



Polyester-Filled PTFE (SP31)

Material Data Sheet
M-73 (Rev. 00; 05-27-20)

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Overview

SP31 is a polyester-filled PTFE compound. It exhibits superior heat and wear resistance as compared to virgin PTFE and graphite-filled compounds. This low friction compound is exceptionally well-suited for rotary service equipment applications. Since SP31 will not wear metal mating surfaces, it is recommended for low to high speed applications running against soft metals. SP31 is suggested for use in applications with service temperatures ranging from -320 °F to +475 °F (-196 °C to +246 °C).

Chemical Compatibility

SP31 is compatible with most fluids and gases.

Compliance

SP31 is not FDA compliant. Bal Seal defines compliant materials as compositions in which all ingredients are designated by the FDA to be “safe for use in food contact.” In addition, none of the ingredients are listed on the California Code of Regulations Hazardous Substance list (<https://www.dir.ca.gov/title8/339.html>).

Color

Gray (color variations may occur during processing).

Heat Treatment

Certain seal sizes are supplied as SP31 HT with a heat treatment to limit dimensional changes. Material properties and composition remain the same.

Mechanical Properties of SP31

Tensile Strength (typical)	Elongation (typical)	Hardness (Shore D)	Hardness (Rc)
3,000 psi	300%	59	45

Advantages

- Low wear rate
- High temperature resistance
- Minimal wear to soft metal counter surface
- Non-conductive

Other Information

For more information, contact a technical sales representative, or e-mail us at sales@balseal.com.

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