Description

Owen Oil Tools Engineering has four (4) O-Ring Specifications to cover the range of operating conditions generally encountered in the oil field. Owen will supply only compounds that meet or exceed our engineering specifications. Please be aware that most catalog pages on product list only the O-Ring compound required for standard duty services. Always determine the most suitable compound for your operating conditions. Some conditions that determine the recommended O-Ring and seal system are as follows:

- Maximum Pressure
- Minimum Sealing Temperature
- Maximum Sealing Temperature
- Methane and/or other Natural Gases present
- CO_2 and/or H_2S presence
- Acids presence
- Maximum Exposure Time

Service Class	OES No. (4)	Nominal Durometer Shore 'A)	Compound	Temp. 1 hr. (1)	Temp. 100 hr. (2)	(3) Peek Back-ups req'd above (psi)
Standard	OES-N569-000	90	Peroxide Cured Nitrile	375°F	300°F	20,000
High Temperature	OES-V569-000	90	Fluorocarbon-Viton	450°F	400°F	20,000
High Temperature	OES-V570-000	95	Fluorocarbon-Viton	450°F	400°F	20,000
Hostile Environment	OES-A569-000	95	AFLAS (5)	550°F	475°F	Back-ups Req'd Always

(1, 2) Intended for Guideline purposes only. Please consult Owen Engineering for details and qualification testing.

(3) PEEK Back-up requirements depend primarily on extrusion gap, Temperature & Pressure conditions. Please consult Owen Engineering for details and qualification testing.

(4) Owen O-Ring Part No. Includes Specification number.
(eg. P/N: OOO-N569-230 = #230, Peroxide Cured Nitrile as per specification OES-N569-000)
(eg. P/N: OOO-V570-230 = #230, Viton - 95 Duro as per specification OES-V570-000)

(5) Not Recommended for sealing temperature below 40°F.

O-Ring Specifications (cont'd.)

Compound	Nitrile	Viton	Viton	AFLAS
Specification	OES-N569-000	OES-V569-000	OES-V570-000	OES-A569-000
Environments				
H2S	NR	B	A	A
CO2	A	B/C	B/C	B
CH4 (Methane)	C	A	B	A
Hydrocarbon (sweet crude)	A	A	A	A
Alcohols	A	C	C	B
Inhibitors	B	NR	NR	A
Salt Water	A	A	A	A
Steam (1)	NR	NR	NR	B
Diesel	B	A	A	B

A - Satisfactory B - Little or No Effect C - Swells D - Attacks NR - Not Recommended
(1) Recommended EPDM Compound