

## **Epradur® PVC-P**

This PVC is excellent for bonding and welding and has a wide range of applications. It is highly resistant to acids and alkalis. Also the painting and printing is no problem. The material is cadmium-free and has a high stiffness and pressure resistance. The impact resistance is limited, especially at low temperatures.

ISO code:   ISO 1183     ISO 1183-1   I,4   g/cm3   ISO 1183-1   I,4   g/cm3   ISO 1183-1   I,4   g/cm3   ISO 1183-1   I,4   g/cm3   ISO 62   0,2   %   Mater absorption in Air (23°C / 50% RH)   ISO 62   0,5   %   Resistance to hot water   n/a   +   Weather resistance   n/a   -	General properties	Test method	Value	Unit
Water absorption in Air (23°C / 50% RH)         ISO 62         0,2         %           Water absorption in Air (23°C / 100% RH)         ISO 62         0,5         %           Resistance to hot water         n/a         +         +           Weather resistance         n/a         -         -           Mechanical properties           Elongation at break:         ISO 527         15         %           Ball indention hardness         ISO 2039         n/a         MPa           Tensile modules of elasticity         ISO 527         3000         MPa           Charpy impact strength - notched         ISO 179         4         kJ/m2           Charpy impact strength - unnotched         ISO 179         No Break         kJ/m2           Compressive stress at 1%         n/a         n/a         n/a         MPa           Coefficient of friction         ASTM D 1894         0,4-0,6         ***           Thermal properties           Melting temperature         n/a         130         °C           Max. allowable service temp (short period)         n/a         70         °C           Max. allowable service temperature         n/a         0         °C           Coefficient of linear expansion	ISO code:	ISO 1183		
Water absorption in Air (23°C / 100% RH)         ISO 62         0,5         %           Resistance to hot water         n/a         +           Weather resistance         n/a         -           Mechanical properties           Elongation at break:         ISO 527         15         %           Ball indention hardness         ISO 2039         n/a         MPa           Tensile modules of elasticity         ISO 527         3000         MPa           Charpy impact strength - notched         ISO 179         4         kJ/m2           Charpy impact strength - unnotched         ISO 179         No Break         kJ/m2           Compressive stress at 1%         n/a         n/a         n/a         MPa           Coefficient of friction         ASTM D 1894         0,4-0,6         *C           Thermal properties           Melting temperature         n/a         130         °C           Max. allowable service temp (short period)         n/a         70         °C           Max. allowable service temp (long period)         n/a         60         °C           Min. service temperature         n/a         0         °C           Coefficient of linear expansion         n/a         60 <t< th=""><th>Density:</th><th>ISO 1183-1</th><th>1,4</th><th>g/cm3</th></t<>	Density:	ISO 1183-1	1,4	g/cm3
Resistance to hot water	Water absorption in Air (23°C / 50% RH)	ISO 62	0,2	%
Weather resistance n/a -   Mechanical properties ISO 527 15 %   Ball indention hardness ISO 2039 n/a MPa   Tensile modules of elasticity ISO 527 3000 MPa   Charpy impact strength - notched ISO 179 4 kJ/m2   Charpy impact strength - unnotched ISO 179 No Break kJ/m2   Compressive stress at 1% n/a n/a MPa   Coefficient of friction ASTM D 1894 0,4-0,6    Thermal properties  Melting temperature  n/a 130 °C   Max. allowable service temp (short period) n/a 70 °C   Max. allowable service temp (long period) n/a 60 °C   Min. service temperature n/a 0 °C   Coefficient of linear expansion n/a 60 x10 -6 m/(m*K)   Flammability UL94 B1    Electrical properties  Dielectric dissipation (at 1MHz)  ISO 60250 3,2 Ω Electric strength  ISO 60243 n/a kV/mm	Water absorption in Air (23°C / 100% RH)	ISO 62	0,5	%
