

## EPDM 70-compound 559274 white - Technical Data Sheet

### 1. Introduction

EPDM 70-compound 559274 FDA-USP is made of Peroxide cured, white Terpolymer of Ethylene, Propylene and Diene monomers. Formulated using only those ingredients in conformity with FDA 21 CFR 177.2600 and USP class VI.

### 2. Product Description

|                        |  |
|------------------------|--|
| Chemical Composition : | Peroxide cured, Terpolymer of Ethylene / Propylene and Diene |
| Physical form :        | O-Rings / Mouldings  |
| Colour :               | White  |
| Storage stability * :  | ± 10 years   |

\* : Following ISO 2230 conditions

### 3. Physical Properties

| Test Method                  | Norm            | Test Values                          |
|------------------------------|-----------------|--------------------------------------|
| Hardness                     | ISO 48 Method M | 70 ± 5 IRHD                          |
| Tensile Strength at break    | ISO 37          | 5 MPa                                |
| Elongation at break          | ISO 37          | 350%                                 |
| Compression Set<br>24h/100°C | ISO 815         | 25%                                  |
| Heat Resistance, 70h/100°C   | ISO 188         |                                      |
| Hardness Change              | ISO 48 Method M | +5°                                  |
| Tensile Strength Change      | ISO 37          | -5%                                  |
| Elongation at break Change   | ISO 37          | -15%                                 |
| Low temperature test         | ASTM D 2137     | non-brittle after<br>3 min. at -40°C |

### 4. Temperature Resistance

- -40° to +150°C
- TR10 (low temp. resistance): -35°C

### 5. Chemical Resistance

|              |                       |
|--------------|-----------------------|
| Air          | : excellent           |
| Alcohol      | : excellent           |
| Alkali       | : excellent           |
| Fats         | : unsatisfactory      |
| Hydrocarbons | : unsatisfactory      |
| Ethers       | : excellent           |
| Esters       | : unsatisfactory      |
| Acids        | : fair                |
| Oils         | : unsatisfactory      |
| Water        | : excellent           |
| Steam        | : good<br>up to 150°C |
| Ozone        | : very good           |

### 6. Advantages

- Excellent water and steam resistance.
- Heat and chemical resistance is superior to that of sulphur cured EPDM.

### 7. Other Information

- Compound is formulated to FDA 177.2600 (class 1) and USP class VI
- Can be produced in small quantities, due to compression-moulding production facilities.
- Extraction tested (class 1).
- Certificate on demand.
- This compound is ADI (Animal Derived Ingredient Free).

