

PTFE 23

MATERIAL	polytetrafluoroethylene 23, virgin, modified PTFE compounded with carbon
DESCRIPTION	Polytetrafluoroethylene, a high-molecular-weight polymer made entirely of fluorine and carbon, is a fluorocarbon solid. PTFE is hydrophobic, meaning that neither water nor things containing water can bind to it. This is because fluorocarbons only exhibit weak London dispersion forces since fluorine has a poor electric polarizability. One of the lowest coefficients of friction of any substance is found in PTFE.
APPLICATION	It's commonly used on wear resistant seals and gaskets. You can also utilise this polymer on piston and rider rings. Another application is grades evaluated to NORSOK M710 for oil and gas applications.
TEMPERATURE	The temperature range is between -240 °C and 260 °C

PHYSICAL PROPERTIES	TEST METHOD	UNIT	VALUE
Tensile strength at break	ASTMD638	Mpa	15
Elongation at break	ASTMD638	%	150
Specific gravity	ASTMD792	g/cm ³	2,05
Ball indentation	DIN53456	N/mm ²	32

The above values are typical

The information in this datasheet is based on many years of experience in the application of PTFE. However, unknown parameters and conditions may restrict general statements during usage. It is vital that users satisfy themselves as to the suitability of individual products through adequate testing. For this reason and due to the wide range of applications of our products, AST B.V. can accept no liability as to the suitability or correctness of our recommendations in individual cases. The application limits for pressure, temperature and velocity given in this datasheet are maximum values determined in the test laboratory. During practical applications it should be remembered that due to the interaction of the operating parameters, the maximum values must be set correspondingly lower. For exceptional operating conditions, please contact us.