

## DSM 4.3.6

**Silicone 40 - Black****General:**

Silicone is a synthetic rubber with exceptionally wide temperature range. Silicone rubber has excellent UV, ozone, and weathering resistance and excellent electrical insulation.

Silicone rubber has only fair to poor resistance to hydrocarbons, and only fair strength and resistance to tearing

**Mechanical Properties**

|                           |                    |
|---------------------------|--------------------|
| <b>Material:</b>          | Silicone 40 Black  |
| <b>Press Cure:</b>        | 18 minutes @ 150°C |
| <b>Post Cure:</b>         | 4 hours @ 150°C    |
| <b>Temperature range:</b> | -50°C / +200°C     |

| PROPERTY                                                | Test Standard                                       | VALUE                        |
|---------------------------------------------------------|-----------------------------------------------------|------------------------------|
| <b>Hardness:</b>                                        | ASTM D2240-15                                       | <b>40 ShA</b>                |
| <b>Density:</b>                                         | ISO 2781: 2018                                      | <b>1.09 g/cm<sup>3</sup></b> |
| <b>Tensile Strength:</b>                                | ISO 37: 2017 (type 2 test piece)                    | <b>7 MPa</b>                 |
| <b>Elongation at Break:</b>                             | ISO 37: 2017 (type 2 test piece)                    | <b>450%</b>                  |
| <b>Modulus @ 100%:</b>                                  | ISO 37: 2017 (type 2 test piece)                    | <b>0.9 MPa</b>               |
| <b>Tear Strength:</b>                                   | ISO 34-1: 2015 – Method B (angle tear without nick) | <b>11 N/mm</b>               |
| <b>Compression Set Resistance<br/>22 hours @ 175°C:</b> | ISO 815-1: 2015 – Method A (type B test piece)      | <b>15%</b>                   |

**Material Obtained:**

Martin's Rubber Company

Datasheet Ref# 100957-0

**ASM (DEK) Applications:**

Please email details of your request to [engineering\\_enquiries@asmpt.com](mailto:engineering_enquiries@asmpt.com)

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| DCR   | N/A |    |    |    |    |    |    |    |    |

