

POM • ○ **ERTACETAL® H**

Semi-crystalline plastic, ERTACETAL® H has a higher mechanical resistance, stiffness, hardness and creep than ERTACETAL® C, as well as lower coefficient of thermal expansion and higher wear resistance.







- High mechanical resistance
- High hardness and rigidity
- Good creep resistance
- Good resistance to wear
- Lower coefficient of thermal expansion

APPLICATIONS

- Precision parts
- Small module sprockets
- Couplings, sleeves, valve elements
- Bushings
- All types of parts that require better finishing and dimensional stability



RESISTANCE





INSULATION





RESISTANCE



TECHNICAL DATASHEET



WATER ABSORPTION AFTER 24/96H IMMERSION IN WATER OF 23°C ¹ AFTER 24/96H IMMERSION IN WATER OF 23°C ¹ AT SATURATION IN AIR OF 23°C / 50% RH AT SATURATION IN WATER OF A 23°C THERMAL PROPERTIES³ WELTING TEMPERARUTE (DSC, 10°C/MIN) GLASS TRANSITION TEMPERATURE (DSC, 20°C/MIN)³ ISO 11 THERMAL CONDUCTIVITY A 23°C TOEFFICIENT OF LINEAR THERMAL EXPANSION AVERAGE VALUE BETWEEN 23-60°C AVERAGE VALUE BETWEEN 23-100°C TEMPERATURE OF DEFLECTION UNDER LOAD METHOD A 1.8 MPA ANAXIMUM ALLOABLE SERVICE TEMPERATURE IN AIR FOR SHORT PERIODS° CONTINUOUSLY: FOR 5.000/20.000H³ MINIMUM SERVICE TEMPERATURE° FAMMABILITY³ "OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C³ TENSILE STRESS AT YIELD/AT BREAK¹° TENSILE STRESS AT YIELD/AT BREAK¹° TENSILE STRAIN AT BREAK¹° TENSILE MODULUS OF ELASTICITY¹¹ TENSILE MODU	- N	- g/cm³ mg % % % °C °C N/(K.m) M/(m.K) °C °C °C °C	1.43 18/36 0.21/0.43 0.20 0.80 180 - 0.31 95 × 10 ⁻⁶ 110 × 10 ⁻⁶
WATER ABSORPTION AFTER 24/96H IMMERSION IN WATER OF 23°C ¹ AFTER 24/96H IMMERSION IN WATER OF 23°C ¹ AT SATURATION IN AIR OF 23°C / 50% RH AT SATURATION IN WATER OF A 23°C THERMAL PROPERTIES³ WELTING TEMPERARUTE (DSC, 10°C/MIN) GLASS TRANSITION TEMPERATURE (DSC, 20°C/MIN)³ ISO 11 THERMAL CONDUCTIVITY A 23°C TOEFFICIENT OF LINEAR THERMAL EXPANSION AVERAGE VALUE BETWEEN 23-60°C AVERAGE VALUE BETWEEN 23-100°C TEMPERATURE OF DEFLECTION UNDER LOAD METHOD A 1.8 MPA ANAXIMUM ALLOABLE SERVICE TEMPERATURE IN AIR FOR SHORT PERIODS° CONTINUOUSLY: FOR 5.000/20.000H³ MINIMUM SERVICE TEMPERATURE° FAMMABILITY³ "OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C³ TENSILE STRESS AT YIELD/AT BREAK¹° TENSILE STRESS AT YIELD/AT BREAK¹° TENSILE STRAIN AT BREAK¹° TENSILE MODULUS OF ELASTICITY¹¹ TENSILE MODU	0 62 0 62 - - - - - - - - - - - - - - - - - - -	mg % % % % °C °C N/(K.m) M/(m.K) °C °C	18/36 0.21/0.43 0.20 0.80 180 - 0.31 95 x 10 ⁻⁶ 110 x 10 ⁻⁶
AFTER 24/96H IMMERSION IN WATER OF 23°C 1 AFTER 24/96H IMMERSION IN WATER OF 23°C 1 AT SATURATION IN AIR OF 23°C / 50% RH AT SATURATION IN WATER OF A 23°C THERMAL PROPERTIES 3 MELTING TEMPERARUTE (DSC, 10°C/MIN) CLASS TRANSITION TEMPERATURE (DSC, 20°C/MIN)3 THERMAL CONDUCTIVITY A 23°C COEFFICIENT OF LINEAR THERMAL EXPANSION AVERAGE VALUE BETWEEN 23-60°C AVERAGE VALUE BETWEEN 23-60°C AVERAGE VALUE BETWEEN 23-100°C TEMPERATURE OF DEFLECTION UNDER LOAD METHOD A 1.8 MPA AMAXIMUM ALLOABLE SERVICE TEMPERATURE IN AIR FOR SHORT PERIODS° CONTINUOUSLY: FOR 5.000/20.000H5 MINIMUM SERVICE TEMPERATURE® FAMMABILITY? "OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C TENSILE STRESS AT YIELD/AT BREAK¹0 TENSILE STRESS AT YIELD/AT BREAK¹0 TENSILE STRESS AT YIELD/AT BREAK¹0 TENSILE STRENGTH¹0 TENSILE STRAIN AT BREAK¹0 TENSILE STRAIN	0 62 - - 357-1/-3 - - - N	% % % % % % % % % % % % % % % % % % %	0.21/0.45 0.20 0.80 180 - 0.31 95 × 10 ⁻⁶ 110 × 10 ⁻⁶
AFTER 24/96H IMMERSION IN WATER OF 23°C 1 AT SATURATION IN AIR OF 23°C / 50% RH AT SATURATION IN WATER OF A 23°C THERMAL PROPERTIES? MELTING TEMPERARUTE (DSC, 10°C/MIN) JEASS TRANSITION TEMPERATURE (DSC, 20°C/MIN)3 THERMAL CONDUCTIVITY A 23°C COEFFICIENT OF LINEAR THERMAL EXPANSION AVERAGE VALUE BETWEEN 23-60°C AVERAGE VALUE BETWEEN 23-100°C TEMPERATURE OF DEFLECTION UNDER LOAD METHOD A 1.8 MPA ANAXIMUM ALLOABLE SERVICE TEMPERATURE IN AIR FOR SHORT PERIODS° CONTINUOUSLY: FOR 5.000/20.000H3 MINIMUM SERVICE TEMPERATURE9 FAMMABILITY? "OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C TENSILE STRESS AT YIELD/AT BREAK¹0 TENSILE STRESS AT YIELD/AT BREAK¹0 TENSILE STRENGTH¹0 TENSILE STRAIN AT BREAK¹0 TENSILE STRAIN AT BR	0 62 - - 357-1/-3 - - - N	% % % % % % % % % % % % % % % % % % %	0.21/0.45 0.20 0.80 180 - 0.31 95 × 10 ⁻⁶ 110 × 10 ⁻⁶
