CPI 111

High duty air compressor piston ring and packing material

CPI materials technology

materialsdata

CPI 111 is a self-lubricating material which has been specially developed for use in high duty, oil free atmospheric air compressors, such as those used in the manufacture of PET bottles.

Extensive wear testing has confirmed the exceptional wear resistance and suitability of CPI 111 as piston rings, rider rings and packing rings in air compressors which use various cylinder and piston rod materials, including cast iron, alloy and stainless steel, or chrome plating.

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	13 MPa	1800 psi
Elongation at 20°C (%)	75	75
Coefficient of thermal expansion	70-90 x 10^{-6} /°C	3.9-5.0 x 10^{-5} /°F
Hardness (Shore 'D')	70-75	70-75
Specific gravity	3.0	3.0
Suggested mean temperature limit (Ts +Td)/2 (non-lube air compressors)	130 °C	270 °F