbH & Co. KG

Lorscher Straße 13, 69469 Weinheim, Germany
Phone: +49 (0) 6201 80 8919-00, Fax: +49 (0) 6201 88 8919-69
fps@freudenberg-process-seals.com, www.freudenberg-process-seals.com

Freudenberg
Sealing Technologies