AT SATURATION IN AIR OF 23°C / 50% RH AT SATURATION IN WATER OF A 23°C THERMAL PROPERTIES? MELTING TEMPERARUTE (DSC, 10°C/MIN) JEASS TRANSITION TEMPERATURE (DSC, 20°C/MIN)3 THERMAL CONDUCTIVITY A 23°C COEFFICIENT OF LINEAR THERMAL EXPANSION AVERAGE VALUE BETWEEN 23-60°C AVERAGE VALUE BETWEEN 23-100°C TEMPERATURE OF DEFLECTION UNDER LOAD METHOD A 1.8 MPA MAXIMUM ALLOABLE SERVICE TEMPERATURE IN AIR FOR SHORT PERIODS° CONTINUOUSLY: FOR 5.000/20.000H3 MINIMUM SERVICE TEMPERATURE° FAMMABILITY7 "OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C° TENSILE STRESS AT YIELD/AT BREAK'0 TENSILE STRESS AT YIELD/AT BREAK'0 TENSILE STRAIN AT YIELD/0 TENSILE STRAIN AT BREAK'0 TENSILE STRAIN AT BREAK'0 TENSILE STRAIN AT BREAK'0 TENSILE STRAIN AT BREAK'0 TENSILE MODULUS OF ELASTICITY" TENSILE MODULUS OF ELASTIC	N	% % % % % % % % % % % % % % % % % % %	0.20 0.80 180 - 0.31 95 × 10 ⁻⁶ 110 × 10 ⁻⁶
AT SATURATION IN WATER OF A 23°C THERMAL PROPERTIES? MELTING TEMPERARUTE (DSC, 10°C/MIN) JEASS TRANSITION TEMPERATURE (DSC, 20°C/MIN)3 JEO 11 JEASS TRANSITION TEMPERATURE (DSC, 20°C/MIN)3 JEO 12 JEHERMAL CONDUCTIVITY A 23°C COEFFICIENT OF LINEAR THERMAL EXPANSION AVERAGE VALUE BETWEEN 23-60°C AVERAGE VALUE BETWEEN 23-100°C TEMPERATURE OF DEFLECTION UNDER LOAD METHOD A 1.8 MPA MAXIMUM ALLOABLE SERVICE TEMPERATURE IN AIR FOR SHORT PERIODS' CONTINUOUSLY: FOR 5.000/20.000H3 MINIMUM SERVICE TEMPERATURE' FAMMABILITY? "OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C* TENSILE STRESS AT YIELD/AT BREAK'0 TENSILE STRESS AT YIELD/AT BREAK'0 TENSILE STRAIN AT YIELD'0 TENSILE STRAIN AT BREAK'0 TENSILE STRAIN AT BREAK'0 TENSILE STRAIN AT BREAK'0 TENSILE STRAIN AT BREAK'0 TENSILE MODULUS OF ELASTICITY'1 TENSILE MODULUS OF ELASTICIT	- N	% °C °C N/(K.m) M/(m.K) °C °C	0.80 180 - 0.31 95 × 10 ⁻⁶ 110 × 10 ⁻⁶
MELTING TEMPERARUTE (DSC, 10°C/MIN) GLASS TRANSITION TEMPERATURE (DSC, 20°C/MIN) ³ ISO 11 GLASS TRANSITION TEMPERATURE (DSC, 20°C/MIN) ³ ISO 11 THERMAL CONDUCTIVITY A 23°C COEFFICIENT OF LINEAR THERMAL EXPANSION AVERAGE VALUE BETWEEN 23-60°C AVERAGE VALUE BETWEEN 23-100°C TEMPERATURE OF DEFLECTION UNDER LOAD METHOD A 1.8 MPA MAXIMUM ALLOABLE SERVICE TEMPERATURE IN AIR FOR SHORT PERIODS ⁴ CONTINUOUSLY: FOR 5.000/20.000H ⁵ MINIMUM SERVICE TEMPERATURE ⁶ FAMMABILITY ⁷ "OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C ⁸ TENSILE STRESS AT YIELD/AT BREAK ¹⁰ TENSILE STRESS AT YIELD/AT BREAK ¹⁰ TENSILE STRENGTH ¹⁰ TENSILE STRAIN AT BREAK ¹⁰ TENSILE MODULUS OF ELASTICITY ¹¹ TENSILE MODULUS OF ELASTICITY ¹¹ ** ISO 5 CHARPY IMPACT STRENGTH - UNNOTCHED ¹³ ** ISO 17 CHARPY IMPACT STRENGTH - NOTCHED BALL IDENTATION HARDNESS ⁴ ** ISO 17 BALL IDENTATION HARDNESS ⁶ ** ISO 17 BALL IDENTATION HARDNESS ⁶ ** ISO 17 SUFFACE RESISTIVITY ** IEC 6 ELECTRIC STRENGTH ¹⁵ ** IEC 6 *	- N	°C °C W/(K.m) M/(m.K) W/(m.K) °C	180 - 0.31 95 × 10 ⁻⁶ 110 × 10 ⁻⁶
MELTING TEMPERARUTE (DSC, 10°C/MIN) JEASS TRANSITION TEMPERATURE (DSC, 20°C/MIN) ³ JEO 11 JEASS TRANSITION TEMPERATURE (DSC, 20°C/MIN) ³ JEO 11 THERMAL CONDUCTIVITY A 23°C COEFFICIENT OF LINEAR THERMAL EXPANSION AVERAGE VALUE BETWEEN 23-60°C AVERAGE VALUE BETWEEN 23-100°C TEMPERATURE OF DEFLECTION UNDER LOAD METHOD A 1.8 MPA MAXIMUM ALLOABLE SERVICE TEMPERATURE IN AIR FOR SHORT PERIODS ⁴ CONTINUOUSLY: FOR 5.000/20.000H ⁵ MINIMUM SERVICE TEMPERATURE ⁶ FAMMABILITY ⁷ "OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C ⁸ TENSILE STRESS AT YIELD/AT BREAK ¹⁰ TENSILE STRESS AT YIELD/AT BREAK ¹⁰ TENSILE STRENGTH ¹⁰ TENSILE STRAIN AT BREAK ¹⁰ TENSILE MODULUS OF ELASTICITY ¹¹ TENSILE MODULUS OF ELASTIC	- N	°C N/(K.m) M/(m.K) M/(m.K) °C	95 × 10 ⁻⁶
