

## Cast Acrylic Sheet Chemical Features (Resistant Properties to Chemical Agents)

Sulfuric Acid 60°C	Stable to 60%
Hydrochloric Acid 60°C	Stable to 30%
Nitric Acid 60°C	Stable to 20%
Caustic Soda 60°C	Stable to 50%
Aqueous Ammonia 60°C	Stable to 18%
Acetic Acid 60°C	Dissolve
Ethyl Acetate	Dissolve
Toluene	Dissolve
Ethylene Dichloride	Dissolve
Benzene	Dissolve
Methyl Alcohol	Dissolve
Dimethyl Formamide	Dissolve
Acetone	Dissolve
Aniline	Dissolve

## Average Physical Properties

Properties	Unit	
Specific Gravity	.	1.19
Hardness	.	HNC – 96
Water Absorption	%	0.35
<b>Tensile Strength:</b>	Kg/cm <sup>2</sup>	709
Tensile strength at yield	Kg/cm <sup>2</sup>	696
Tensile strength of break	Kg/cm <sup>2</sup>	29,532
Tensile modulus	%	8
Elongation at break		
<b>Bending Strength:</b>	Kg/cm <sup>2</sup>	1.052
Flexural Strength	Kg/cm <sup>2</sup>	31,264
Flexural Modulus		
Impact Strength	Kg/cm <sup>2</sup>	1.1
Shear Strength	Kg/cm <sup>2</sup>	600 – 650
<b>Transmittancy:</b>		
Full rays	%	93.3
Parallel rays	%	HAZE= 0.27
Specific Heat	Cal/g/°C	0.35
Heat Distortion Temperature (4.6kg/cm)	°C	100
Coefficient of Heat Conductivity	Cal/s.cm <sup>2</sup>	4.5 X 10-4
Coefficient of Linear Expansion	Cm/cm/°C	6.5 X 10-5
Ultimate Temperature of Continuous Operation	°C	60 – 90
Flammability	Mm/min	33
Surface Resistivity at 28°C	Ohm	>1016
Volume Resistivity	Ohm cm	> 10-15
Thermoforming Ranges	°C	140 – 180
Dielectric Strength	Kv/Mm	20