

Parco

4623-90 Nitrile Seals

Need Peroxide-Cured 90-Durometer Seals at a Great Price?

Parco is committed to being the leader in low-cost, peroxide-cured, 90-durometer nitrile O-rings. Seals made from our 4623-90 compound have outstanding physical properties and are competitively priced.

4623-90 Meets Your Needs

1. Excellent Resistance to Compression Set

When installed, most seals must resist taking a set from compression to seal properly. When a seal takes a set, it no longer exerts force on the mating surfaces, resulting in leakage. A compound with low compression set, like 4623-90, better maintains its elastomeric properties and original thickness, preserving seal integrity.

Seals made from Parco's 4623-90 compound provide excellent resistance to compression set at higher temperatures. After testing 4623-90 for 22 hours at 212°F, it had a compression set of only 9 percent (see Figure 1).

2. Peroxide-Cured

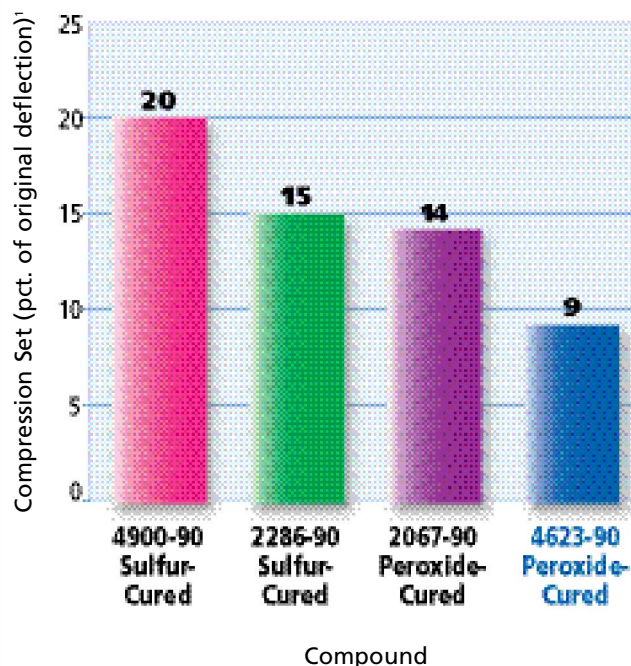
Nitrile compounds use either sulfur or peroxide curatives. Peroxide-cured compounds typically have better resistance to compression set and extrusion. Peroxide-cured compounds also have lower elongation.

3. Exceptional Prices

Parco's 4623-90 prices are among the lowest available. We use the latest manufacturing techniques and sell in huge volume. That allows us to provide you with peroxide-cured, 90-durometer nitrile O-rings at a great price.

Fig. 1:

Compression Set of Popular Parco 90-Durometer Nitrile Compounds



¹Compression set calculated after 22 hours at 100°C (212°F).

Source: Parco Test Reports.

Parco seals made from 4623-90 have excellent resistance to compression set. At 9 percent, 4623-90 significantly outperforms other 90-durometer nitrile compounds.

4623-90

Typical Values for Compound 4623-90 Peroxide-cured 90-durometer nitrile

Section of Spec.	Physical Property	Requirement ¹	Typical Value	ASTM Test Method
	Original Properties			
	Hardness, Shore A	90 ± 5	88	D2240
	Tensile strength, MPa (psi), min.	10(1450)	21.4(3101)	D412
	Ultimate elongation, pct., min.	100	123	D412
Z1	Modulus at 50 pct., elongation, MPa (psi)	Report	10.2(1481)	D412
	Compression Set, Solid			D395
	Pct. of original deflection			Method B
B14	22 hours at 100°C (212°F)	25	9	
Z2	70 hours at 150°C (302°F)	Report	21	
	Heat Aging			
	70 hours at 100°C (212°F)			D573
Basic	Hardness change, pts., Shore A	±15	1	
	Tensile strength change, pct.	±30	-6	
	Ultimate elongation change, pct., max.	-50	-19	
	Fluid Aging, Fuel B			
	70 hours at 23°C (73°F)			D471
EF21	Hardness change, pts., Shore A	-30 to 10	-5	
	Tensile strength change, pct., max.	-60	-18	
	Ultimate elongation change, pct., max.	-60	-14	
	Volume change, pct.	0 to 40	7	
	Fluid Aging, IRM 903 Oil			
	70 hours at 100°C (212°F)			D471
EO34	Hardness change, pts., Shore A	-10 to +5	-1	
	Tensile strength change, pct., max.	-45	-20	
	Ultimate elongation change, pct., max.	-45	-25	
	Volume change, pct.	0 to +25	2	

¹Compound 4623-90 meets the requirements shown above for ASTM D2000 M7BG910 B14 EF21 EO34 Z1 Z2.

Source: Parco Test Report 8086B.

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