THERMAL CONDUCTIVITY A 23°C COEFFICIENT OF LINEAR THERMAL EXPANSION AVERAGE VALUE BETWEEN 23-60°C AVERAGE VALUE BETWEEN 23-100°C TEMPERATURE OF DEFLECTION UNDER LOAD METHOD A 1.8 MPA MAXIMUM ALLOABLE SERVICE TEMPERATURE IN AIR FOR SHORT PERIODS° CONTINUOUSLY: FOR 5.000/20.000H5 MINIMUM SERVICE TEMPERATURE FAMMABILITY? "OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C TENSILE STRESS AT YIELD/AT BREAK'0 TENSILE STRESS AT YIELD/AT BREAK'0 TENSILE STRAIN AT YIELD'0 TENSILE STRAIN AT BREAK'0 TENSILE MODULUS OF ELASTICITY'1 TENSILE MODULUS OF E	- N	°C N/(K.m) M/(m.K) M/(m.K) °C	95 × 10 ⁻⁶
THERMAL CONDUCTIVITY A 23°C COEFFICIENT OF LINEAR THERMAL EXPANSION AVERAGE VALUE BETWEEN 23-60°C AVERAGE VALUE BETWEEN 23-100°C TEMPERATURE OF DEFLECTION UNDER LOAD METHOD A 1.8 MPA MAXIMUM ALLOABLE SERVICE TEMPERATURE IN AIR FOR SHORT PERIODS' CONTINUOUSLY: FOR 5.000/20.000H5 MINIMUM SERVICE TEMPERATURE' FAMMABILITY' "OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C* TENSILE STRESS AT YIELD/AT BREAK'0 TENSILE STRESS AT YIELD/AT BREAK'0 TENSILE STRAIN AT SREAK'0 TENSILE STRAIN AT BREAK'0 TENSILE STRAIN AT BREAK'O TENSILE STRAIN AT SEAK'O	- N	W/(K.m) M/(m.K) PC PC	95 × 10 ⁻⁶ 110 × 10 ⁻⁶ 110
AVERAGE VALUE BETWEEN 23-60°C AVERAGE VALUE BETWEEN 23-100°C TEMPERATURE OF DEFLECTION UNDER LOAD METHOD A 1.8 MPA MAXIMUM ALLOABLE SERVICE TEMPERATURE IN AIR FOR SHORT PERIODS ⁴ CONTINUOUSLY: FOR 5.000/20.000H ⁵ MINIMUM SERVICE TEMPERATURE ⁶ FAMMABILITY ⁷ "OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C ⁸ TENSILE STRESS AT YIELD/AT BREAK ¹⁰ TENSILE STRENGTH ¹⁰ TENSILE STRAIN AT BREAK ¹⁰ TENSILE STRAIN AT BREAK ¹⁰ TENSILE STRAIN AT BREAK ¹⁰ TENSILE MODULUS OF ELASTICITY ¹¹	- n	M/(m.K) M/(m.K) °C °C	95 × 10 ⁻⁶ 110 × 10 ⁻⁶ 110
AVERAGE VALUE BETWEEN 23-60°C AVERAGE VALUE BETWEEN 23-100°C TEMPERATURE OF DEFLECTION UNDER LOAD METHOD A 1.8 MPA MAXIMUM ALLOABLE SERVICE TEMPERATURE IN AIR FOR SHORT PERIODS* CONTINUOUSLY: FOR 5.000/20.000H5 MINIMUM SERVICE TEMPERATURE* **AMMABILITY** "OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) **MECHANICAL PROPERTIES AT 23°C* TENSILE STRESS AT YIELD/AT BREAK** TENSILE STRENGTH** TENSILE STRAIN AT BREAK** **TENSILE STRAIN AT BREAK** TENSILE STRAIN AT BREAK** **TENSILE STRAIN AT BREAK** TENSILE MODULUS OF ELASTICITY** TENSILE MODULUS OF ELASTICITY** **TENSILE MODULUS OF ELASTICITY** TENSILE MODULUS OF ELASTICITY** **TENSILE MODULUS OF ELASTICITY** TENSILE MODULUS OF ELASTICITY** **TENSILE MODULUS OF ELASTI	- N	M/(m.K) ○C ○C	110 × 10 ⁻⁶
AVERAGE VALUE BETWEEN 23-100°C TEMPERATURE OF DEFLECTION UNDER LOAD METHOD A 1.8 MPA MAXIMUM ALLOABLE SERVICE TEMPERATURE IN AIR FOR SHORT PERIODS4 CONTINUOUSLY: FOR 5.000/20.000H5 MINIMUM SERVICE TEMPERATURE6 FAMMABILITY7 "OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C TENSILE STRESS AT YIELD/AT BREAK10 + ISO 5 TENSILE STRESS AT YIELD/AT BREAK10 + ISO 5 TENSILE STRENGTH10 + ISO 5 TENSILE STRAIN AT PIELD10 + ISO 5 TENSILE STRAIN AT BREAK10 + ISO 5 TENSILE MODULUS OF ELASTICITY11 + ISO 5 COMPRESSION TEST ¹² COMPRESSION TEST ¹² COMPRESSION TEST ¹² COMPRESSIVE STRENGTH - UNNOTCHED13 + ISO 17 CHARPY IMPACT STRENGTH - NOTCHED + ISO 17 BALL IDENTATION HARDNESS4 + ISO 18 BALL IDENTATION HARDNESS4 + ISO 18 BECECTRIC STRENGTH15 + IEC 6 ELECTRIC STRENGTH15 + IEC 6 EL	- N	M/(m.K) ○C ○C	110 × 10 ⁻⁶
METHOD A 1.8 MPA MAXIMUM ALLOABLE SERVICE TEMPERATURE IN AIR FOR SHORT PERIODS* CONTINUOUSLY: FOR 5.000/20.000H5 MINIMUM SERVICE TEMPERATURE6 FAMMABILITY7 "OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C* TENSILE STRESS AT YIELD/AT BREAK10 TENSILE STRESS AT YIELD/AT BREAK10 TENSILE STRENGTH10 TENSILE STRAIN AT YIELD10 TENSILE STRAIN AT BREAK10 TENSILE STRAIN AT BREAK10 TENSILE STRAIN AT BREAK10 TENSILE MODULUS OF ELASTICITY11 TENSILE MODUL		°C	110
