

Material data

Chemical Resistance

PVC	According to ISO Technical report 7473 1981. PVC (polyvinylchloride, uPVC) is resistant to most acids, lyes, salt solutions and hydrous organic combinations. PVC is not resistant to aromatic and chlorinated solvents, e.g. acetone, thinner, trichloroethylene, ethyl acetate, tetrahydrofurane, metylene chloride, metyl ethyl ketone.
Aluminium	(Al) is resistant to most first acids and organic solvents. Aluminium is not resistant to most strong acids (except nitric acid) and alkali.
Steel	Surface treatment, Zinc coated both sides. Additional powder coating will increase resistance to corrosion.
PA	Resistant to lubricants, fuel, refrigerants, enamels and paints, as well as detergents and degreasing agents. Not resistant to acids.
ABS	Resistant to alcohols, alkalis, detergents, greases and waxes, oils and aliphatic hydrocarbons. Not resistant to aromatic hydrocarbons, benzine, phenols and ketones.
PC/ABS	Resistant to detergents, greases and waxes. Limited resistance to alkalis and aliphatic hydrocarbons. Not resistant to aromatic hydrocarbons, benzine, phenols, ketones, oils.

Physical data

PVC	Material	Self-extinguishing, cadmium- and lead-free PVC	
	Density	1.5 g/cm ³	
	Linear expansion	60x10 ⁻⁶ m/m °C	
	Water absorption	less than 0.2 %	
	Fire rating	UL 94 V0	
	Colour	white NCS 0401-Y62R and RAL 9010, grey NCS 2502-Y	
	Temperature	-20 – +60 °C	
	Halogen content	Yes	
Aluminium	Material	Extruded aluminium SS 4104-06 DIN: Al Mg Si 0.5 BS: H9	
	Surface treatment	Natural colour, anodized 5-10 µm powder coating	
	Density	2.7 g/cm ³	
	Linear expansion	24 x 10 ⁻⁶ m/m °C	
	Colour	see product specification	
	Temperature	-20 – +80 °C	
Steel	Material	Corrosion protected cold-rolled sheet steel DX S1D SS-EN 10142 10147, 10215	
	Surface treatment	Metal plated with Zn or Al-Zn, layer thickness min. 7 µm, powder coating	
	Ultimate tensile stress	max. 300 N/mm ²	
	Elongation	22 % A ₈₀	
	Density	7.8 g/cm ³	
	Colour	see product specification	
	Temperature	-20 – +80 °C	

Physical data (cont.)

PA	Material	Polyamid + glass fibre
	Density	1.25 g/cm ³
	Linear expansion	70x10 ⁻⁶ m/m °C
	Water absorption	2.3 %
	Fire rating	UL 94 HB
	Colour	see product specification
	Temperature	-40 – +70 °C
	Halogen content	No
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ABS	Material	ABS
	Density	1.04 g/cm ³
	Linear expansion	100x10 ⁻⁶ m/m °C
	Water absorption	0.4 %
	Fire rating	UL 94 HB
	Colour	see product specification
	Temperature	-20 – +60 °C
	Halogen content	No
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PC/ABS	Material	Polycarbonate/ABS
	Density	1.17 g/cm ³
	Linear expansion	70x10 ⁻⁶ m/m °C
	Water absorption	0.2 %
	Fire rating	UL 94 V0
	Colour	see product specification
	Temperature	-20 – +70 °C
	Halogen content	No