Mechanical properties  Elongation at break: ISO 527 15 % Ball indention hardness ISO 2039 n/a MPa  Tensile modules of elasticity ISO 527 3000 MPa  Charpy impact strength - notched ISO 179 4 kJ/m2  Charpy impact strength - unnotched ISO 179 No Break kJ/m2  Compressive stress at 1% n/a n/a MPa  Coefficient of friction ASTM D 1894 0,4-0,6  Thermal properties  Melting temperature n/a 130 °C  Max. allowable service temp (short period) n/a 70 °C  Max. allowable service temp (long period) n/a 60 °C  Min. service temperature n/a 0 °C  Coefficient of linear expansion n/a 60 x10 -6 m/(m*K)  Flammability UL94 B1  Electrical properties  Dielectric dissipation (at 1MHz) ISO 60250 3,2 Ω  Electric strength ISO 60243 n/a kV/mm	Resistance to hot water	n/a	+	
Elongation at break:  Ball indention hardness  ISO 2039  n/a  MPa  Tensile modules of elasticity  ISO 527  3000  MPa  Charpy impact strength - notched  ISO 179  Charpy impact strength - unnotched  ISO 179  No Break  kJ/m2  Charpy impact strength - unnotched  ISO 179  No Break  kJ/m2  Compressive stress at 1%  n/a  n/a  ASTM D 1894  0,4-0,6   Thermal properties  Melting temperature  n/a  Max. allowable service temp (short period)  n/a  n/a  n/a  60  °C  Max. allowable service temp (long period)  n/a  n/a  0  °C  Coefficient of linear expansion  n/a  Electrical properties  Dielectric dissipation (at 1MHz)  Electric strength  ISO 60250  3,2  Ω  Electric strength	Weather resistance	n/a	_	
Ball indention hardness  ISO 2039 n/a MPa  Tensile modules of elasticity  ISO 527 3000 MPa  Charpy impact strength - notched  ISO 179 4 kJ/m2  Charpy impact strength - unnotched  ISO 179 No Break  KJ/m2  Compressive stress at 1% n/a n/a MPa  Coefficient of friction  ASTM D 1894 0,4-0,6   Thermal properties  Melting temperature  Max. allowable service temp (short period)  Max. allowable service temp (long period)  N/a  Max. allowable service temp (long period)  N/a  O  Coefficient of linear expansion  N/a  Flammability  UL94  B1  Electrical properties  Dielectric dissipation (at 1MHz)  ISO 60250  ISO 60243  N/a  MPa  MPa  MPa  MPa  MPa  MPa  MPa  M	Mechanical properties			
Tensile modules of elasticity  ISO 527  3000  MPa  Charpy impact strength - notched  ISO 179  Charpy impact strength - unnotched  ISO 179  No Break  kJ/m2  Compressive stress at 1%  n/a  Coefficient of friction  ASTM D 1894  N/4-0,6   Thermal properties  Melting temperature  n/a  Max. allowable service temp (short period)  n/a  N/a  N/a  N/a  O  C  Max. allowable service temp (long period)  n/a  N/a  O  C  Coefficient of linear expansion  R/a  Flammability  UL94  B1  Electrical properties  Dielectric dissipation (at 1MHz)  Electric strength  ISO 60250  3,2  Ω  Electric strength	Elongation at break:	ISO 527	15	%
Charpy impact strength - notched ISO 179 4 kJ/m2 Charpy impact strength - unnotched ISO 179 No Break kJ/m2 Compressive stress at 1% n/a n/a n/a MPa Coefficient of friction ASTM D 1894 0,4-0,6  Thermal properties  Melting temperature n/a 130 °C Max. allowable service temp (short period) n/a 70 °C Max. allowable service temp (long period) n/a 60 °C Min. service temperature n/a 0 °C  Min. service temperature n/a 60 x10 -6 m/(m*K) Flammability UL94 B1  Electrical properties  Dielectric dissipation (at 1MHz) ISO 60250 3,2 Ω  Electric strength ISO 60243 n/a kV/mm	Ball indention hardness	ISO 2039	n/a	MPa
