

CPI 197

High duty polymer alloy for dry nitrogen compressor piston rings and packings



CPI 197 proprietary polymer alloy has been developed to meet the requirements of non-lubricated dry nitrogen compressors, and in particular those operating at very high pressures.

This material is able to extend the operating limits of both pressure and temperature, by comparison with CPI 188 and CPI 196 materials.

CPI 197 may also be used in dry helium or dry argon compressors, but is not suitable for oxygen or dry gases which contain oxygen, such as bone dry air, crude argon or crude nitrogen.

CPI, part of the Howden group, 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	60 MPa	8700 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	1.6	1.6
Suggested mean temperature limit (Ts +Td)/2 (non-lube nitrogen compressors)	175°C	350°F

Note: The values above are for reference only and are not intended for specification or quality control purposes.