

CPI 193

Special polymer alloy for very high duty gas compressor piston and rod seals



material data

CPI 193 is a proprietary polymer alloy developed to extend the useful upper working limits of piston and rod seals in both lubricated and oil-free gas compressors.

The high strength and toughness of CPI 193, coupled with its excellent self-lubricating properties in dry gases, allow it to be selected for very high pressure gas compressor applications such as natural gas reinjection, ethylene primary and secondary compression, etc.

CPI should be consulted for the proper design and application of its specialized products and materials. For further advice and technical support please contact CPI directly.

Typical properties	Metric	Imperial
Tensile strength at 20°C	70 MPa	10000 psi
Elongation at 20°C (%)	2-3	2-3
Coefficient of thermal expansion	40 x 10 ⁻⁶ /°C	2.2 x 10 ⁻⁵ /°F
Hardness (Shore 'D')	85-90	85-90
Specific gravity	1.5	1.5
Suggested mean temperature limit (Ts +Td)/2 (non-lube gas compressors)	175 °C	350 °F
Suggested mean temperature limit (Ts +Td)/2 (lubricated gas compressors)	200 °C	390 °F