

	<b>INDEX</b> Ref: helium D	<b>ABBE #</b>	<b>SPECIFIC GRAVITY</b> Ref: 1 cc water, 1g	<b>TRANSMISSION</b> Ref: helium D with thickness 2mm	<b>IMPACT RESISTANCE</b>	<b>OTHER</b>
<b>GLASS</b>	1.523	58.9	2.54	100% UVC 80% UVB 15% UVA	<b>Poor</b> (req. temp.)	-Charged atoms, random, strong bonds. -low reflectance -good optics -chemical/scratch resist. -greater temp change sensitivity -less chromatic dispersion -metallic oxides -Barium crown, flint and hi-index glass all have a higher index, lower abbe #, higher sg and better or same UV abs. than glass (and also poor impact resist.) -optimal for ARC,selective tint filtering
<b>CR-39</b>	1.498	59/58	1.32	100% UVC 100% UVB 85% UVA	Good	-long fibrous cross linked chains -thermoset
<b>POLYCARB</b>	1.586	30	1.20	100% UVC 100% UVB 100% UVA	Excellent!	-long atom chains that slide, can deform -thermoplastic; soft -poor scratch resistance, requires SRC
<b>TRIVEX</b>	1.53	46	1.11	100% UVC 100% UVB 100% UVA	Excellent! (strength of polycarb)	-hybrid of poly/CR-39 -polyurethane -quasi-thermoset -strength of thermoplastic -slightly less scratch resistant than CR-39 -tints fast -excellent surfacing quality -...but polycarb thinner for a given Rx -can be made to 1.0 mm ct