

70 EPDM 253815

White EPDM for the Pharmaceutical Industry



With 70 EPDM 253815, Freudenberg Process Seals has succeeded in developing a white EPDM material with the same performance as its classic black counterpart – ideal for use in hygienically demanding applications in the pharmaceutical as well as in food and beverage industries.

White sealing products are a much sought-after technical solution in the pharmaceutical as well as in food and beverage industries, especially for applications involving strict hygienic standards. However the good chemical resistance and outstanding mechanical properties of conventional elastomers are normally optimized using carbon black additives. Freudenberg Process Seals has now combined the preferred color for hygienic applications with the best sealing performance.

The new white 70 EPDM 253815 represents a completely new compound from Freudenberg Process Seals, containing mineral filler while still offering the excellent sealing properties of a black EPDM. This combination makes it ideally suited to meeting the high demands of Hygienic Sealing applications and their challenging approvals.

Your Advantages at a Glance

- Ideally suited for applications with high hygienic standards in the pharmaceutical as well as food and beverage industries
- Offers the same outstanding sealing performance as conventional black EPDM materials
- Available in a broad range of products, from O-rings to molded parts
- Increases productivity, as it offers a longer service life than do conventional „white“ materials



Freudenberg
Sealing Technologies

Our „White“ is Tougher

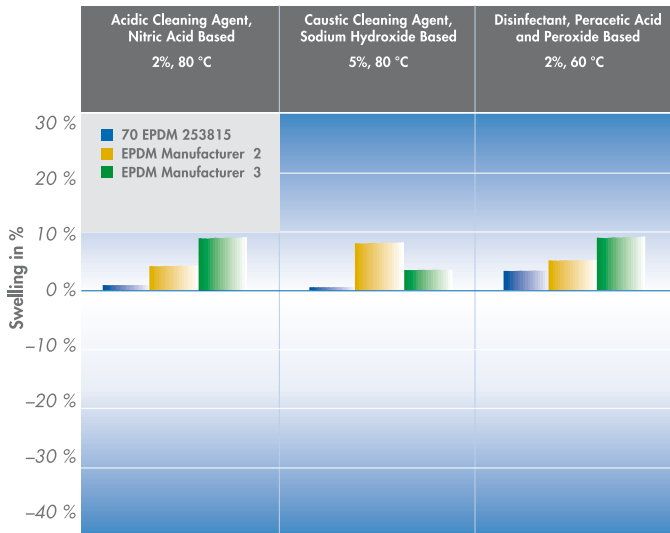
In extensive testing, 70 EPDM 253815 demonstrated superior mechanical resilience and chemical resistance; it especially yielded better results in CIP / SIP in comparison with white elastomers from other manufacturers processes.

Its mechanical performance parameters remain largely unaffected in CIP / SIP processes and the swelling rate also remains well under 5%, making white EPDM the first choice, even for Hygienic Design applications.

Material Traits	70 EPDM 253815	70 EPDM 291
Color	White	Black
Density	1.05	1.08
Hardness	69	77
Modulus 100%	3.2	9.8
Tensile strength	14.2	16.2
Elongation at break	295	165
Compression set 24h/150 °C	23	15
Compression set 70h/150 °C	27	24
Temperature range	-40 °C to +150 °C	-40 °C to +150 °C

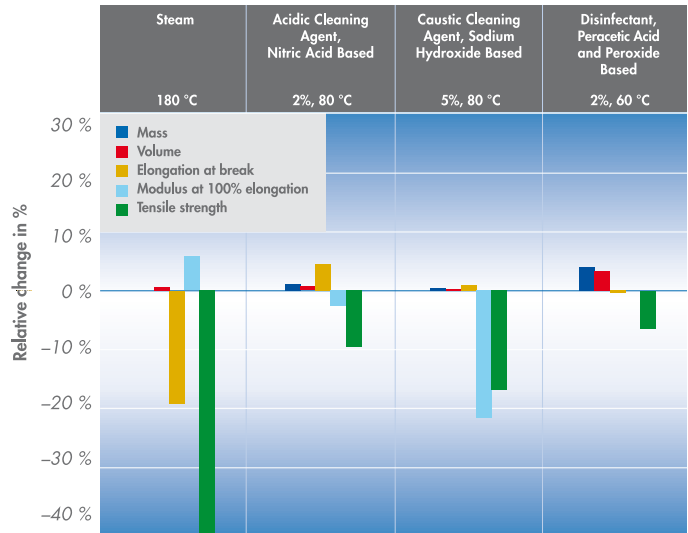
Approvals and Compliances
FDA
EG 1935/2004
3A® Sanitary Standard
ADI-free®

Benchmark for White EPDM Materials



Exposure of white EPDM to various CIP / SIP media over 168 hours: Illustration of the volume change.

Material Characteristics: 70 EPDM 253815



Relative change in mass, volume, elongation at break, modulus at 100% elongation and tensile strength for 70 EPDM 253815 after 168 hours exposure to various CIP / SIP media.

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