

CHEMICAL NAME
DENSITY
COLOR
WATER ABSORPTION 24/96h

PE UHMW
0.93 g/cm³

 <0.1 mg

THERMAL PROPERTIES

Melting temperature	135 °C
Minimum service temperature	- 200 °C
Thermal conductivity at 23 °C	0,40 W/(K.m)
Temperature of deflection under load method A 1, 81 N/mm ²	42 °C
Max. Allowable service temperature in air	
For short periods	120 °C
Continuously for 5000/20 000 hours	80 °C
Flammability	
« Oxygen index »	< 20 %
According to UL 94 (6 mm thickness)	HB

MECHANICAL PROPERTIES AT 23 °C

Tension test	
Tensile stress at yield ISO 527	19/- Mpa
Tensile strain at yield ISO 527	15 %
Tensile strain at break ISO 527	> 50 %
Tensile modulus of elasticity ISO 527	750 Mpa
Compression test	
Compressive test at 1 / 2 / 5 % nominal strain	6.5 / 10.5 / 17 Mpa
Charpy impact strength- unnotched IOS 179	No Break
Charpy impact strength notched ISO 179	115 P kJ / m ²
Ball indentation hardness ISO 2039-1	33 N / mm ²
Shore hardness ISO 2039-2	60

ELECTRICAL PROPERTIES AT 23 °C

Electric strength ISO 60243	45 KV /mm
Volume resistivity ISO 60093	> 10 ¹⁴ Ohm.cm
Surface resistivity ISO 60093	> 10 ¹³ Ohm.cm
Relative permittivity at	
100 Hz ISO 60250	2.1
1 MHz ISO 60250	3
Dielectric dissipation factor tan at	
100 Hz ISO 60250	0.004
1 MHz ISO 60250	0,010
Comparative tracking index (CTI) ISO 60112	600

SIÈGE SOCIAL

+33 (0)4 72 79 26 00 18 rue des frères Lumière
 contact@icmindustrie.com 69680 CHASSIEU , FRANCE

www.icmindustrie.com