METHOD A 1.8 MPA MAXIMUM ALLOABLE SERVICE TEMPERATURE IN AIR FOR SHORT PERIODS* CONTINUOUSLY: FOR 5.000/20.000H5 MINIMUM SERVICE TEMPERATURE6 FAMMABILITY7 "OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C* TENSILE STRESS AT YIELD/AT BREAK** TENSILE STRESS AT YIELD/AT BREAK** TENSILE STRESS AT YIELD/AT BREAK** TENSILE STRAIN AT SEREAK** TENSILE STRAIN AT BREAK** TENSILE STRAIN AT BREAK** TENSILE STRAIN AT BREAK** TENSILE MODULUS OF ELASTICITY** TENSILE MODULUS OF ELASTICITY	75-1/-2 - -	°C	
MAXIMUM ALLOABLE SERVICE TEMPERATURE IN AIR FOR SHORT PERIODS ⁴ CONTINUOUSLY: FOR 5.000/20.000H ⁵ MINIMUM SERVICE TEMPERATURE ⁶ FAMMABILITY ⁷ "OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C° TENSION TEST ⁹ TENSILE STRESS AT YIELD/AT BREAK ¹⁰ + ISO 5 TENSILE STRESS AT YIELD/AT BREAK ¹⁰ + ISO 5 TENSILE STRENGTH ¹⁰ + ISO 5 TENSILE STRAIN AT BREAK ¹⁰ + ISO 5 TENSILE STRAIN AT BREAK ¹⁰ + ISO 5 TENSILE STRAIN AT BREAK ¹⁰ + ISO 5 TENSILE MODULUS OF ELASTICITY ¹¹ + ISO 5 COMPRESSION TEST ¹² COMPRESSIVE STRESS AT 1/2/5% NOMINAL STRAIN ¹¹ + ISO 6 CHARPY IMPACT STRENGTH - UNNOTCHED ¹³ + ISO 17 CHARPY IMPACT STRENGTH - NOTCHED + ISO 17 BALL IDENTATION HARDNESS ⁴ + ISO 18 ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH ¹⁵ + IEC 6 ELECTRIC STRENGTH ¹⁶ + IEC 6 ELE	75-1/-2 - -	°C	
FOR SHORT PERIODS* CONTINUOUSLY: FOR 5.000/20.000H5 MINIMUM SERVICE TEMPERATURE6 FAMMABILITY7 "OXYGEN INDEX" ISO 4 ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C° TENSION TEST9 TENSILE STRESS AT YIELD/AT BREAK10 + ISO 5 TENSILE STRENGTH10 + ISO 5 TENSILE STRAIN AT YIELD10 + ISO 5 TENSILE STRAIN AT BREAK10 + ISO 5 TENSILE STRAIN AT BREAK10 + ISO 5 TENSILE STRAIN AT BREAK10 + ISO 5 TENSILE MODULUS OF ELASTICITY** + ISO 5 COMPRESSION TEST*2 COMPRESSIVE STRESS AT 1/2/5% NOMINAL STRAIN** + ISO 6 CHARPY IMPACT STRENGTH - UNNOTCHED** + ISO 7 BALL IDENTATION HARDNESS* + ISO 7 ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH** + IEC 6 ELECTRIC STRENGTH** + IEC 6 VOLUME RESISTIVITY + IEC 6 SURFACE		_	
FOR SHORT PERIODS* CONTINUOUSLY: FOR 5.000/20.000H5 MINIMUM SERVICE TEMPERATURE6 FAMMABILITY7 "OXYGEN INDEX" ISO 4 ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C° TENSION TEST9 TENSILE STRESS AT YIELD/AT BREAK10 + ISO 5 TENSILE STRENGTH10 + ISO 5 TENSILE STRAIN AT YIELD10 + ISO 5 TENSILE STRAIN AT BREAK10 + ISO 5 TENSILE STRAIN AT BREAK10 + ISO 5 TENSILE STRAIN AT BREAK10 + ISO 5 TENSILE MODULUS OF ELASTICITY** + ISO 5 COMPRESSION TEST*2 COMPRESSIVE STRESS AT 1/2/5% NOMINAL STRAIN** + ISO 6 CHARPY IMPACT STRENGTH - UNNOTCHED** + ISO 7 BALL IDENTATION HARDNESS* + ISO 7 ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH** + IEC 6 ELECTRIC STRENGTH** + IEC 6 VOLUME RESISTIVITY + IEC 6 SURFACE	-	_	
CONTINUOUSLY: FOR 5.000/20.000H5 MINIMUM SERVICE TEMPERATURE6 FAMMABILITY7 "OXYGEN INDEX" ISO 4 ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C° TENSION TEST9 TENSILE STRESS AT YIELD/AT BREAK10 + ISO 5 TENSILE STRENGTH10 + ISO 5 TENSILE STRAIN AT YIELD10 + ISO 5 TENSILE STRAIN AT BREAK10 + ISO 5 TENSILE STRAIN AT BREAK10 + ISO 5 TENSILE STRAIN AT BREAK10 + ISO 5 TENSILE MODULUS OF ELASTICITY11 + ISO 5 COMPRESSION TEST12 COMPRESSIVE STRESS AT 1/2/5% NOMINAL STRAIN11 + ISO 1 CHARPY IMPACT STRENGTH - UNNOTCHED13 + ISO 1 BALL IDENTATION HARDNESS4 + ISO 1 ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH15 + IEC 6 ELECTRIC STRENGTH15 + IEC 6 VOLUME RESISTIVITY + IEC SURFACE RESISTIVITY + IEC	-	°C	150
MINIMUM SERVICE TEMPERATURES FAMMABILITY? "OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C° TENSION TEST° TENSILE STRESS AT YIELD/AT BREAK¹° TENSILE STRESS AT YIELD/AT BREAK¹° TENSILE STRENGTH¹° TENSILE STRAIN AT BREAK¹° TENSILE STRAIN AT BREAK¹° TENSILE STRAIN AT BREAK¹° TENSILE STRAIN AT BREAK¹° TENSILE MODULUS OF ELASTICITY¹¹ TENSILE STRAIN AT BREAK¹° TENSILE STRAIN AT BREAK¹° TENSILE STRAIN AT BREAK¹° TENSILE STRAIN AT BREAK¹° TENSILE STRAIN AT PIECO TENSILE STRAIN AT PIECO TENSILE MODULUS OF ELASTICITY¹¹ TENSILE STRAIN AT PIECO TENSILE	-		105/90
