

# M SEALS EC805

Metal detectable FDA compliant EPDM Rubber

MATERIAL DATA SHEET (Version 6.0 – 05.2022)



FDA Compliant



ADI FREE



Metal Detectable  
X-Ray Detectable



3-A Sanitary



NUT FREE

## Description

M Seals material EC805 is a metal and X-Ray detectable, peroxide cured Ethylene-Propylene-Diene-Monomer (EPDM). The material has been migration tested in accordance with FDA 21 CFR 177.2600 while also meeting the requirements of EC1935/2004 and 3-A 18-03 Class 3 regulations. These fantastic attributes make EC805 the material of choice for seals and other elastomeric parts being used in food contact applications where contamination is absolutely unacceptable. EC805 EPDM Rubber has excellent resistance to hot water, steam and some cleaning agents. However, this compound or any EPDM should not be used where the presence of Hydrocarbon fluids, vegetable oils and/or animal fats will be found. Please contact the M Seals technical team if you require assistance.

## Physical Properties

Property	Test method	Unit	Typical value
Colour			Blue
Density	ASTM D1817	g/cm <sup>3</sup>	1.61
Hardness	ASTM D2240	Shore A	67 (+/-5)
Tensile Strength	ASTM D412	Psi	1073
Elongation at break	ASTM D412	%	285
Compression set (24 Hours @ 100°C)	ASTM D395B	%	15.1
Minimum service temperature		°C	-40
Maximum service temperature		°C	+140

### Global migration results of FDA extraction on EC805 material samples (mg/inch<sup>2</sup>)

FDA test method	Reflux test conditions	Mass Loss	Limit*	Conclusion
CFR 177.2600 (e)	De-ionised water, 7 hours	1.31	20	PASS
CFR 177.2600 (e)	De-ionised water, 2 hours	0.17	1	PASS
CFR 177.2600 (f)	N-hexane, 7 hours	81.47	175	PASS
CFR 177.2600 (f)	N-hexane, 2 hours	0.76	4	PASS

\* Maximum acceptable global migration according to FDA CFR 177.2600

## Main Characteristics

- Metal detectable & X-Ray detectable
- CFR 177.2600 FDA Compliant
- Extraction tested
- Blue in colour
- ADI & Nut free
- 3-A Class 3 compliant (Excluding milk fat test)

## Typical Products

- Triclover seals
- RJT seals
- DIN 11851 D-Seals
- Static Seals & O-Rings
- Vulcanised / Joined profiles
- Bespoke mouldings

Tel: 0044 (0) 114 243 2777 . Fax: 0044 (0) 114 242 2300 . Mail: [sales.esd@m-seals.co.uk](mailto:sales.esd@m-seals.co.uk) . Web: [www.m-seals.com](http://www.m-seals.com)

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