

# E81H

Low friction EPDM elastomer for food applications



## Description

E81H is a peroxide-cured, Ethylene Propylene Terpolymer material suitable for use in dry food contact applications requiring FDA compliance.

E81H contains PTFE to provide increased surface lubricity and reduced friction in dynamic sealing applications.

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

## Key Attributes

- ▶ FDA extraction tested to CFR 21 § 177.2600 (a-d)
- ▶ Contains PTFE to improve surface lubricity/reduce friction
- ▶ Free from Animal Derived Ingredients (ADI)

## Typical Applications

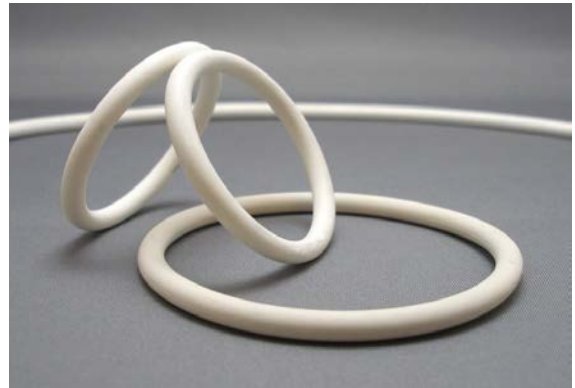
Recommended for use in dry food contact applications.

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

## Other materials available

E80H FDA compliant (all food types) EPDM grade (white)  
 E70H USP & FDA compliant (all food types) EPDM grade (white)  
 E73D KTW, DVGW, ACS, NSF, WRAS-compliant EPDM grade (black)  
 Many more FDA, USP Class VI & 3A compliant materials for food, drinking water and pharmaceutical applications

Heat Resistance: 168 hours @ 125°C (257°F)			
	ASTM	ISO	Value
Hardness change (points)	D1415	ISO48	+6
Tensile strength change (%)	D412	ISO37	-15
Elongation at break change	D412	ISO37	-15



## Typical Material Properties

Property	ASTM	ISO	
Material Type	EPDM	EPDM	Terpolymer
Colour			White
Hardness (typical value): (°IRHD)	D1415	ISO48	78
Tensile Strength (MPa)	D412	ISO37	7
Elongation at break (%)	D412	ISO37	200
Compression Set: 70 hrs @ 100°C (212°F)	D395	ISO815	13%
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 to the best of our knowledge accurate and reliable. However, PPE 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 program of inspection and replacement is strongly recommended. In non-black grades of elastomer, it is possible to observe slight variations in colour. This is normal and is inherent in the part; it is not indicative of foreign matter. These colour variations are not expected to adversely affect the performance of the part.  
 The material properties above should not be used for specification purposes.

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