"OXYGEN INDEX" ISO 4 ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C° TENSILE STRESS AT YIELD/AT BREAK¹° + ISO 5 TENSILE STRESS AT YIELD/AT BREAK¹° + ISO 5 TENSILE STRESS AT YIELD/AT BREAK¹° + ISO 5 TENSILE STRENGTH¹° + ISO 5 TENSILE STRAIN AT YIELD¹° + ISO 5 TENSILE STRAIN AT BREAK¹° + ISO 5 TENSILE STRAIN AT BREAK¹° + ISO 5 TENSILE MODULUS OF ELASTICITY¹¹ + ISO 5 TENSILE MODULUS OF ELASTICITY¹¹ + ISO 5 COMPRESSION TEST¹² COMPRESSION TEST¹² COMPRESSION TEST¹² CHARPY IMPACT STRENGTH - UNNOTCHED¹³ + ISO 13 CHARPY IMPACT STRENGTH - NOTCHED + ISO 13 ROCKWELL HARDNESS¹⁴ + ISO ELECTRIC STRENGTH¹S + IEC 6 ELECTRIC STRENGTH STRENGTH + IEC 6 EL		°C	-50
"OXYGEN INDEX" ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C° TENSICE STRESS AT YIELD/AT BREAK¹° TENSILE STRESS AT YIELD/AT BREAK¹° TENSILE STRENGTH¹° TENSILE STRENGTH¹° TENSILE STRAIN AT BREAK¹° TENSILE STRAIN AT BREAK¹° TENSILE MODULUS OF ELASTICITY¹¹ TENSILE STRAIN AT BREAK¹° TENSILE STRENGT¹¹ TENSILE STRENGT¹ TEN			30
ACCORDING TO UL94 (3/6MM DE ESPESSURA) MECHANICAL PROPERTIES AT 23°C³ TENSICE STRESS AT YIELD/AT BREAK¹0 + ISO 5 TENSILE STRESS AT YIELD/AT BREAK¹0 + ISO 5 TENSILE STRENGTH¹0 + ISO 5 TENSILE STRAIN AT YIELD¹0 + ISO 5 TENSILE STRAIN AT BREAK¹0 + ISO 5 TENSILE STRAIN AT BREAK¹0 + ISO 5 TENSILE MODULUS OF ELASTICITY¹¹ + ISO 5 TENSILE MODULUS OF ELASTICITY¹¹ + ISO 5 COMPRESSION TEST²² COMPRESSIVE STRESS AT 1/2/5% NOMINAL STRAIN¹¹ + ISO 6 CHARPY IMPACT STRENGTH - UNNOTCHED¹³ + ISO 13 CHARPY IMPACT STRENGTH - NOTCHED + ISO 13 BALL IDENTATION HARDNESS⁴ + ISO ROCKWELL HARDNESS¹⁴ + ISO 6 ELECTRIC STRENGTH¹⁵ + IEC 6 ELECTRIC STRENGTH¹⁵ + IEC 6 ELECTRIC STRENGTH¹⁵ + IEC 6 EVOLUME RESISTIVITY + IEC SURFACE RESISTIVITY + IEC ELECTRIC PERMITTIVITY €, : A 100HZ + IEC	589-1/-2	%	15
TENSION TEST ⁹ TENSILE STRESS AT YIELD/AT BREAK ¹⁰ + ISO 5 TENSILE STRESS AT YIELD/AT BREAK ¹⁰ + ISO 5 TENSILE STRENGTH ¹⁰ + ISO 5 TENSILE STRAIN AT YIELD ¹⁰ + ISO 5 TENSILE STRAIN AT BREAK ¹⁰ + ISO 5 TENSILE STRAIN AT BREAK ¹⁰ + ISO 5 TENSILE MODULUS OF ELASTICITY ¹¹ + ISO 5 TENSILE MODULUS OF ELASTICITY ¹¹ + ISO 5 COMPRESSION TEST ¹² COMPRESSIVE STRESS AT 1/2/5% NOMINAL STRAIN ¹¹ + ISO 6 CHARPY IMPACT STRENGTH - UNNOTCHED ¹³ + ISO 17 CHARPY IMPACT STRENGTH - NOTCHED + ISO 17 ROCKWELL HARDNESS ¹⁴ + ISO 6 ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH ¹⁵ + IEC 6 EVOLUME RESISTIVITY + IEC 6 SURFACE RESISTIVITY + IEC	309-1/-2	-	HB/HB
TENSION TEST® TENSILE STRESS AT YIELD/AT BREAK® + ISO 5 TENSILE STRESS AT YIELD/AT BREAK® + ISO 5 TENSILE STRENGTH® + ISO 5 TENSILE STRAIN AT YIELD® + ISO 5 TENSILE STRAIN AT BREAK® + ISO 5 TENSILE STRAIN AT BREAK® + ISO 5 TENSILE STRAIN AT BREAK® + ISO 5 TENSILE MODULUS OF ELASTICITY® + ISO 5 TENSILE MODULUS OF ELASTICITY® + ISO 5 COMPRESSION TEST® COMPRESSIVE STRESS AT 1/2/5% NOMINAL STRAIN® + ISO 6 CHARPY IMPACT STRENGTH - UNNOTCHED® + ISO 17 CHARPY IMPACT STRENGTH - NOTCHED + ISO 17 BALL IDENTATION HARDNESS® + ISO 6 ROCKWELL HARDNESS® + ISO 6 ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH® + ISO 6 ELECTRIC STRENGTH® + IEC 6 VOLUME RESISTIVITY + IEC 6 SURFACE RESISTIVITY + IEC 6			110/110
TENSILE STRESS AT YIELD/AT BREAK¹0 + ISO 5 TENSILE STRESS AT YIELD/AT BREAK¹0 ++ ISO 5 TENSILE STRENGTH¹0 + ISO 5 TENSILE STRAIN AT YIELD¹0 + ISO 5 TENSILE STRAIN AT BREAK¹0 ++ ISO 5 TENSILE STRAIN AT BREAK¹0 ++ ISO 5 TENSILE MODULUS OF ELASTICITY¹¹ ++ ISO 5 TENSILE MODULUS OF ELASTICITY¹¹ ++ ISO 5 COMPRESSION TEST¹2 COMPRESSION TEST¹2 COMPRESSIVE STRESS AT 1/2/5% NOMINAL STRAIN¹¹ + ISO CHARPY IMPACT STRENGTH - UNNOTCHED¹³ + ISO 15 BALL IDENTATION HARDNESS⁴ + ISO 15 ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH¹5 + IEC 6 ELECTRIC STRENGTH¹5 ++ IEC 6 ELECTRIC STRENGTH¹5 ++ IEC 6 EVOLUME RESISTIVITY ++ IEC SURFACE RESISTIVITY ++ IEC SURFACE RESISTIVITY ++ IEC ELECTRIC PERMITTIVITY €,: A 100HZ ++ IEC			
