

## ► Main features

PVC is one of the most used plastic materials due to its low cost and ease of processing. It is an high density material, very hard and durable, with a low water absorption rate. It has high chemical stability and an high modulus of elasticity. Like PP, PVC is also easy to work and weld.

## ► Applications

Tubs  
Extractor hood  
Piping  
Carter  
Spacers  
Mechanical details in general

## ► Application sectors

Chemical  
Mechanic  
Electric and  
Semiconductors  
Pumps and fluid management

## ► FDA Compatibility

NO

## ► Available colours



## PHYSICAL PROPERTIES

## REGULATIONS

## UM

## PVC

PHYSICAL PROPERTIES		REGULATIONS	UM	PVC
Density	DIN53479	g/cm <sup>3</sup>	1.45	
Water absorption (50% at 23° C)	**DIN53495	%	0.2	
Maximum temp. for use in the air for short duration	-	°C	-	
Maximum temperature of use in continuous air	-	°C	60	
Minimum temperature of use in continuous air	-	°C	-15	

## MECHANICAL PROPERTIES

## REGULATIONS

## UM

## PVC

Yield stress/tensile strength ( $\sigma_s$ )	*DIN53455 (4)	N/mm <sup>2</sup>	58
Elongation at break ( $\epsilon_s$ )	ISO 527	%	20
Breaking load ( $\sigma_r$ )	DIN53455	N/mm <sup>2</sup>	-
Elongation at break ( $\epsilon_r$ )	ISO 527	%	20
Impact resistance	*DIN53453	kJ/m <sup>2</sup>	NR
Impact resistance, notched test	*DIN53453	kJ/m <sup>2</sup>	4
Rockwell hardness	DIN53465	Scala M	-
Compression test, load 1% deform. nominal	*DIN53454 (3)	N/mm <sup>2</sup>	-
Elasticity module	*DIN53457 (5)	N/mm <sup>2</sup>	3000

## THERMIC PROPERTIES

## REGULATIONS

## UM

## PVC

Melting temperature	-	°C	-
VICAT softening temperature	DIN53460	°C	75
Deformation temperature under bending load	DIN53461	°C	68
Coefficient of linear thermal expansion ( $\alpha$ )	DIN53752	K <sup>-1</sup> X10 <sup>-4</sup>	0.8
Thermal conductivity at 23°	DIN52612	W/(Kxm)	0.15

## ELECTRICAL PROPERTIES

## REGULATIONS

## UM

## PVC

Volume resistivity	**DIN53482	Ω/cm	10 <sup>15</sup>
Surface resistivity	**DIN53482	Ω	10 <sup>13</sup>
Dielectric constant at 10 <sup>3</sup> Hz (on thickness of 1 mm.)	**DIN53483	-	-
Dielectric dissipation factor ( $\tan \delta$ ) a 10 <sup>3</sup> Hz	**DIN53483	-	-
Dielectric strength (on thickness of 1 mm.)	IEC 60243	kV/mm	12
Electrical leakage resistivity	112/030TI	-	-

## OTHER PROPERTIES

## REGULATIONS

## UM

## PVC

Possibility of gluing	-	-	Yes
Absence of physiological risks	FDA	-	No
Dry friction coefficient on steel	DIN53375	-	-
Flammability	UL94	-	Bi (1)
UV stability	-	-	-

\* : MEASUREMENTS ON TEST TUBES IN ANHYDROUS STATE  
\*\*: MEASUREMENTS ON EQUILIBRIUM TUBES  
WITH U.R. 50% AT A TEMPERATURE OF 23° C

(3): ON CYLINDERS Ø 12X30 MM  
(5): TRACTION SPEED 1 MM / MIN

(4): TRACTION SPEED 5 MM/MIN  
(6): TRACTION SPEED 20 MM/MIN