SANDVIK

# SULFONES
# WIRE INSULATIONS AND COATINGS

データシート

**Sulfone polymers are high-heat plastics with a clear advantage. These amorphous thermoplastics offer more toughness, strength and hydrolytic stability than many other transparent plastics. They withstand prolonged exposure to water, chemicals and temperatures – handling a broad range of end-use temperatures from -40°C to 204°C (-40°F to 400°F).**

We have developed proprietary processing techniques to allow the application of these materials on our alloy offerings; they can be applied at thicknesses as thin as 2.5 microns. Sulfones are traditionally applied using extrusion or injection molding, and application of thicknesses below 1 mil are atypical of these processing methods. In-house processing capability of these resins has also been developed, allowing very thin layers of polymer to be applied, yet still retaining the polymer's unique characteristics.

## PSU

A tough thermoplastic allowing continuous use up to 300 °F (149 °C). It's resistant to oxidation and hydrolysis and can withstand prolong exposure to high temperatures and repeated sterilization. Typical properties are found below.

Tensile Strength: 70.3 MPa

Tensile Elongation (Break): 50-100%

Flexural Modulus: 2690 MPa

## PES

A tough thermoplastic allowing continuous use up to 270 °F (132 °C). Desirable properties include thermal stability and its inherent flame resistance. Typical properties are found below.

Tensile Strength: 88.9 MPa

Tensile Elongation (Break): 50-100%

Flexural Modulus: 2620 MPa

## PPSU

PPSU delivers the highest performance of the sulfone polymers available, offering better impact resistance and chemical resistance than PSU and PES.

Tensile Strength: 69.6 MPa

Tensile Elongation (Break): 60%

Flexural Modulus: 2410 MPa

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