

# Spectroplast TrueSil A60

## A white translucent silicone material for general applications

TrueSil Silicone products are high performance 3D printed (3DP) silicone rubber products produced by Spectroplast's proprietary Silicone Additive Manufacturing (SAM) technology. These silicone elastomers are made of 100% pure silicone and fulfill market standards in terms of performance and surface quality. TrueSil Silicone products come in various shore durometers. All 3D printed products made of TrueSil Silicone are postprocessed after 3D printing to obtain final performance. All tests and certifications are performed on printed products and not the raw material.



# MATERIAL DATA

# TrueSil A60

|                                     | METRIC <sup>1</sup>               | IMPERIAL <sup>1</sup> | METHOD                |
|-------------------------------------|-----------------------------------|-----------------------|-----------------------|
| <b>Shore Hardness</b>               | 60A ± 10                          |                       | ISO 7619-1            |
| <b>Young's Modulus</b>              | > 1.5 MPa                         |                       | ISO 37 Type 4         |
| <b>Tensile Strength</b>             | > 8.5 MPa                         | > 1232 psi            | ISO 37 Type 4         |
| <b>Elongation</b>                   | > 350 %                           |                       | ISO 37 Type 4         |
| <b>Tear Strength</b>                | > 15 N/mm                         | > 85 lbs/in           | ASTM D624 Type C      |
| <b>Compression Set</b> 24h RT       | < 2 %                             |                       | ASTM D395 Type B      |
| <b>Compression Set</b> 24h 80°C     | < 10 %                            |                       | ASTM D395 Type B      |
| <b>Color</b>                        | white translucent                 |                       |                       |
| <b>Cytotoxicity</b> <sup>2</sup>    | Non-Cytotoxic                     |                       | ISO 10993-5:2009      |
| <b>Skin Irritation</b> <sup>2</sup> | Non-Irritant                      |                       | ISO 10993-23:2021-10  |
| <b>Surface Roughness</b>            | Side = Sa 3.6 um, Top = Sa 1.2 um |                       | ISO 25178-2:2012      |
| <b>Density (Solid)</b>              | 1.099 g/cm <sup>3</sup>           |                       | ISO 2781 <sup>3</sup> |
| <b>Rebound Resilience</b>           | 48 % ± 1 %                        |                       | ISO 4662              |

<sup>1</sup>Material properties can depend on part geometry, print orientation, temperature and disinfection or sterilisation methods.

<sup>2</sup>Printed parts were submitted to TentaConsult for evaluation in accordance with ISO10993-5:2009 Biological evaluation of medical devices-Part5: Tests for in vitro cytotoxicity; ISO 10993-23:2021-10 Biological evaluation of medical devices-Part23: Test for skin irritation.

<sup>3</sup> Nonstandard samples were used.

## DISCLAIMER

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