
# THE SEALING INNOVATION TIMES

## FKM original Viton® compound 514323 developed for biodiesels

**Biodiesels are an esterification of fatty acids with vegetable oils as origin. The presence of water can reverse this chemical reaction.**


Standard Viton® copolymers will swell and standard fillers such as metaloxides will be attacked.

ERIKS MDT (Material Development Team) developed a special compound 514323 based on an original Viton®.

Extensive tests at ERIKS MTC (Material Technology Center) assure you a constant quality for biodiesel, pure or mixed.

know-how makes the difference

ERIKS

# Genuine Viton® 75-compound 514323 black - Technical Data Sheet

## 1. Introduction

Original Viton® 514323-compound is based on a 100% Genuine Viton®-F polymer according the APA technology. This compound is specially formulated for bio-fuels. Products out of this compound are being made according to strict guidelines of DuPont Performance Elasomers. This guarantees a constant high quality level. All products carry the specific, easy recognizable emblem on their package.

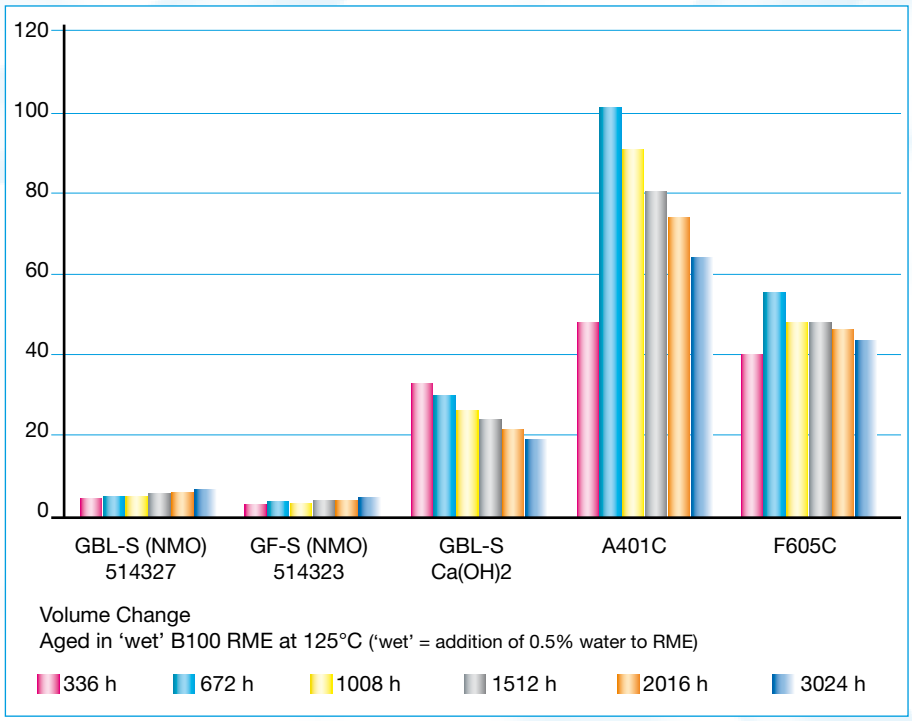
## 2. Product Description

| | | |
|---|---|---|
| Chemical Composition | : | Special fluorcarbon with 70% fluorine, peroxide cured |
| Physical form | : | O-Rings |
| Colour | : | Black |
| Odour | : | None |
| Storage stability * | : | Excellent |

* : Following ISO 2230 conditions

## 3. Physical Properties

| *Test Method* | *Norm* | *Test Values* |
|---|---|---|
| Hardness | ISO 48 Method M | 75 ± 5 IRHD |
| Tensile Strength at break | ISO 37 | 18,2 MPa |
| Elongation at break | ISO 37 | 310% |
| Specific Weight | ISO 2781 | 1,885 |
| Compression Set | ISO 815 | |
| 25% compression - 22h/175°C | ISO 815 | 10% |
| 70h/175°C | ISO 815 | 14% |
| Liquid Resistance RME +0,15%$H_2O$ | ISO 1817-1999 | |
| IRHD Change: 168h/150°C • 336h/150°C • 672h/150°C | | -7% • -7% • -6% |
| Volume Change: 168h/150°C • 336h/150°C • 672h/150°C | | +3,9% • +3,7% • +3,7% |
| Weight Change: 168h/150°C • 336h/150°C • 672h/150°C | | +1,7% • +1,8% • +1,9% |




## 4. Temperature Resistance

- -20° to +200°C
- TR10 (low temp. resistance): -10°C

## 5. Chemical Resistance

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

## 6. Advantages

- Very good compression-set
- Specially resistant to bio-fuel
- Labeled with Viton® stickers