TENSILE STRESS AT YIELD/AT BREAK¹0 ++ ISO 5 TENSILE STRENGTH¹0 + ISO 5 TENSILE STRAIN AT YIELD¹0 + ISO 5 TENSILE STRAIN AT BREAK¹0 + ISO 5 TENSILE STRAIN AT BREAK¹0 ++ ISO 5 TENSILE MODULUS OF ELASTICITY¹¹ ++ ISO 5 TENSILE MODULUS OF ELASTICITY¹¹ ++ ISO 5 COMPRESSION TEST¹2 COMPRESSIVE STRESS AT 1/2/5% NOMINAL STRAIN¹¹ + ISO 15 CHARPY IMPACT STRENGTH - UNNOTCHED¹³ + ISO 15 BALL IDENTATION HARDNESS⁴ + ISO 15 ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH¹5 + IEC 6 VOLUME RESISTIVITY ++ IEC SURFACE RESISTIVITY ++ IEC RELATIVE PERMITTIVITY €, : A 100HZ ++ IEC	27 1/ 2	MPa	78/-
TENSILE STRENGTHIO + ISO 5 TENSILE STRAIN AT YIELDIO + ISO 5 TENSILE STRAIN AT BREAKIO + ISO 5 TENSILE STRAIN AT BREAKIO + ISO 5 TENSILE MODULUS OF ELASTICITYII + ISO 5 TENSILE MODULUS OF ELASTICITYIII + ISO 5 COMPRESSION TESTI2 COMPRESSIVE STRESS AT 1/2/5% NOMINAL STRAINIII + ISO CHARPY IMPACT STRENGTH - UNNOTCHEDIII + ISO 13 CHARPY IMPACT STRENGTH - NOTCHED + ISO 13 BALL IDENTATION HARDNESS' + ISO ROCKWELL HARDNESS' + ISO ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTHIS + IEC 6 ELECTRIC STRENGTHIS + IEC 6 VOLUME RESISTIVITY + IEC SURFACE RESISTIVITY + IEC SURFACE RESISTIVITY + IEC SURFACE RESISTIVITY + IEC ELECTRIC SPRINTITIVITY \$\epsilon\$, IA 100HZ + IEC		MPa	78/-
TENSILE STRAIN AT YIELD¹¹ TENSILE STRAIN AT BREAK¹¹ TENSILE STRAIN AT BREAK¹¹ TENSILE MODULUS OF ELASTICITY¹¹ TENSILE MODULUS OF ELASTICITY¹¹ TENSILE MODULUS OF ELASTICITY¹¹ TENSILE MODULUS OF ELASTICITY¹¹ COMPRESSION TEST¹² COMPRESSIVE STRESS AT 1/2/5% NOMINAL STRAIN¹¹ + ISO CHARPY IMPACT STRENGTH - UNNOTCHED¹³ FISO 17 BALL IDENTATION HARDNESS⁴ FISO 18 BELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH¹S FIEC E ELECTRIC STRENGTH¹S FIEC E ELECTRIC STRENGTH¹S FIEC E EVOLUME RESISTIVITY FIEC SURFACE RESISTIVITY FIEC SURFACE RESISTIVITY FIEC SURFACE RESISTIVITY FIEC		MPa	78
TENSILE STRAIN AT BREAK¹¹° TENSILE STRAIN AT BREAK¹¹° TENSILE MODULUS OF ELASTICITY¹¹ TENSILE MODULUS OF ELASTICITY¹¹ TENSILE MODULUS OF ELASTICITY¹¹ TENSILE MODULUS OF ELASTICITY¹¹ COMPRESSION TEST¹² COMPRESSIVE STRESS AT 1/2/5% NOMINAL STRAIN¹¹ + ISO CHARPY IMPACT STRENGTH - UNNOTCHED¹³ TENSILE MODULUS OF ELASTICITY¹¹ TENSILE MODULUS OF ELASTICITY¹		%	40
TENSILE STRAIN AT BREAK¹0 ++ ISO 5 TENSILE MODULUS OF ELASTICITY¹¹ + ISO 5 TENSILE MODULUS OF ELASTICITY¹¹ ++ ISO 5 TENSILE MODULUS OF ELASTICITY¹¹ ++ ISO 5 COMPRESSION TEST¹² COMPRESSIVE STRESS AT 1/2/5% NOMINAL STRAIN¹¹ + ISO CHARPY IMPACT STRENGTH - UNNOTCHED¹³ + ISO 17 CHARPY IMPACT STRENGTH - NOTCHED + ISO 17 BALL IDENTATION HARDNESS⁴ + ISO ROCKWELL HARDNESS¹⁴ + ISO ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH¹⁵ + IEC 6 ELECTRIC STRENGTH¹⁵ + IEC 6 VOLUME RESISTIVITY + IEC SURFACE RESISTIVITY ++ IEC SURFACE RESISTIVITY ++ IEC SURFACE RESISTIVITY ++ IEC ELECTRIC SPRMITTIVITY €, : A 100HZ ++ IEC		%	50
TENSILE MODULUS OF ELASTICITY" TENSILE MODULUS OF ELASTICITY" TENSILE MODULUS OF ELASTICITY" COMPRESSION TEST" COMPRESSIVE STRESS AT 1/2/5% NOMINAL STRAIN" + ISO CHARPY IMPACT STRENGTH - UNNOTCHED" CHARPY IMPACT STRENGTH - NOTCHED + ISO 17 CHARPY IMPACT STRENGTH - NOTCHED + IEC 6 CHARPY IMPACT STRENGTH - NOTCHED + IEC CHARPY IMPACT STRENGTH - IEC CHARPY IMPACT STRENGTH - NOTCHED + IEC CHARPY IMPACT STRENGTH - IEC C		%	50
TENSILE MODULUS OF ELASTICITY ¹¹ ++ ISO 5 COMPRESSION TEST ¹² COMPRESSIVE STRESS AT 1/2/5% NOMINAL STRAIN ¹¹ + ISO CHARPY IMPACT STRENGTH - UNNOTCHED ¹³ + ISO 17 CHARPY IMPACT STRENGTH - NOTCHED + ISO 17 ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH - IEC 6 ELECTRIC STRENGTH - IEC 6 VOLUME RESISTIVITY + IEC SURFACE RESISTIVITY + IEC SURFACE RESISTIVITY + IEC SURFACE RESISTIVITY + IEC RELATIVE PERMITTIVITY \$\epsilon\$, A 100HZ + IEC		MPa	3300
COMPRESSION TEST ¹² COMPRESSIVE STRESS AT 1/2/5% NOMINAL STRAIN ¹¹ + ISO CHARPY IMPACT STRENGTH - UNNOTCHED ¹³ + ISO 17 CHARPY IMPACT STRENGTH - NOTCHED + ISO 18 BALL IDENTATION HARDNESS ⁴ + ISO ROCKWELL HARDNESS ⁴ + ISO ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH ¹⁵ + IEC 6 ELECTRIC STRENGTH ¹⁵ + IEC 6 VOLUME RESISTIVITY + IEC VOLUME RESISTIVITY + IEC SURFACE RESISTIVITY + IEC SURFACE RESISTIVITY + IEC ELECTRIC STRENGTH ¹⁵ + IEC 6 FINAL PROPERTIES AT 23°C FINAL PROPERTIES AT 23			3300
