

Technical data sheet in accordance with ASTM

# Material

## VMQ SI701807

auburn

cross linking: peroxidic

|                       |                      |             |              |
|-----------------------|----------------------|-------------|--------------|
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| 2                     | 5/18/2018            |             |              |

| Physical properties   | nominal range  | typical values |                   |
|---|----------------|----------------|-------------------|
| <b>Density</b><br>ASTM D1817  | 1.31 ±0.03     | 1.30           | g/cm <sup>3</sup> |
| <b>Hardness</b><br>ASTM D2240, Shore A                                  | 70 ±5          | 72             | Shore             |
| <b>Tensile strength</b><br>ASTM D412                                    | >= 5           | 6.5            | MPa               |
| <b>Elongation at Break</b><br>ASTM D412                                 | >= 150         | 175            | %                 |
| <b>Low temperature test</b><br>ASTM D1329, TR10                         | ---            | -42.8          | °C                |
| <b>Tear strength</b><br>ASTM D 624, B                                   | ---            | 16.5           | KN/m              |
| <b>Compression set</b><br>ASTM D395, B, 22 h, 175 °C, 25 %              | ---            | 22             | %                 |
| <b>Low-temperature resistance</b><br>ASTM D 2137, 3 min, Method A, pass | ---            | -55            |                   |
| <b>Temperature range</b>  | -55°C to 200°C |                |                   |

### Declarations of conformity

|                      | Country | Part  | Remark   | Expires | unlimited                           |
|----------------------|---------|-------|--|---------|-------------------------------------|
| (EG) 1935/2004       | EU      |       | food   |         | <input checked="" type="checkbox"/> |
| (EG) 2023/2006 (GMP) | EU      |       | (EG) 2023/2006 (GMP)                           |         | <input checked="" type="checkbox"/> |
| ADI Free             |         |       | see certificate                                |         | <input checked="" type="checkbox"/> |
| BfR XV               | DE      |       | BfR XV   |         | <input checked="" type="checkbox"/> |
| FDA                  | USA     | Seals | § 177.2600                                     |         | <input checked="" type="checkbox"/> |
| RoHS conform         |         |       | including EU 2011/65 and EU2015/863 (ROHS III) |         | <input checked="" type="checkbox"/> |

### Freudenberg

Freudenberg Industrial Services GmbH  
 Global Material Technology  
 Nadja Güldner

Telefon: +49 40 66989 279  
 Fax: +49 40 66989 9279  
 Email: nadja.gueldner@fst.com



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### Change after aging in Air: 70h/225°C

Hardness (ASTM D2240, Shore A)  
Tensile strength (ASTM D412)  
Elongation at Break (ASTM D412)

|       | Base value | After aging | difference |
|-------|------------|-------------|------------|
| Shore | 72         | 71          | -1         |
| MPa   | 6.5        | 5.9         | -9 %       |
| %     | 175        | 131         | -25 %      |

#### Typ. values

### Change after aging in IRM 901: 70h/150°C

Hardness (ASTM D2240, Shore A)  
Tensile strength (ASTM D412)  
Elongation at Break (ASTM D412)  
volume change (ASTM D471)

|       | Base value | After aging | difference |
|-------|------------|-------------|------------|
| Shore | 72         | 66          | -6         |
| MPa   | 6.5        | 5.5         | -16 %      |
| %     | 175        | 156         | -11 %      |
|       |            | 4.2         |            |

#### Typ. values

### Change after aging in IRM 903: 70h/150°C

Hardness (ASTM D2240, Shore A)  
Tensile strength (ASTM D412)  
Elongation at Break (ASTM D412)  
volume change (ASTM D471)

|       | Base value | After aging | difference |
|-------|------------|-------------|------------|
| Shore | 72         | 52          | -20        |
| MPa   | 6.5        | 4.9         | -25 %      |
| %     | 175        | 140         | -20 %      |
|       |            | 34.3        |            |

#### Typ. values

### Change after aging in Water: 70h/100°C

Hardness (ASTM D2240, Shore A)  
Tensile strength (ASTM D412)  
Elongation at Break (ASTM D412)  
volume change (ASTM D471)

|       | Base value | After aging | difference |
|-------|------------|-------------|------------|
| Shore | 72         | 72          | 0          |
| MPa   | 6.5        | 5.5         | -16 %      |
| %     | 175        | 163         | -7 %       |
|       |            | -0.2        |            |

#### Typ. values

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### No ASTM D2000 properties available

The given values are based on a limited number of tests on standard test pieces (2mm sheets). The data from finished parts can deviate from above values depending on the manufacturing process and the component geometry.

The data represents our present empirical values. It is incumbent on the person placing the order to examine whether it is suitable for its intended purpose, before using the product. All questions regarding the guarantee of this product are in line with our terms and conditions, inasmuch as statutory provisions do not plan for something else.

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Global Material Technology  
Nadja Güldner

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Fax: +49 40 66989 9279  
Email: [nadja.gueldner@fst.com](mailto:nadja.gueldner@fst.com)

