

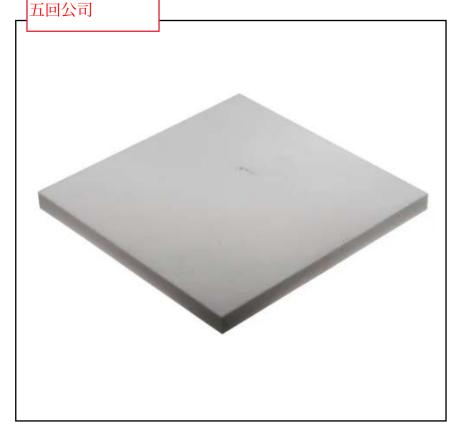
FEATURES

- Extremely high chemical resistance
- Hot water resistant
- High temperature performance a high melting point of -200 to +260°C, shortterm up to 300°C
- Excellent sliding properties with low coefficient of friction
- Non-stick surface, no materials will stick to it. PTFE is also difficult to bond or weld
- High coefficient of thermal expansion (The ratio that a material expands in accordance with changes in temperature)
- Relatively low strength and rigidity
- Excellent UV and weather resistance
- Good electrical insulation properties

「5:19 PM] Derek Guo 各位, 明后 天(周二周三)有台 风过境, 大家可以 选择WFH, 周四周

Onacue Plastic Sheet, 19 PMJ Derek 10 各位, 明后 300mm x 20mm

ock No.: 197-0102



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.



Product Description

From RS Pro a range of high-quality PTFE solid plastic sheets available in a range of sizes and thicknesses

General Specifications

Form	Solid
Colour	Opaque
Material	PTFE
Laminated	Yes
Laminated Material	Acrylic; Epoxy Resin; Fine Weave Cotton; Glass Fibre
Flammability Rating	UL 94 V-0
Polymer Type	Copolymer
Finish	Opaque
Adhesive Backing	Yes
Applications	Components that can be manufactured from this plastic include the following: Slide bearings and runners, Pump housings and parts, Valve seats, Tank linings, Roller coverings, Pipe linings, Filter housings, Etching plates, High frequency insulation, Seals

Electrical Specifications

Specific Surface Resistance	10 ¹⁶ Ω
Specific Volume Resistance	10 ¹⁷ Ω.cm
Dielectric Constant	2.1
Dielectric Loss Factor	0.0017tg
Breakdown Voltage	17kV/mm
Dielectric Strength 23°C, 50% r.h.	80V/mm



Mechanical Specifications

Length	300mm				
Width	300mm				
Thickness	20mm				
Density	2.18 to 2.21g/cm ³				
Tensile Strength	25Mpa				
Hardness	R 118 Rockwell				
Water absorption	0.3%				
Thermal Conductivity	0.17W/m.K				
Elongation	50%				
Impact Strength	12kJM ⁻²				
Modulus Of Elasticity	2500Mpa				
Flexural Strength	91Mpa				
Compression Strength	20Mpa				
Compression Modulus	2300Mpa				
Ball Indentation Hardness	165Mpa				
Thermal Expansion	8x10 ⁻⁵ k ⁻¹				
Specific Heat	1.1J/(g.K)				
Specific Gravity	1.38				
Flexural Modulus	2600Mpa				
Friction Coefficient	0.54				
Poisson Ratio	0.38kJM ⁻²				

Operation Environment Specifications

Maximum Operating Temperature	260°C
Melting Point	255°C
Glass Transition Temperature	-60°C
Vicat Softening Point	65°C

Approvals

Compliance/Certifications	CE / UR / cUR
Standards Met	DIN 53479; DIN 53736; ASTM-D 1929





PTFE

Chemical Designation
PTFE (Polytetrafluorethylene)

Colour white opaque Density 2.15 g/cm³

Mechanical properties	parameter	value	unit	norm		comment	
Tensile strength		22	MPa	ASTMD 4894	1)	(1) Tested on extruded and machined specimen (2) Tested on extruded and machined specimen (3)	
Elongation at break		220	%	ASTM D 4894	2)		
Compression strength	1% strain	5	MPa	ASTMD 695			
Shore hardness	Shore D	55		ASTM D 2240	3)		
Thermal properties	parameter	value	unit	norm		comment	
Glass transition temperature		- 20	°C	DIN 53765	1)	(1) Found in public sources.	
Service temperature	short term	260	°C	-	2)	 (2) Found in public sources. Individual testing regarding 	
Service temperature	long term	260	°C	-		application conditions is mandatory.	
Thermal expansion (CLTE)	23-100°C, long.	13	10 ⁻⁵ K ⁻¹	ASTMD 696		manuatory.	
Thermal conductivity		0.20	W/(K*m)	ASTMC 177			
Electrical properties	parameter	value	unit	norm		comment	
Specific surface resistance		10 ¹⁶	Ω	ASTMD 257	1)	(1) Without defects	
Specific volume resistance		10 ¹⁷	Ω*cm	ASTMD 257			
Dielectric strength	In air, 0.125mm thick	80	kV/mm	ASTMD 149		•	
Dielectric constant	50-109Hz	2.1		ASTMD 150			
Other properties	parameter	value	unit	norm		comment	
Water absorption	23°C	< 0.01	%	ASTMD 570		(1) Corresponding means no listing at UL (yellow card). The information might be	
Flammability (UL94)	corresponding to	V0		DIN IEC 60695-11-10;	1)		
						 taken from resin, stock shape or estimation. Individual testing regarding application conditions is mandatory. 	

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