

Technical Data Sheet PVC-CAW

PVC-CAW

PVC-CAW – rigid PVC (PVC-U), flame-retardant (UL 94 V-0 / DIN 4102 B1), excellent chemical resistance

Typische Eigenschaften

- Flame-retardant (UL 94 V-0, DIN 4102 B1)
- Very good chemical resistance (acids, alkalis, salt solutions)
- High rigidity and strength
- Good electrical insulator
- Low water absorption, weather-resistant
- Good machinability, thermoformable and weldable
- Not intended for food contact (technical grade)
- Economical standard engineering material

Typische Industrien

- Chemical apparatus and tank construction
- Electroplating and surface technology
- Ventilation and exhaust-air technology
- Water treatment and waste-water technology
- Mechanical and plant engineering
- Electrical and insulation technology

	Testverfahren	Einheit	Wert
Mechanical Properties			
Yield stress	DIN EN ISO 527	MPa	58
Elongation at yield	DIN EN ISO 527	%	4
Tensile modulus	DIN EN ISO 527	MPa	3300
Notched impact strength (Charpy)	DIN EN ISO 179-1eA	kJ / m ²	4
Shore D hardness (15 s)	DIN EN ISO 868		82
Thermal Properties			
Vicat softening temperature B/50	DIN EN ISO 306	°C	74
Service temperature range		°C	0 ... +60
Coefficient of thermal expansion	ISO 11359-2	10 ⁻⁴ / K	0.8
Thermal conductivity		W / (m·K)	0.15
Electrical Properties			
Dielectric strength	DIN IEC 60243-1	kV / mm	39
Surface resistivity	DIN IEC 60093	Ω	≥ 10 ¹³
Volume resistivity	DIN IEC 60093	Ω·cm	≥ 10 ¹⁵
Fire Behaviour			
Building material class (1–4 mm)	DIN 4102		B1 (low flammability)

	Testverfahren	Einheit	Wert
Flammability (from 1 mm)	UL 94		V-0
Fire behaviour (1-3 mm)	NF P 92-501		M1
Oxygen index (LOI)	ISO 4589	%	~ 42
General Properties			
Density	DIN EN ISO 1183	g / cm ³	1.44
Colour			dark grey (standard; other colours available)

PVC-CAW is a flame-retardant rigid PVC (PVC-U) for chemical apparatus and tank construction. The values stated are typical characteristic values; they serve as an aid to material selection and are not a legally binding warranty of specific properties. PVC-CAW is a technical grade and not intended for food contact. The service temperature is limited (0 ... +60 °C); above this the material softens. Chemical and media resistance depends on temperature and concentration and must be verified case by case. As the properties also depend on dimension and processing, the actual values may deviate somewhat.