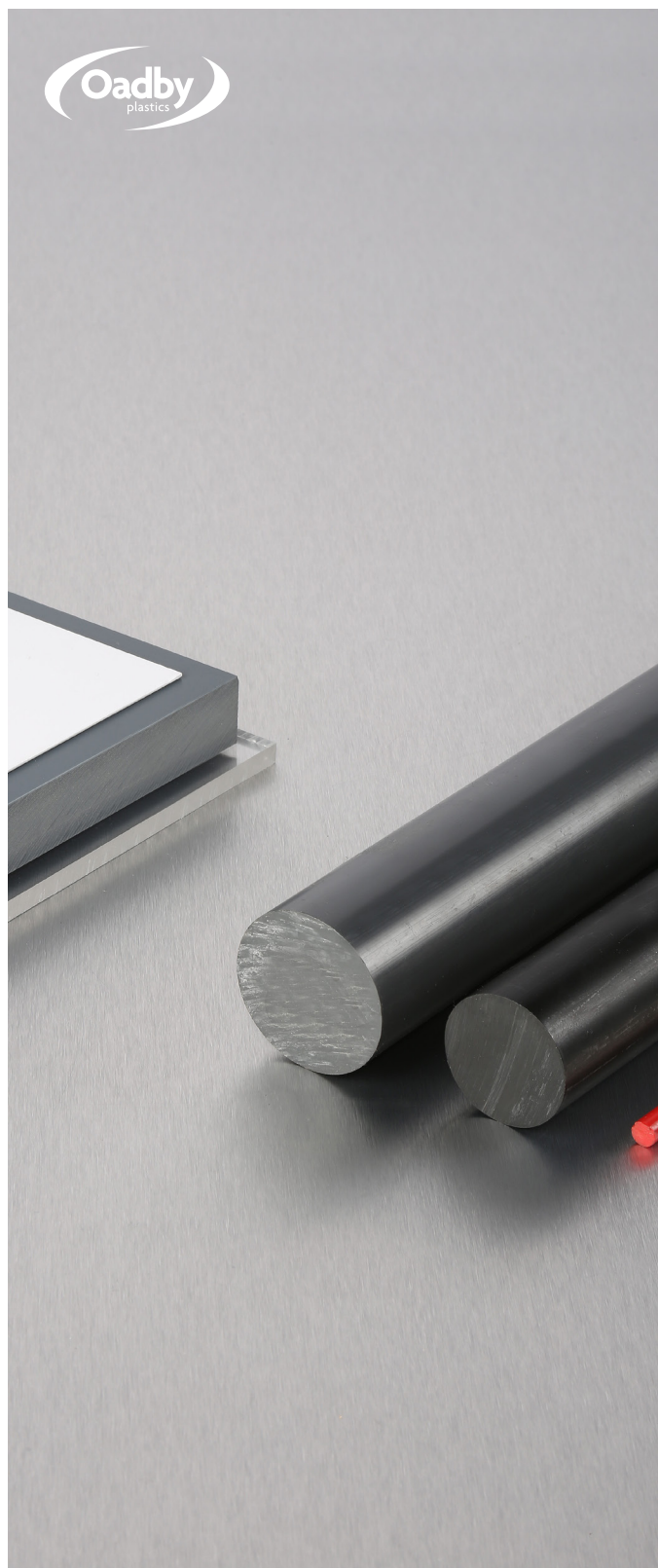


uPVC

Material Information



uPVC

Product full identity:

Unplasticised Polyvinyl Chloride

Built for performance and reliability, uPVC delivers exceptional chemical resistance, high mechanical and tensile strength, and a Class 1 fire rating - making it the smart choice for demanding industrial environments. Its ease of welding and precise fabrication make uPVC a proven solution for a wide range of industrial applications - from corrosive fluid handling systems and internal wall cladding, to chemical storage tanks, pump and valve bodies, and ventilation systems.

Properties

- Fire rating - self extinguishing
- Excellent chemical resistance
- Good temperature range (+60 to -0°C)
- High mechanical and tensile strength
- High rigidity
- Easily glued and weldable

Applications

- Corrosive fluids
- Internal wall cladding
- Handling tanks
- Pump and valve bodies
- Ventilation systems

Forms

	Solid Rod		Sheet
	Hollow Rod		Channel
	Square Tube		Angle
	Hexagonal Bar		Weld Rod

Physical	Unit	Test Method	Result
Specific gravity	g/cm ³	DIN EN ISO 1183	1.45
Water absorption until saturation at 23°C	%	MSZ EN ISO 62	0.2
Maximum service temp. Upper temp limit – short term	°C	-	60
Maximum service temp. Upper temp limit – long term	°C	-	-
Lower temp limit	°C	-	0
Mechanical	Unit	Test Method	Result
Tensile strength	MPa	DIN EN ISO 527-1.2	>45
Elongation at yield	%	DIN EN ISO 527	>45
Tensile strength at break	MPa	DIN EN ISO 527	>25
Unnotched impact strength	kJ/m ²	DIN EN ISO 179	No break
Notch impact strength	kJ/m ²	DIN EN ISO 179	No break
Ball indentation / Rockwell hardness	MPa	-	-
Shore-D		DIN EN ISO 868	80
Flexural modulus of elasticity	MPa	-	-
Tensile modulus of elasticity	MPa	DIN EN ISO 527-1.2	>2500
Thermal	Unit	Test Method	Result
Vicat-softening point VST/B/50	°C	DIN EN ISO 306	79
Heat deflection temperature HDT/B	°C	-	-
Coefficient of linear thermal expansion 23 – 100°C	m/(m.K)	DIN 53752	0.7
Thermal conductivity at 23°C	W/mK	DIN 52612	0.2
Electrical	Unit	Test Method	Result
Volume resistivity	Ω x m	-	-
Surface resistivity	Ω	DIN 5348	10 ¹³
Insulation resistivity	Ω . cm	-	-
Dielectric constant at 1MHz		-	-
Dielectric loss factor at 1MHz		-	-
Dielectric strength	kV/mm	MSZ EN 60243-1	21
Comparative tracking index (CTI)		-	-
Additional Data	Unit	Test Method	Result
Bondability		-	-
Food compliance – FDA		FDA	No
Food compliance – EU		EU 10/2011	Yes (wall linings only)
Antistatic		-	-
Flammability	Unit	Test Method	Result
Fire performance		UL 94 DIN 4102 NFP 92-501 (F) BS 476 Part 6 BS 476 Part 7	V-0 B1 M1 Class 0 Class 1
Optical	Unit	Test Method	Result
N/A	N/A	N/A	N/A

All information provided in this Product Datasheet is for guide purposes only. The data has been taken from standard test results provided by our manufacturers.