

PERT Pipe Material Properties

PHYSICAL PROPERTIES

	Test Method	Unit	
Density at 23°C	ISO 1183	gr/cm ³	0,945 – 0,955
MFR 190/5	ISO 1133	gr/10min	0,6 – 0,7

Mechanical Properties

	Test Method	Unit	
Yield stress	ISO 527	Mpa	23
Yield strain	ISO 527	%	8
Tensile modulus	ISO 527	Mpa	850
Flexural modulus	ISO 178	MPa	750
Charpy Impact strength at 0°C	ISO 868	Kj/m ²	20
Elongation at break	EN 638	%	> 300
OIT Oxidation Induction Time (210°C)	ISO 11357-6	min	>40 min
FNCT (Arkopal 80°C, 4.0 MPa)	ISO 16770	hrs	>2000
Coefficient of Linear Thermal Expansion @40°C		m/m°K	1.7 E-4

Chemical Resistance

	20° C	70° C
Gas, natural	+	+
Fuel oil	+	+
Heavy duty motor oil	+	+
Hydraulic fluid	+	+
Sea water	+	+

+ good, o limited, - bad