

Application purpose and characteristics

Chemical engineering and tank building, ventilation manufacturing, electrical and electronic industries.

High resistance to acids, lyes and salt solutions, Fire class B1 to DIN 4102 up to 4mm thickness, highly weldable and adherable.

Material name, short description	PVC-U
Material name, based on technical standards	Polyvinylchlorid unplasticized
Density	1.44 g/cm ³
Color	dark grey
Compound code	PVC-U 00.001-01

Mechanical properties

Modulus of elasticity & tension 1	3000 N/mm ² DIN EN ISO 527
Yield stress	55 N/mm ² DIN EN ISO 527
Elongation at break	20 % DIN EN ISO 527
Bending strength 1	80 N/mm ² DIN EN ISO 178
Compressive strength 1	75 N/mm ² EN ISO 604
Hardness nominal value	82 Shore D DIN EN ISO 868
Ball indentation hardness	110 N/mm ² DIN EN ISO 2039-1
Notch impact strength	4.00 kJ/m ² DIN EN ISO 179 charpy

Other attributes

Water absorption	0.2 % DIN EN ISO 62
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Thermal attributes

Min. operating temperature	-15 °C
Max. operating temperature long term	60 °C
Coefficient of linear thermal expansion 1	75 * 10 ⁻⁶ /°C DIN EN ISO 11359-1,-2
Heat deflection temperature 1	68 °C DIN EN ISO 75
Thermal conductivity	0.16 W/(m·K) DIN 8302

Electrical attributes

Comparative tracking index	600 CTI IEC 60112
Dielectric dissipation factor 1	0.02 IEC 60250 10 ⁶ Hz
Dielectric constant 1	3 IEC 60250
Dielectric strength 1	12 kV/mm IEC 60243
Surface resistivity	≥10 ¹³ Ω IEC 60093
Volume resistivity	≥10 ¹⁵ Ω*cm IEC 60093

In compliance with **RoHS** and **REACH** directives.

This information is based on our available data. These values are measured on standard test specimens and are within the normal tolerance range of material properties and do not represent guaranteed property values. Therefore they shall not be used for specification purposes. The customer is solely responsible for quality and suitability of material for his application. He has to test usage and processing prior to use. Angst+Pfister makes no guarantees for the suitability of the material for any given application and assumes no obligation or liability in connection with the information provided above.