



# AES-Elast™

Probably the most generically applicable elastomer in the world



- As close as possible to a one size fits all elastomer solution for generic process seal applications
- One of the most universally fluid-resistant elastomers
- Suits food industry component and cartridge seals
- FDA compliance to US regulation 21CFR177.2600



## Introduction

AES-Elast™ offers the excellent thermal resistance of Viton® with unique resistance to chemicals and environments that have historically exceeded the performance of conventional fluoroelastomers, particularly in highly caustic and steam applications.

The elastomer is FDA compliant to US regulation 21CFR177.2600.

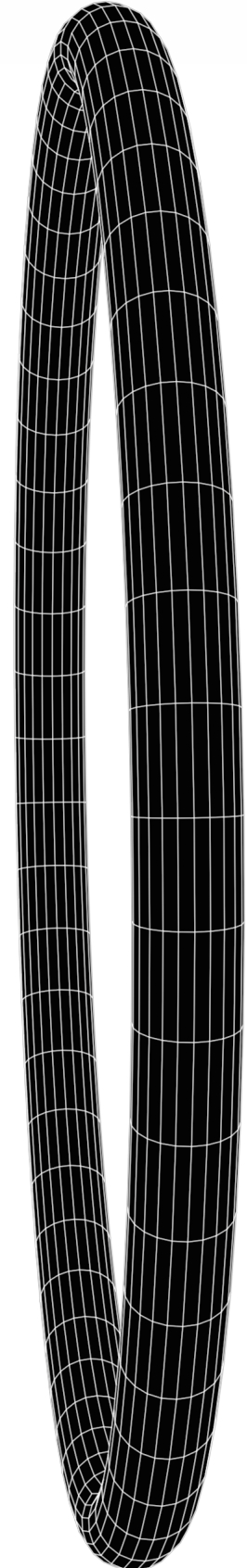
## Description

<b>Chemical Composition</b>	Copolymer of ethylene, tetrafluoroethylene, perfluoromethylvinyl ether, and a cure site monomer
<b>Physical Form</b>	O-Rings and moulded components
<b>Colour</b>	Black
<b>AESSEAL Colour Code</b>	Ivory (2 dots)
<b>Storage Stability</b>	Excellent

SGS technical report MAN272304-001 can be provided upon request to provide confidence for customers and to assist with any management of change (MOC) processes at site.

## Physical properties

Property	Typical Value	Test Standard
<b>Temperature Resistance</b>	-20 to 200°C (-5 to 400°F)	
<b>Hardness</b>	70 ± 5 Shore A	ASTM D2240
<b>Tensile Strength (min)</b>	19.33 MPa	ASTM D412
<b>Elongation (min)</b>	247%	ASTM D412
<b>Specific Gravity</b>	1.87	ASTM D297
<b>Modulus at 100%</b>	5.48 MPa	
<b>Compression Set (max)</b>	12%	ASTM D395



## Ageing properties

Property	Heat ageing - ASTM D573 (70 hours at 250°C)	Oil resistance in #3 Oil ASTM D471 (70 hours at 150°C)
Hardness change	+1.4 Shore A	+7.8 Shore A
Tensile strength change	-5.79%	-3.1%
Elongation change	-5.16%	+26%
Volume change	-1.25%	+1.43%



## Chemical resistance

Below is a generic guide of broad chemical suitability. For full compatibility selections contact AESSEAL®.

### Recommended:

- Acids
- Alcohols
- Aldehydes
- Alkalis
- Amines
- Bases
- Brine
- Gasoline
- High pH Caustics
- Hydraulic Oils
- Hydrocarbons, aromatic and aliphatic
- Ketones
- MTBB, MBK, MIBK (low mol weight carbonyls)
- Oils and Fuels
- Mixed solvents systems
- Steam / Hot Water >80°C
- Vegetable oils, animal fats
- Water

### Not Recommended:

- Ammonia
- Calcium Acetate
- Carbonyl Chloride
- Ethylene Oxide
- Glycol Ether
- Hydrofluoric Acid
- Propylene Oxide

## FDA approved

FDA approved, AES-ELAST™ is especially suitable to meet the needs of the Food & Beverage industry where high temperatures and caustic solutions are required to meet strict hygiene arrangements.

AES-ELAST™ is competitively priced compared to FFKM/FKM brands, continuing our tradition of supplying high quality products at a favourable price for our customers.

**Contact your local AESSEAL® representative for more information.**

[AES-Elast@aes seal.com](mailto:AES-Elast@aes seal.com)





## At last ... AES-Elast™

With global supply chains under pressure, particularly for perfluoroelastomers, AESSEAL® is delighted to formally release its AES-Elast™ O-ring for standard and non-standard sealing applications.

This is a trademark brand 100% manufactured by AESSEAL® and held in stock for immediate delivery.



 This brochure is fully recyclable. When laminated, a sustainable, biodegradable and recyclable lamination is used. 

For further information and safe operating limits contact our technical specialists at the locations below.



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[www.aes seal.com](http://www.aes seal.com)

#### AESSEAL plc is certified to:

ISO 9001, ISO 14001, ISO/IEC 20000, ISO/IEC 27001,  
ISO/TS 29001, ISO 37001, ISO 45001 & ISO 50001



Net Zero champions globally



Use double mechanical seals with hazardous products.

Always take safety precautions:

- Guard your equipment
- Wear protective clothing



#### USA Sales & Technical advice:

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