Charpy impact strength - unnotched ISO 179 No Break kJ/m2 Compressive stress at 1% n/a n/a n/a MPa Coefficient of friction ASTM D 1894 0,4-0,6  Thermal properties  Melting temperature n/a 130 °C Max. allowable service temp (short period) n/a 70 °C Max. allowable service temp (long period) n/a 60 °C Min. service temperature n/a 0 °C Coefficient of linear expansion n/a 60 x10 -6 m/(m*K) Flammability UL94 B1  Electrical properties  Dielectric dissipation (at 1MHz) ISO 60250 3,2 Ω Electric strength ISO 60243 n/a kV/mm	Tensile modules of elasticity	ISO 527	3000	MPa
Compressive stress at 1% n/a n/a MPa  Coefficient of friction ASTM D 1894 0,4-0,6  Thermal properties  Melting temperature n/a 130 °C  Max. allowable service temp (short period) n/a 70 °C  Max. allowable service temp (long period) n/a 60 °C  Min. service temperature n/a 0 °C  Coefficient of linear expansion n/a 60 x10 -6 m/(m*K)  Flammability UL94 B1  Electrical properties  Dielectric dissipation (at 1MHz) ISO 60250 3,2 Ω  Electric strength ISO 60243 n/a kV/mm	Charpy impact strength - notched	ISO 179	4	kJ/m2
Coefficient of friction  ASTM D 1894  0,4-0,6  Thermal properties  Melting temperature  n/a  130  °C  Max. allowable service temp (short period)  n/a  70  °C  Max. allowable service temp (long period)  n/a  60  °C  Min. service temperature  n/a  0  °C  Coefficient of linear expansion  n/a  60  x10 -6 m/(m*K)  Flammability  UL94  B1  Electrical properties  Dielectric dissipation (at 1MHz)  ISO 60250  3,2  Ω  Electric strength	Charpy impact strength - unnotched	ISO 179	No Break	kJ/m2
Thermal properties  Melting temperature n/a 130 °C  Max. allowable service temp (short period) n/a 70 °C  Max. allowable service temp (long period) n/a 60 °C  Min. service temperature n/a 0 °C  Coefficient of linear expansion n/a 60 x10 -6 m/(m*K)  Flammability UL94 B1  Electrical properties  Dielectric dissipation (at 1MHz) ISO 60250 3,2 Ω  Electric strength ISO 60243 n/a kV/mm	Compressive stress at 1%	n/a	n/a	MPa
Melting temperaturen/a130°CMax. allowable service temp (short period)n/a70°CMax. allowable service temp (long period)n/a60°CMin. service temperaturen/a0°CCoefficient of linear expansionn/a60x10 -6 m/(m*K)FlammabilityUL94B1Electrical propertiesDielectric dissipation (at 1MHz)ISO 602503,2ΩElectric strengthISO 60243n/akV/mm	Coefficient of friction	ASTM D 1894	0,4-0,6	
Max. allowable service temp (short period)n/a70°CMax. allowable service temp (long period)n/a60°CMin. service temperaturen/a0°CCoefficient of linear expansionn/a60x10 -6 m/(m*K)FlammabilityUL94B1Electrical propertiesDielectric dissipation (at 1MHz)ISO 602503,2ΩElectric strengthISO 60243n/akV/mm	Thermal properties			
Max. allowable service temp (long period) $n/a$ 60 °C  Min. service temperature $n/a$ 0 °C  Coefficient of linear expansion $n/a$ 60 $x10 - 6 m/(m*K)$ Flammability UL94 B1  Electrical properties  Dielectric dissipation (at 1MHz) ISO 60250 3,2 $\Omega$ Electric strength ISO 60243 $n/a$ kV/mm	Melting temperature	n/a	130	°C
Min. service temperature $n/a$ 0 °C Coefficient of linear expansion $n/a$ 60 $x10$ -6 $m/(m*K)$ Flammability UL94 B1  Electrical properties Dielectric dissipation (at 1MHz) ISO 60250 3,2 $\Omega$ Electric strength ISO 60243 $n/a$ kV/mm	Max. allowable service temp (short period)	n/a	70	°C
Coefficient of linear expansion n/a 60 x10 -6 m/(m*K) Flammability UL94 B1	Max. allowable service temp (long period)	n/a	60	°C
Flammability UL94 B1   Electrical properties   Dielectric dissipation (at 1MHz) ISO 60250 3,2 $\Omega$ Electric strength ISO 60243 n/a kV/mm	Min. service temperature	n/a	0	°C
Electrical properties  Dielectric dissipation (at 1MHz) ISO 60250 3,2 $\Omega$ Electric strength ISO 60243 n/a kV/mm	Coefficient of linear expansion	n/a	60	x10 -6 m/(m*K)
Dielectric dissipation (at 1MHz) ISO 60250 3,2 $\Omega$ Electric strength ISO 60243 n/a kV/mm	Flammability	UL94	B1	
Electric strength ISO 60243 n/a kV/mm	Electrical properties			
	Dielectric dissipation (at 1MHz)	ISO 60250	3,2	Ω
Volume resistivity ISO 60093 $>10^15$ $\Omega$ .cm	Electric strength	ISO 60243	n/a	kV/mm
	Volume resistivity	ISO 60093	>10^15	Ω.cm