

## EPDM 70-compound 55985 - Technical Data Sheet

### 1. Introduction

The ERIKS compound 55985 is a Peroxide cured EPDM-compound with many approvals and compliances. It has improved chemical and thermal resistance compared with sulphur cured EPDM compounds. This material is very suitable for (Chloramine treated) drinking water, food and beverages (incl dairy products) applications.

### 2. Product Description

|                        |   |
|------------------------|---|
| Chemical Composition : | Ethylene Propylene Diene Terpolymer, Peroxide cured |
| Physical form :        | O-Rings / Moulded parts                             |
| Colour :               | Black   |
| Odour :                | None  |
| Storage stability * :  | ± 10 years  |

\* : Following ISO 2230 conditions

### 3. Physical Properties

| Test Method                              | Norm       | Requirements | Test Values |
|--|------------|--------------|-------------|
| Hardness                                 | ISO 48     | 70±5 IRHD    | 68          |
| Specific Weight                          | ISO 2781   | 1,12         | 1,12        |
| Tensile Strength at Break                | ISO 37     | min 10 Mpa   | 15,2 MPA    |
| Elongation at break                      | ISO 37     | min 160%     | 188%        |
| Compression Set, 22h @ 150°C             | ISO 815 A  | max 15%      | 14%         |
| Ageing in water, 70h @ 100°C             | ISO 1817   |              |             |
| Hardness Change                          |            | ±5           | 1           |
| Volume Change                            |            | ±5           | 0,4         |
| Weight Change                            |            |              | 0,7         |
| Chloramine Resistance 50ppm, 672h @ 70°C | ASTM D6284 |              |             |
| Hardness Change                          |            |              | -3          |
| Volume Change                            |            |              | 1,2         |
| Weight Change                            |            |              | 1,4         |

### 4. Temperature Resistance

- -45° to +150°C

### 5. Chemical Resistance

|                             |                    |
|-----------------------------|--------------------|
| Air                         | : excellent        |
| Alcohol                     | : excellent        |
| Alkali                      | : excellent        |
| Brake Fluids (Glycol based) | : good             |
| Fats                        | : unsatisfactory   |
| Hydrocarbons                | : unsatisfactory   |
| Ethers                      | : excellent        |
| Esters                      | : unsatisfactory   |
| Acids                       | : fair             |
| Oils (mineral)              | : unsatisfactory   |
| Water                       | : excellent        |
| Steam                       | : good up to 140°C |
| Ozone                       | : excellent        |

### 6. Advantages

- Very good Compression Set Resistance
- Good Steam Resistance

### 7. Other Information

- Approvals:  
USP Class VI – 121°C  
DVGW-W270 D1and D2  
KTW D1 and D2  
NSF 51 and 61  
WRAS for cold and hot water up to 85°C

- Compliant to:  
3A No. 18-03, Class III  
EN 681-1  
FDA 21 CFR 177.2600  
EC 1935/2004  
ADI free



