

M SEALS EPFQ-W85

White FDA compliant Sulphur cured EPDM Rubber



MATERIAL DATA SHEET (Version 6.0 – 05.2022)



FDA Compliant



ADI Free

Description

M Seals material EPFQ-W85 is a white Sulphur cured Ethylene-Propylene-Rubber (EPDM) which has been migration tested in accordance with FDA 21 CFR 177.2600 and meets the requirements of EC1935/2004 regulations. This fantastic attribute makes EPFQ-W85 a good choice for seals and other elastomeric parts which require good chemical and/or fluid compatibility while working in food and beverage applications. EPDM has a poor resistance to fats and oils; therefore, we do not recommend its use in applications utilising these types of fluid/s.

Physical Properties

Property	Test method	Unit	Typical value
Colour			White
Density	ISO 1183-1	g/cm ³	1.39
Hardness @ 23°C	ISO 7619-1	Shore A	85
100% Modulus	DIN 53504	N/mm ²	3.0
Tensile Strength	DIN 53504	N/mm ²	5.8
Elongation at break	DIN 53504	%	454
Tear resistance	ISO 34-1 A	N/mm	28.8
Compression set (24 Hours @ 70°C, 25%)	ISO 815-1	%	19.8
Compression set (24 Hours @ 100°C, 25%)	ISO 815-1	%	35.1
Minimum service temperature		°C	-50
Maximum service temperature		°C	+100

Global migration results of FDA extraction on EPFQ-W85 material samples (mg/inch ²)				
FDA test method	Reflux test conditions	Mass Loss	Limit*	Conclusion
CFR 177.2600 (e)	De-ionised water, 7 hours	9	20	PASS
CFR 177.2600 (e)	De-ionised water, 2 hours	<1	1	PASS
CFR 177.2600 (f)	N-hexane, 7 hours	71	175	PASS
CFR 177.2600 (f)	N-hexane, 2 hours	7	4	PASS
* Maximum acceptable global migration according to FDA CFR 177.2600 – This material exceeds the limit on the second extraction test with N-hexane. In a migration test set-up, N-hexane is used to simulate fatty and/or oily foodstuff of which EPDM has no compatibility. It is not recommended to use this material in applications utilising this type of fluid / foodstuff.				

Main Characteristics

- FDA Compliant
- Migration tested in accordance with EC1935/2004 regs
- Animal Derived Ingredient Free (ADI Free)
- Good resistance to acids, alcohols, bases and brake fluid
- Useful temperature range

Typical Products

- Triclover seals
- RJT seals
- DIN 11851 D-Seals
- Static Seals & O-Rings
- Depositor seals

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