

Data Sheet

SO70 70 Shore OO Sorbothane® Polyurethane Sheet & Moulded Components

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| Data Sheet Type | Final |
| Material Reference | SO70 |
| Polymer | Polyurethane |
| Date Issued | 08/09/25 |



Description

SO70 70° Shore OO Sorbothane is a Polyurethane Compound that can be supplied as sheets and can be moulded into components. Sorbothane is a super-soft polyurethane that exhibits properties of both liquids and solids. Designed to absorb energy and widely used for shock absorption and impact dampening.

| Specifications | Values | Test Methods |
|---|--------------------------|-------------------|
| Acoustic Properties - Transmission in Air | > 40 dec/cm | None |
| Bacterial Resistance | No Growth | None |
| Bulk Modulus | 2.86 gPascal | None |
| Chemical Resistance to Diesel | 6.4 % | None |
| Chemical Resistance to Hydraulic Fluid | -1.4 % | None |
| Chemical Resistance to Kerosene | 4.3 % | None |
| Chemical Resistance to Soap Solution | 5 % | None |
| Colour | Black | None |
| Compressive Stress @ 50% | 16.34 kg/cm ³ | None |
| Compressive Stress @ 20% | 2.11 kg/cm ³ | None |
| Dielectric Strength | 261 v/mil | None |
| Dynamic Youngs Modulus @ 15 hertz | 11.41 kg/cm ² | None |
| Dynamic Youngs Modulus @ 30 hertz | 16.7 kg/cm ² | None |
| Dynamic Youngs Modulus @ 5 hertz | 8.45 kg/cm ² | None |
| Dynamic Youngs Modulus @ 50 hertz | 21.14 kg/cm ² | None |
| Elongation at Break | 399 % | ASTM D412 |
| Flash Ignition Flammability | 317 °C | None |
| Fungal Resistance | No Growth | None |
| Glass Transition | -34.7 °C | None |
| Heat Ageing | Stable | None |
| Highest Recommended Working Temperature | 98 °C | None |
| Lowest Recommended Working Temperature | -15 °C | None |
| Ozone Resistance | Special Compound Option | ASTM D1149 Type A |
| Resilience Test Rebound Height | 22 % | None |
| Self Ignition Flammability | 417 °C | None |
| Specific Gravity | 1.363 g/cm ³ | ASTM D2240 |
| Tan Delta @ 15 Hertz Excitation | 0.6 | None |
| Tan Delta @ 30 Hertz Excitation | 0.59 | None |
| Tan Delta @ 5 Hertz Excitation | 0.56 | None |
| Tan Delta @ 50 Hertz Excitation | 0.55 | None |
| Tear Strength | 11.69 kg/cm ³ | None |
| Tensile Elastic Stress @ 100% Strain | 4.66 kg/cm ³ | None |
| Tensile Elastic Stress @ 200% Strain | 8.95 kg/cm ³ | None |
| Tensile Elastic Stress @ 300% Strain | 11.69 kg/cm ³ | None |
| Tensile Strength @ Break | 14.52 kg/cm ³ | None |
| UV Resistance | Good | None |

Purposes



Acid Resistance



Anti-Vibration



Chemical Resistant



Wear Resistant

Important Notes about this Material Data Sheet

This datasheet has been carefully compiled to advise you, our customer, in the best possible way. The information, figures, test values, and data correspond to actual engineering standards and are the result of many years of tests and trials. As individual operating conditions influence the application of each product, the information supplied in this datasheet can only be seen as a rough guideline. In every case it is the sole responsibility of the customer to evaluate his individual requirements, in particular whether the specified properties of our products are sufficient for the intended use. This datasheet is subject to alteration without prior notice. All mentioned values contained herein are guiding values representing long-term experience averages. Please be aware that Test Results for individual Material Batches will only be provided if requested at the time of order and may be subject to additional charges and/or lead times. This Data Sheet supersedes all previous data sheets and any other data previously provided either Verbally, Electronic or Written, with reference to the above Material Grade.