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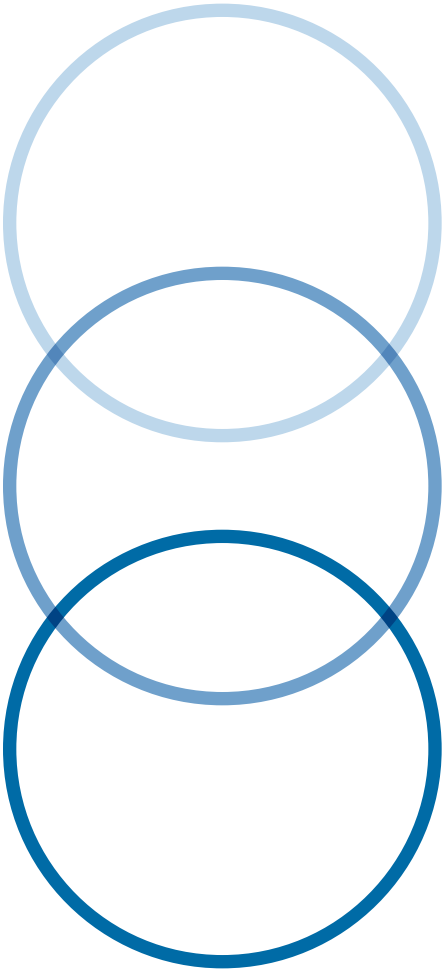

Polyimide-Filled Polytetrafluoroethylene (SP191)

Material Data Sheet
M-64 (Rev. 01; 04-9-18)

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ISO 9001 · IATF 16949 · AS 9100D · NORSOK COMPLIANT MATERIALS · NACE COMPLIANT MATERIALS

Overview

SP191 is a polyimide-filled PTFE compound which exhibits low friction and minimal wear in rotary and reciprocating sealing applications. SP191 performs well against soft mating surfaces such as aluminum, mild steel, brass, and plastics, and it is ideal for use in stop-start applications where the goal is to eliminate stick-slip. This material is suggested for use in applications with service temperatures ranging from -400 °F to 550 °F (-240 °C to 287 °C).

Chemical Compatibility

SP191 exhibits excellent compatibility with most fluids and gases. For more details, reference Technical Report 60A, "Chemical Compatibility Guide," in the technical library section of our website at www.balseal.com.

FDA Compliance

SP191 is a composition which contains ingredients that meet FDA regulation 21 CFR 170.39 for use in food contact applications. Bal Seal Engineering defines its compositions as "FDA Compliant" if each of the ingredients in the composition have been found by the FDA to be "safe for use in food contact" or "acceptable for use in food contact."

Color

Tan (color variations may occur during processing)

Mechanical Properties of SP191

Tensile Strength (typical)	Elongation (typical)
2800 psi (19 MPa)	225%

Advantages

- Low friction
- Extremely low wear
- Increased hardness
- Broad useful temperature range of -400 °F to 550 °F (-240 °C to 287 °C)

Application Examples

- Industrial robotics (assembly, food processing)
- Low pressure HPLC pumps
- Surgical tools
- Aerospace gimbals/pods/pan-tilt systems

Other Information

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