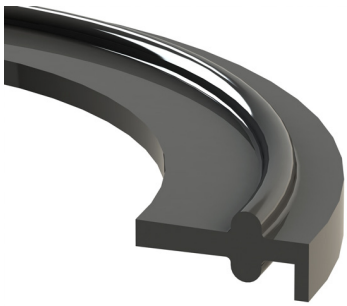
EPDM 70 Compound 559273

559273 is a specialist grade peroxide cured EPDM compound developed for pharmaceutical applications and food contact with improved chemical and thermal resistance. This compound is developed in conformity with USP class VI. The USP study was conducted based upon the references: USP 30, NF25, 2007.<88> Biological Reactivity Tests, in vivo. Extraction conditions 121 ± 2°C for 1 ± 0,1 hour.



Description

- **Chemical composition**: Terpolymer of ethylene, propylene and diene
- **Physical form**: O-rings, moulded parts and triclamps
- **Colour**: Black
- **Temperature resistance**: -45°C to +150°C

Application

- Pharmaceutical
- Food contact

Compliances

- USP class VI <88><381>
- FDA CFR 177.2600
- EC1935:2004
- ADI
- REACH
- RoHS

Additional information

- USP 35, NF 30, chapter <381> Elastomeric Klozures for injections, section physico-chemical tests.
- Extraction tested
- Migration tested
- O-rings available from stock

Table 1: Physical properties

Property	Test standard	Value	Unit
Hardness	ASTM D2240	70±5	Shore A
Elongation at break	ASTM D412	190	%
Tensile strength	ASTM D412	14	MPa
100% Modulus	ASTM D412	5.5	MPa
Compression set – 24 hours at 125°C Slab	ASTM 395	13	%

Table 2: Ageing properties

Property	Test standard	Value	Unit
Heat ageing – 70 hours at 150°C	ASTM D573		
Hardness change		+1	Shore A
Elongation at break change		-18	%
Tensile strength change		-18	%
Immersion in water - 70 hours at 100°C	ASTM D417		
Hardness change		-2	Shore A
Elongation at break change		+1	%
Tensile strength change		-3	%
Volume change		+1.3	%