Qmonix® EPDM Elastomer Compound 560NF







General Features

- Excellent compression set resistance and compression set resistance
- Very good resistance to all aqueous media; water, steam, aqueous acids/ bases, as well as glycol-based coolants, including organic acid technology coolants
- Excellent low temperature performance
- Excellent resistance to glycol-based brake fluids

Application

Designed for use in Transportation (Automotive) applications requiring contact with aqueous and glycol-based solutions such as coolants and brake fluids.

560ND offers excellent compression set resistance, heat resistance, and low temperature flexibility.







Engine Seals

Intake Manifold Seals

Transmission Seals

Bonded Seals







Valve Body 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	73	D 2240
Tensile	MPa	10 min	16.7	D 412
Elongation at break	%		219	D 412
100% Modulus	MPa		4.7	D 412
Tear Strength, Die C	kN/m		15.8	D 624
Specific Gravity			1.11	D 297



Property	Unit	Obtained	ASTM Test Method	Property	Unit	Obtained	ASTM Test Method
Change after 70h @ 100°C			D 573	Change after 168h @ 125°C			D 573
Δ Hardness	Shore A	3		Δ Hardness	Shore A	3	
∆ Tensile	%	18.4		∆ Tensile	%	18.4	
Δ Elongation	%	4.8		Δ Elongation	%	4.8	