COMPRESSIVE STRESS AT 1/2/5% NOMINAL STRAIN ¹¹ + ISO CHARPY IMPACT STRENGTH - UNNOTCHED ¹³ + ISO 17 CHARPY IMPACT STRENGTH - NOTCHED + ISO 17 BALL IDENTATION HARDNESS ⁴ + ISO ROCKWELL HARDNESS ¹⁴ + ISO ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH ¹⁵ + IEC 6 ELECTRIC STRENGTH ¹⁵ + IEC 6 VOLUME RESISTIVITY + IEC SURFACE RESISTIVITY + IEC SURFACE RESISTIVITY + IEC SURFACE RESISTIVITY + IEC RELATIVE PERMITTIVITY \(\varepsilon_{\text{in}}\) = IEC RELATIVE PERMITTIVITY \(\varepsilon_{\text{in}}\) = IEC	127-1/-2	MPa	3300
CHARPY IMPACT STRENGTH - UNNOTCHED ¹³ + ISO 17 CHARPY IMPACT STRENGTH - NOTCHED + ISO 17 BALL IDENTATION HARDNESS ⁴ + ISO ROCKWELL HARDNESS ¹⁴ + ISO ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH ¹⁵ + IEC 6 ELECTRIC STRENGTH ¹⁵ + IEC 6 VOLUME RESISTIVITY + IEC SURFACE RESISTIVITY + IEC SURFACE RESISTIVITY + IEC SURFACE RESISTIVITY + IEC RELATIVE PERMITTIVITY \(\epsilon\), IEC RELATIVE PERMITTIVITY \(\epsilon\), IEC RELATIVE PERMITTIVITY \(\epsilon\), IEC	2.504	140	70 (40 (0)
CHARPY IMPACT STRENGTH - NOTCHED + ISO 17 BALL IDENTATION HARDNESS* + ISO ROCKWELL HARDNESS** + ISO ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH** + IEC 6 ELECTRIC STRENGTH** + IEC 6 VOLUME RESISTIVITY + IEC VOLUME RESISTIVITY + IEC SURFACE RESISTIVITY + IEC SURFACE RESISTIVITY + IEC RELATIVE PERMITTIVITY \$\epsilon\$, \$\alpha\$ 100HZ + IEC	0 604	MPa	29/49/8
BALL IDENTATION HARDNESS4 + ISO ROCKWELL HARDNESS14 + ISO ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH15 + IEC 6 ELECTRIC STRENGTH15 + IEC 6 VOLUME RESISTIVITY + IEC VOLUME RESISTIVITY + IEC SURFACE RESISTIVITY + IEC SURFACE RESISTIVITY + IEC RELATIVE PERMITTIVITY £,: A 100HZ + IEC		KJ/m ²	NO BREA
ROCKWELL HARDNESS ¹⁴ + ISO 2 ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH ¹⁵ + IEC 6 ELECTRIC STRENGTH ¹⁵ ++ IEC VOLUME RESISTIVITY + IEC SURFACE RESISTIVITY ++ IEC SURFACE RESISTIVITY ++ IEC RELATIVE PERMITTIVITY \(\epsilon\), A 100HZ + IEC	79-1/1eA	KJ/m ²	10
ELECTRICAL PROPERTIES AT 23°C ELECTRIC STRENGTH ¹⁵ + IEC 6 ELECTRIC STRENGTH ¹⁵ ++ IEC 6 VOLUME RESISTIVITY + IEC SURFACE RESISTIVITY ++ IEC SURFACE RESISTIVITY ++ IEC SURFACE RESISTIVITY ++ IEC RELATIVE PERMITTIVITY ε,: A 100HZ + IEC		N/mm ²	160
ELECTRIC STRENGTH ¹⁵ + IEC 6 ELECTRIC STRENGTH ¹⁵ ++ IEC 6 VOLUME RESISTIVITY + IEC VOLUME RESISTIVITY ++ IEC SURFACE RESISTIVITY + IEC SURFACE RESISTIVITY ++ IEC RELATIVE PERMITTIVITY ε_{ϵ} : A 100HZ + IEC	2039-2	-	M 88
ELECTRIC STRENGTH ^{IS} ++ IEC & VOLUME RESISTIVITY + IEC VOLUME RESISTIVITY ++ IEC SURFACE RESISTIVITY ++ IEC SURFACE RESISTIVITY ++ IEC RELATIVE PERMITTIVITY \(\epsilon\), : A 100HZ + IEC	0242.1	1.) / /	
VOLUME RESISTIVITY + IEC VOLUME RESISTIVITY ++ IEC SURFACE RESISTIVITY ++ IEC SURFACE RESISTIVITY ++ IEC RELATIVE PERMITTIVITY ϵ_r : A 100HZ + IEC		kV/mm	20
VOLUME RESISTIVITY ++ IEC SURFACE RESISTIVITY ++ IEC SURFACE RESISTIVITY ++ IEC RELATIVE PERMITTIVITY ϵ_r : A 100HZ ++ IEC		kV/mm	20
SURFACE RESISTIVITY + IEC SURFACE RESISTIVITY ++ IEC RELATIVE PERMITTIVITY ϵ_r : A 100HZ + IEC	60093	Ohm.cm	> 1014
SURFACE RESISTIVITY ++ IEC RELATIVE PERMITTIVITY ϵ_r : A 100HZ + IEC	60003	Ohm.cm	> 10 ¹⁴
RELATIVE PERMITTIVITY ϵ_r : A 100HZ + IEC		Ohm	> 10 ¹³
·	60093	Ohm	> 10 ¹³
OLL ALIVE DEDMITTIVITY: A 100117	60093 60093	-	3.8
	60093 60093 60250		3.8
	60093 60093 60250 60250	-	3.8
ř	60093 60093 60250 60250	-	3.8
	60093 60093 60250 60250 60250		0.003
	60093 60093 60250 60250 60250 60250 60250	-	0.003
	60093 60093 60250 60250 60250 60250 60250	-	0.008
	60093 60093 60250 60250 60250 60250 60250 60250	-	
COMPARATIVE TRACKING INDEX (CTI) + IEC COMPARATIVE TRACKING INDEX (CTI) ++ IEC	60093 60093 60250 60250 60250 60250 60250 60250 60250	- - -	0.008

