



ERIKS' 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  $121 \pm 2^{\circ}$ C for  $1 \pm 0.1$  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

Please consult our <u>Chemical Resistance Guide</u> for more information on this compound.

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| Table 1. Thysical 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     |  |
| Comprossion set 24 hours at 125°C |               |       |         |  |

### Table 2: Ageing properties

Slab

| 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  | %       |

ASTM 395

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