

The Physical Properties Of Acrylic Sheets

	Property	Unit	Value
Mechanical	Specific Gravity	---	1.19 ~ 1.2
	Rockwell Hardness	kg/cm²	M-100
	Shear Strength	kg/cm²	630
	Rupture	kg/cm²	1050
	Tensile Strength	kg/cm²	760
	Yield	kg/cm²	1260
	Impact Strength	cai/gr°C	0.35
Thermal	Thermal Ratio	cal/xee/cm/°C/cm	
	Thermal Spformation Temp.	°C	100
	Thermal Forming Temperat,	°C	140-180
	Coefficient of linear thermal expansion	cm/cm/°C	6x10-5
Optical	Transparency	%	93
	Reractive Index	---	1.49
Electrical	Dielectric Strength	kv/mm	20
	Surface Resistivety	ohm	>=1016
Miscellaneous	Water (24h) Absorption	%	0.3
	Taste	taste	---

Expansion & Contraction
Taking an acrylic sheet of 1000mm as an exmple.
In 40°C the sheet is 1002mm. In -30°C the sheet is 997mm .

Features of Acrylic compared to other materials				
Material	(kg.cm) Elastivity	Therma Deformation Temperature	Transparency	Hardness
ACRYLIC	900 ~ 1330	74 ~ 103	92 ~ 93	85 ~ 105
PS	560 ~ 980	65 ~ 104	89	65 ~ 80
AS	980 ~ 1330	88 ~ 104	87	80 ~ 90
PC	950	130 ~ 141	87	75 ~ 85
PVC	700 ~ 1120	66 ~ 77	84	