^{+:} values for dry material

(1) According to method 1 of ISO 62 and measured on ø 50x3 mm discs. (2) The elements supplied for this property are for the most part supplied by the manufacturers of the raw materials. (3) The values of this property are only attributed to amorphous rather than semi-crystalline materials. (4) Only for short periods of exposure in applications where only very low loads are applied to the material. (5) Temperature that resists after a period of 5,000 / 20,000 hours. After this time, there is a decrease of about 50% in tensile strength compared to the original value. The given temperature values are based on the thermal oxidation degradation which occurs which causes a reduction of the properties. In the meantime, the maximum permissible service temperature depends in many cases essentially on the deduction and magnitude of the mechanical stresses to which the material is subject. (6) As the impact strength decreases with decreasing temperature, the minimum allowable service temperature is determined by the extent of impact to which the material is subjected. The values given are based on unfavorable impact conditions and can not therefore be considered absolute limits.(7) These assessments derive from the technical specifications of the manufacturers of the raw materials and do not allow the determination of the behavior of the materials under fire conditions. (8) Most of the figures given by the properties of the (+) materials are mean values of the tests done on species machined with $\ensuremath{\text{\emptyset}}$ 40-60 mm. **(9)** Specimen testing: Type 1b. **(10)** Speed test: 5 or 50 mm / min. (11) Speed test: 1m / min. (12) Testing specimens: cylinders ø 8×16 mm. (13) Pendulum used: 151. (14) Test on 10 mm thick specimens. (15) Electrode configuration: cylinders ø 25 / ø 75 mm, in transformer oil according to IEC 60296.

Note that the electrical force for the extruded black material can be considerably

lower than that of natural material. The possible micro porosity in the center of conserved forms in stock significantly reduces the electric force.

^{++:} values referring to material in equilibrium with the standard atmosphere 23°C / 50% rh

^{*} Other colors available on request