

### FKM 75-compound 514206 copolymer for Vulc-O-Ring - Technical Data Sheet

#### 1. Introduction

Fluoroelastomer 514206-compound is based on Genuine Viton® polymer. Products out of this compound are being made according to strict guidelines of DuPont Performance Elastomers or Solexis. This guarantees a constant high quality level.



#### 2. Product Description

|                        |  |
|------------------------|--|
| Chemical Composition : | Dipolymer of Hexa-Fluoropropylene and Vinylidene Fluoride, plus cure chemicals |
| Physical form :        | O-Rings / Mouldings  |
| Colour :               | Black  |
| Odour :                | None   |
| Storage stability * :  | Excellent  |

\* : Following ISO 2230 conditions

#### 3. Physical Properties

| Test Method                     | Norm     | Test Values    |
|---------------------------------|----------|----------------|
| Hardness on slab                | ISO 868  | 75 ± 5 Shore A |
| Tensile Strength at break       | ISO 37   | 11,52 MPa      |
| Elongation at break             | ISO 37   | 233%           |
| Specific Weight                 | ISO 2781 | 2,32           |
| Modulus at 100%                 | ISO 37   | 7,2%           |
| Compression Set                 | ISO 815  |                |
| 22h/175°C, on slab              |          | 4,6%           |
| 22h/200°C, on slab              |          | 7,0%           |
| Heat Ageing 70h/250°C           | ISO 188  |                |
| Hardness Change                 |          | +4°            |
| Elongation Change               |          | -34%           |
| Tensile Strength Change         |          | +3,7 MPa       |
| Weight Change                   |          | 0,02 gr        |
| Immersion in oil n°2, 70h/150°C | ISO 1817 |                |
| Hardness Change                 |          | +0,5°          |
| Volume Change                   |          | +4,56          |
| Elongation Change               |          | -6,5           |
| Tensile Strength Change         |          | +0,47 MPa      |
| Immersion in Fuel C, 70h/23°C   | ISO 1817 |                |
| Hardness Change                 |          | -1°            |
| Volume Change                   |          | +3%            |
| Elongation Change               |          | -3%            |
| Tensile Strength Change         |          | -0,23 Mpa      |

#### 4. Temperature Resistance

- 20° to +200°C
- TR10 (low temp. resistance): -17°C

#### 5. Chemical Resistance

|                    |             |                    |             |
|--------------------|-------------|--------------------|-------------|
| Concentrated acids | : excellent | Crude oil          | : excellent |
| Acetone            | : bad       | Toluene            | : excellent |
| Hydroxides         | : excellent | Fuel C             | : excellent |
| Benzene            | : excellent | Gasoline           | : very good |
|                    |             | ASTM oil 3         | : excellent |
|                    |             | Methylene chloride | : very good |
|                    |             | MEK                | : bad       |
|                    |             | MTBE               | : bad       |
|                    |             | Water < 100°C      | : good      |

#### 6. Advantages

- Extreme good compression-set
- Can be produced in small quantities in all possible sizes up to Ø 5000 mm inside and Ø 25 mm core.
- Brown and green colour on demand.

#### 7. Other Information on Vulc-O-Rings

- Tolerances standard on cross section to ISO 3302.
- Tolerances on O-Ring inside diameter according ISO 3302 up to diam. 160 mm. Bigger diameters tolerances ±0,5%.
- Smooth surface.
- Can be produced to ±0,05 mm tolerance in cross section.