

E70Q

EPDM elastomer for food, dairy and life-science applications

Description

E70Q is a peroxide-cured, Ethylene Propylene Terpolymer material suitable for use in all types of applications requiring FDA, USP and 3A compliance. It is suitable for use in all food contact applications including dry, aqueous and fatty* media,

E70Q provides excellent water and steam resistance and is widely used in equipment associated with the production of foodstuffs intended for human consumption and biomedical applications.

Available in any sized O-ring (fully moulded up to 2.5m/8ft internal diameter), gaskets and custom designed components.



Key Attributes

- FDA compliant – extraction tested to CFR 21 § 177.2600(e,f)
- USP Class VI <88> and USP <87> compliant
- 3A sanitary standard 18-03 Class 2 compliant
- Free from Animal Derived Ingredients (ADI)

Typical Applications

Recommended for use in food, dairy, biomedical and pharmaceutical applications

- O-rings
- Gaskets
- Hygienic/sanitary couplings & pipe connectors
- Valves
- Pumps
- Metering Equipment

Other materials available

E80Q FDA & 3A compliant EPDM grade (black)
 V70H FDA, USP & 3A compliant FKM grade (black)
 E73D KTW, DVGW, ACS, NSF, WRAS – compliant EPDM grade (black)

Typical Material Properties

Property	ASTM	ISO	Value
Material Type	EPDM	EPDM	Terpolymer
Colour			Black
Hardness (typical value): (°IRHD)	D1415	ISO48	70
Tensile Strength(MPa)	D412	ISO37	11.5
Elongation at break (%)	D412	ISO37	395
Compression Set: 22 hrs @ 125°C (257°F) 120 hrs @ 130°C (266°F) 672 hrs @ 130°C(266°F)	D395	ISO815	16.5% 22% 31%
Minimum Operating Temperature			-40°C (-40°F)
Maximum Operating Temperature			+150°C (+302°F)
Low temperature resistance: Non-brittle for 3 mins @	D2137	ISO R812	-40°C (-40°F)

Special Note: This information is the best of our knowledge accurate and reliable. However, Abbey Seals International Ltd makes no warranty, expressed or implied, that parts manufactured from this material will perform satisfactorily in the customer's application. It is the customer's responsibility to evaluate parts prior to use, especially in applications where their failure may result in injury and/or damage. It should also be noted that all elastomeric parts have a finite life. Therefore a regular programme of inspection and replacement is strongly recommended. The material properties above should not be used for specification purposes



FDA Extraction test results			
Media	Extraction Test	Authorised limits mg/sq.inch	E70Q test result
Boiling Water	First 7 hours	20	3.00
	2 succeeding hrs	1	0.18
n-Hexane	First 7 hours	175	48.2
	2 succeeding hrs	4	0.11

*recommended for use with maximum 8% milk fat concentration only.



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