

M SEALS HC325

Metal detectable FDA compliant HNBR



MATERIAL DATA SHEET (Version 6.0 – 05.2022)



FDA Compliant



ADI FREE



Metal Detectable



NUT FREE

Description

M Seals material HC325 is a metal detectable Hydrogenated Nitrile Butadiene Rubber (H-NBR) which has been migration tested in accordance with FDA 21 CFR 177.2600 regulations. This fantastic attribute makes HC325 the material of choice for seals and other elastomeric parts which require excellent chemical and/or fluid compatibility while working in food and beverage applications where contamination is unacceptable.

Physical Properties

Property	Test method	Unit	Typical value
Colour			Blue
Density	ISO 1183	g/cm ³	1.36
Hardness	ISO 7619-1	Shore A	78 (+/-5)
Tensile Strength	DIN 53504	MPa	8.1
Elongation at break	DIN 53504	%	270
Compression set (24 Hours @ 150°C)	ISO 815-1	%	29
Minimum service temperature		°C	-35
Maximum service temperature		°C	+150

Global migration results of FDA extraction on HC325 material samples (mg/inch²)

FDA test method	Reflux test conditions	Sample 1	Sample 2	Sample 3	Mean	Limit*	Conclusion
CFR 177.2600 (e)	De-ionised water, 7 hours	2.0	1.9	2.4	2.2	20	PASS
CFR 177.2600 (e)	De-ionised water, 2 hours	≤1	≤1	≤1	≤1	1	PASS
CFR 177.2600 (f)	N-hexane, 7 hours	13.9	12.9	13.6	14.9	175	PASS
CFR 177.2600 (f)	N-hexane, 2 hours	1.8	1.8	1.8	1.9	4	PASS

* Maximum acceptable global migration according to FDA CFR 177.2600

Main Characteristics

- Metal detectable
- CFR 177.2600 FDA Compliant
- Extraction tested
- No tooling required
- Blue in colour
- ADI free
- Does not contain ingredients derived from Nuts

Typical Products

- Triclover seals
- RJT seals
- DIN 11851 D-Seals
- Static Seals & O-Rings
- Depositor seals
- Butterfly valve seals
- Bespoke Parts

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