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Fluid Immersion

Property	Unit	Obtained	ASTM Test Method	Property	Unit	Obtained	ASTM Test Method
Water				Caterpillar ELC			
Change after 70h @ 100°C			D 471	Change after 1008h @ 125°C			D 471
Δ Hardness	Shore A	-1		Δ Hardness	Shore A	1	
Δ Tensile	%	10.9		Δ Tensile	%	6.4	
Δ Elongation	%	4.3		Δ Elongation	%	0.5	
∆ Volume	%	0.1		Δ Volume	%	-1.1	
Property	Unit	Obtained	ASTM Test Method	Property	Unit	Obtained	ASTM Test Method
DOT 3 Brake Fluid				Diesel Exhaust Fluid (DEF)			
Change after 168h @ 150°C			D 471	Change after 168h @ 125°C			D 471
Δ Hardness	Shore A	-3		∆ Hardness	Shore A	-7	
∆ Tensile	%	13.6		∆ Tensile	%	10.2	
Δ Elongation	%	-0.5		Δ Elongation	%	-12.5	
∆ Volume	%	5.2		Δ Volume	%	47.9	
Property	Unit	Obtained	ASTM Test Method	Property	Unit	Obtained	ASTM Test Method
Property DexCool Coolant	Unit	Obtained	ASTM Test Method	Property DexCool Coolant	Unit	Obtained	ASTM Test Method
Property DexCool Coolant Change after 70h @ 125°C	Unit	Obtained	ASTM Test Method D 471	Property DexCool Coolant Change after 168h @ 125°C	Unit	Obtained	ASTM Test Method D 471
Property DexCool Coolant Change after 70h @ 125°C Δ Hardness	Unit Shore A	Obtained 3	ASTM Test Method D 471	Property DexCool Coolant Change after 168h @ 125°C Δ Hardness	Unit Shore A	Obtained 1	ASTM Test Method D 471
Property DexCool Coolant Change after 70h @ 125°C Δ Hardness Δ Tensile	Unit Shore A %	Obtained 3 21.8	ASTM Test Method D 471	PropertyDexCool CoolantChange after 168h @ 125°CΔ HardnessΔ Tensile	Unit Shore A %	Obtained 1 16.3	ASTM Test Method D 471
PropertyDexCool CoolantChange after 70h @ 125°CΔ HardnessΔ TensileΔ Elongation	Unit Shore A % %	Obtained 3 21.8 3.4	ASTM Test Method	PropertyDexCool CoolantChange after 168h @ 125°CΔ HardnessΔ TensileΔ Elongation	Unit Shore A % %	Obtained 1 16.3 8.7	ASTM Test Method D 471
PropertyDexCool CoolantChange after 70h @ 125°CΔ HardnessΔ TensileΔ ElongationΔ Volume	Unit Shore A % % %	Obtained 3 21.8 3.4 -0.4	ASTM Test Method D 471	PropertyDexCool CoolantChange after 168h @ 125°CΔ HardnessΔ TensileΔ ElongationΔ Volume	Unit Shore A % % %	Obtained 1 16.3 8.7 -0.4	ASTM Test Method
Property DexCool Coolant Change after 70h @ 125°C Δ Hardness Δ Tensile Δ Elongation Δ Volume	Unit Shore A % % %	Obtained 3 21.8 3.4 -0.4 Obtained	ASTM Test Method	Property DexCool Coolant Change after 168h @ 125°C Δ Hardness Δ Tensile Δ Elongation Δ Volume	Unit Shore A % % %	Obtained 1 16.3 8.7 -0.4 Obtained	ASTM Test Method D 471 ASTM Test Method
Property DexCool Coolant Change after 70h @ 125°C Δ Hardness Δ Tensile Δ Elongation Δ Volume Property DexCool Coolant	Unit Shore A % % % Unit	Obtained 3 21.8 3.4 -0.4 Obtained	ASTM Test Method	Property DexCool Coolant Change after 168h @ 125°C Δ Hardness Δ Tensile Δ Elongation Δ Volume Property DexCool Coolant	Unit Shore A % % % Unit	Obtained 1 1 1 6.3 8.7 -0.4 Obtained	ASTM Test Method
Property DexCool Coolant Change after 70h @ 125°C Δ Hardness Δ Tensile Δ Tensile Δ Volume Property DexCool Coolant Change after 1008h @125°C	Unit Shore A % % Unit	Obtained 3 21.8 3.4 -0.4 Obtained	ASTM Test Method	Property DexCool Coolant Change after 168h @ 125°C Δ Hardness Δ Tensile Δ Elongation Δ Volume Property DexCool Coolant Change after 70h @ 135°C	Unit Shore A % % % Unit	Obtained 1 1 6.3 8.7 -0.4 Obtained	ASTM Test Method
Property DexCool Coolant Change after 70h @ 125°C Δ Hardness Δ Tensile Δ Elongation Δ Volume Property DexCool Coolant Change after 1008h @125°C Δ Hardness	Unit Shore A % % Unit	Obtained 3 21.8 3.4 -0.4 Obtained	ASTM Test Method	Property DexCool Coolant Change after 168h @ 125°C Δ Hardness Δ Tensile Δ Elongation Δ Volume Property DexCool Coolant Change after 70h @ 135°C Δ Hardness	Unit Shore A % Unit Unit Shore A	Obtained 1 1 6.3 8.7 - 0.4 Obtained	ASTM Test Method
Property DexCool Coolant Change after 70h @ 125°C Δ Hardness Δ Tensile Δ Elongation Δ Volume Property DexCool Coolant Change after 1008h @125°C Δ Hardness Δ Tensile	Unit Shore A % % Unit Shore A %	Obtained 3 21.8 3.4 -0.4 Obtained 3 15	ASTM Test Method	Property DexCool Coolant Change after 168h @ 125°C Δ Hardness Δ Tensile Δ Elongation Δ Volume DexCool Coolant DexCool Coolant Change after 70h @ 135°C Δ Hardness Δ Tensile	Unit Shore A % % 0% Unit Shore A %	Obtained 1 1 1 6.3 8.7 -0.4 Obtained Obtained -5.2	ASTM Test Method
Property DexCool Coolant Change after 70h @ 125°C Δ Hardness Δ Tensile Δ Tensile Δ Volume Property DexCool Coolant Change after 1008h @125°C Δ Hardness Δ Tensile Δ Lange after 1008h @125°C Δ Hardness Δ Tensile Δ Tensile Δ Tensile Δ Tensile Δ Tensile Δ Tensile Δ Tensile	Unit Shore A % % Unit Shore A % %	Obtained 3 21.8 3.4 -0.4 Obtained 3 15 -1.4	ASTM Test Method	Property DexCool Coolant Change after 168h @ 125°C Δ Hardness Δ Tensile Δ Elongation Δ Volume DexCool Coolant Change after 70h @ 135°C Δ Hardness Δ Hardness Δ Froperty DexCool Coolant Change after 70h @ 135°C Δ Hardness Δ Tensile Δ Elongation	Unit Shore A % % Unit Shore A % %	Obtained 1 16.3 8.7 -0.4 Obtained 0 -5.2 -10.6	ASTM Test Method

Compression Set Resistance

Property	Unit	Obtained	ASTM Test Method
			D 395, Method B
22h @ 100°C	%	8.4	
70h @ 100°C	%	10.4	
22h @ 125°C	%	7.1	
70h @ 125°C	%	11.1	
22h @ 150°C	%	10.9	
70h @ 150°C	%	19	

Property	Obtained	ASTM Test Method
Glass Transition Temperature, °C	-50	D 7426

Low Temperature



To get a quote or order, please visit our website or contact one of our Customer Service Representatives USA: 1(800)927-1422 Asia: +86-512 6273 2700 Europe: +33(0)2 32 22 24 26

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