

PRODUCTSPECIFICATION – PVC-U PIPES & FITTINGS FOR PRESSURE APPLICATIONS (Liquids).

I. GENERAL PROPERTIES

PVC-U: unplasticized polyvinyl chloride
Color: Grey RAL 7011

PHYSICAL PROPERTIES

Property	Standard	Unit	Value
Density at 23°C	DIN 53479 ISO 1183	kg/dm ³	1.4

MECHANICAL PROPERTIES

Property	Standard	Unit	Value
Tensile stress at yield	DIN 53455 ISO 527	N/mm ² MPa	>50
Elongation at yield	ISO 527	%	>40
Shore Hardness	ISO 868	D	83
Impact Strength	DIN 54453 (23°C)	kJ/m ²	No break
Impact Strength (charpy)	DIN 54453 (23°C)	kJ/m ²	> 2
Flexural strength	DIN 53452	N/mm ²	70
Modulus of elasticity	DIN 53457	N/mm ²	3000

THERMICAL PROPERTIES

Property	Standard	Unit	Value
Melting range	Polarisatiemicroscop	°C	120-130
Vicat softening point	DIN 53460-B	°C	76
Operating temperature (without mechanical loads)	ISO 306	Min°C Max°C	-10 +60
Thermal conductivity	DIN 52612	W/m°K	0.16
Linear coefficient of thermal expansion	DIN 52328	mm/m°K	0.08

ELECTRICAL PROPERTIES

Property	Standard	Unit	Value
Specific surface resistance	DIN 53482	Ω	> 10 ¹³
Specific surfae resistance	DIN 53482	Ω mm	> 10 ¹⁵
Electric strength	DIN 53481	kV/cm	350

GENERAL PROPERTIES

Property	Standard	Unit	Value
Flammability	DIN 4102 deel 1	-	B1

II. UITVOERING

Pipes: Extruded round pipes according international approvals (ISO 8061/2 and ISO /R 161)



- Straight lengths: 5 meter
Diameter d6mm - 630mm.
Pressure rating (PN): 4, 6, 10, 16, 16v (reinforced)

Solvent -welding fittings: Injection moulded fitting (system FIP)
With solvent welding connection on each connection side of the fitting (male or female)
Diameter d12mm - d500mm.
Pressure rating: PN10 or PN16
According: DIN 8063, ISO R 727 IPP n°122, NFT54-028, KIWA54, UNI EN 29002 ISO 9002

Adaptor fittings: Injection moulded fitting (system FIP)
Each side of the fitting has a threaded connection or a solvent welding connections
Diameter 3/8" - 4".
Pressure rating: PN16

Threaded fittings: Injection moulded (System FIP)
Each side of the fitting has a threaded connection, according ISO R7, DIN 2999, DIN 338 and BS 21 (BS tread)
Diameter 3/8" - 4".
Pressure rating: PN16

III. MOUNTING

According DVS 2204-1 guidelines. (Solvent welding of thermoplastic materials PVC-U)