

DATASHEET

| DATASHEET | | Date: 07.02.2020 Version: 3.0 |
|-------------------|--|----------------------------------|
| CH No. | <u>MDS CH95101</u> | |
| Basic elastomer | PTFE | |
| Colour | White | |
| Temperature range | Service Temperature range from -200 to + 260 °C | |
| Approvals | RoHS (UE/2015/53) • VHU (2000/53) • SVHC Free • Phthalate Free • WR WRC/WRAS • FDA CFR 21.177.1550 • W270 • UL94 • USP VI • 3A • EU 1935/2004 approved • ADI • EU2023/2006 | |

| TYPICAL PROPERTIES | | | | |
|---|-------------------|-----------|-------|-----------------|
| Properties | Unit | Required | Value | Testing methods |
| Hardness | Shore D | 54-60 | | ISO 868 |
| Tensile strength | MPa | 20-35 | 32 | ISO13000-1 |
| Specific gravity | g/cm ³ | 2.13-2.18 | | ISO13000-1 |
| Maximum Elongation | % | 200-300 | 240 | ISO13000-1 |
| Thermal conductivity | W/m.K | 0.24 | | ASTM C177 |
| Coefficient of friction, dynamic | - | 0.06-0.08 | | - |
| Coefficient of friction, dynamic | - | 0.08 | | ASTM D 1894 |
| Dielectric rigidity | V/mil | - | 421 | ASTM D419 |
| Volumic resistance | Ohm.cm | 1E18 | | ASTM D 257 |
| Fusion temperature | °C | 325-335 | | - |
| Flexion strength | MPa | 17 | | DIN 53452 |
| Traction elasticity modulus | MPa | 600-700 | | DIN 53457 |
| Water absorption | % | 0.01 | | ASTM D570 |
| Shock resistance with notch a | KJ/m ² | 15 | | DIN 53453 |
| Electric resistance | KV/mm | 20-70 | | ASTM D149 |
| Deformation under load 24H at 23°C Load: 14MPa | % | 10-13 | | ASTM D395B |
| Permanent deformation under load 24H at 23°C Load: 14MPa | % | 6-7.5 | | ASTM D395B |
| Compressive strength under 1 % of deformation | MPa | 4-5 | | ASTM D695 |
| Dielectric constant | - | 2.1 | | ASTM D150 |

| AGEING IN AIR 70 HOURS AT 250°C | | | | |
|---------------------------------|---------|----------|-------|-----------------|
| Test: | Unit | Required | Value | Testing methods |
| Traction | % | - | -7 | - |
| Maximum Elongation | % | - | 3 | - |
| Harshness | Shore A | - | 3 | - |
| Volume | % | - | -4.5 | - |

ASTM 101 70 HOURS AT 200°C

| Test: | Unit | Required | Value | Testing methods |
|--------------------|---------|----------|-------|-----------------|
| Traction | % | - | -19 | - |
| Maximum Elongation | % | - | 22 | - |
| Harness | Shore A | - | -8 | - |
| Volume | % | - | 12.2 | - |

ASTM 7700 70 HOURS AT 200°C

| Test: | Unit | Required | Value | Testing methods |
|--------------------|---------|----------|-------|-----------------|
| Traction | % | - | -19 | - |
| Maximum Elongation | % | - | 5 | - |
| Harness | Shore A | - | -11 | - |
| Volume | % | - | 17.1 | - |

FUEL C 70 HOURS AT 23°C

| Test: | Unit | Required | Value | Testing methods |
|--------------------|---------|----------|-------|-----------------|
| Traction | % | - | -16 | - |
| Maximum Elongation | % | - | 6 | - |
| Harness | Shore A | - | -2 | - |
| Volume | % | - | 3.8 | - |

Please Note:

The mentioned values are average values and result from a limited number of laboratory tests. These tests were performed on standard test specimens and may therefore vary significantly from the values that were determined by means of tests performed on finished parts. On the basis of his own tests, the purchaser must ensure that the product is suitable for the intended application purpose. Our recommendations are provided according to the best of our knowledge. However, they are not binding and exclude any form of liability for any kind of damage.