HNBR (Highly Saturated Nitrile) Elastomer Compound 574CX

Minnesota Rubber & Plastics
Quadion LLC

General Features

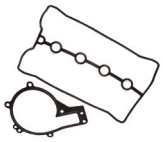
- Excellent compression set resistance
- Superior heat resistance
- Excellent resistance to petroleum oils, greases, and fuels
- Good low temperature performance

Application

A general purpose HNBR with excellent aging resistance for suitability in demanding sealing applications.

574CX exhibits excellent resistance to wide range of petroleum products, automotive coolants, refrigerants and lubricants while providing good low temperature flexibility.


Engine Seals


Intake Manifold Seals


Bonded Seals


Valve Body Seals


Transmission Seals


Hydraulic and Pneumatic Seals


Quad-Ring® Seals


Quad® Brand O-Rings & Ground Rubber Balls

Original Properties

Property	Unit	Required	Obtained	ASTM Test Method
Hardness	Shore A	70 ± 5	71	D 2240
Tensile	MPa	10 min	21.1	D 412
Elongation at break	%		242	D 412
100% Modulus	MPa		5	D 412
Tear Strength, Die C	kN/m		17.9	D 624
Specific Gravity			1.21	D 297

Air Age

Property	Unit	Obtained	ASTM Test Method
Change after 70h @ 150°C			D 573
Δ Hardness	Shore A	3	
Δ Tensile	%	-0.8	
Δ Elongation	%	0.8	

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Fluid Immersion

Property	Unit	Obtained	ASTM Test Method
IRM 901 oil			
Change after 70h @ 150°C			D 471
Δ Hardness	Shore A	0	
Δ Tensile	%	-2.2	
Δ Elongation	%	-4.1	
Δ Volume	%	-1.5	

Property	Unit	Obtained	ASTM Test Method
IRM 903 oil			
Change after 70h @ 150°C			D 471
Δ Hardness	Shore A	-7	
Δ Tensile	%	-0.8	
Δ Elongation	%	0.8	
Δ Volume	%	12.4	

Property	Unit	Obtained	ASTM Test Method
Diesel Exhaust Fluid (DEF)			
Change after 168h @ 125°C			D 471
Δ Hardness	Shore A	-3	
Δ Tensile	%	-9.4	
Δ Elongation	%	6.2	
Δ Volume	%	6.9	

Property	Unit	Obtained	ASTM Test Method
Caterpillar ELC Coolant (50% with DI Water)			
Change after 336h @ 150°C			D 471
Δ Hardness	Shore A	-2	
Δ Tensile	%	-3.8	
Δ Elongation	%	0.7	
Δ Volume	%	1.1	

Property	Unit	Obtained	ASTM Test Method
Mobil 1 Dexos 0W-20 Motor Oil			
Change after 70h @ 100°C			D 471
Δ Hardness	Shore A	-2	
Δ Tensile	%	2.5	
Δ Elongation	%	6.2	
Δ Volume	%	0.5	

Property	Unit	Obtained	ASTM Test Method
Mobil 1 Dexos 0W-20 Motor Oil containing 0.88% by volume of 15.8 Normal Nitric Acid			
Change after 70h @ 100°C			D 471
Δ Hardness	Shore A	-1	
Δ Tensile	%	-2.1	
Δ Elongation	%	-12.4	
Δ Volume	%	1.2	

Property	Unit	Obtained	ASTM Test Method
Ford Premium Coolant (50% with DI Water)			
Change after 336h @ 150°C			D 471
Δ Hardness	Shore A	-3	
Δ Tensile	%	-8.4	
Δ Elongation	%	-2.6	
Δ Volume	%	2.3	

Property	Unit	Obtained	ASTM Test Method
GM DexCool Coolant (50% with DI Water)			
Change after 336h @ 150°C			D 471
Δ Hardness	Shore A	-3	
Δ Tensile	%	-12.6	
Δ Elongation	%	2.2	
Δ Volume	%	3.1	

Compression Set Resistance

Property	Unit	Obtained	ASTM Test Method
			D 395, Method B
22h @ 150°C	%	7.4	
70h @ 150°C	%	11.4	

Low Temperature

Property	Obtained	ASTM Test Method
Glass Transition Temperature, °C	-27	D 7426
Temperature Retraction, TR10, °C	-27	D 1329

Minnesota Rubber & Plastics
Quadion LLC
Leader in Advanced Technologies

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