

Type	Acrylic	Polycarbonate	Expanded PVC	Engraveable	HDPE	UHMW	Acetal	Vinyl	HIPS	ABS
Brand Name	Plexiglas	Makrolon	Celtec	Rowmark	Roschling	Roschling	Delrin			
Common Uses	Displays, cases, trays, windows, skylights, enclosures, cosmetics, awning, wall protection, picture frames, table/floor protection	Windows impact prone, machine guarding, kitchen shields, windshields, protective, personnel safety	Interior signage, solid color displays, drawer liners, trays/dividers, resuseable patterns, photograpghy backdrops	Laserable sign material, decorations, placeholders, labels, name tags, identification badges	Cutting boards, marine spacers, bushings, washers, ballistic plates, furniture	Manufacturing rail bumpers, skid plates, high wear protection, bushings, washers, machining operations	Gears, ball bearings, fasteners, knife handles, insulators, valve bodies, hinges, packaging	Stencils, fashion, art, thin protectors (monitor cover), patterns	Vacuum forming, food containers, covers, low strength components, prototypes	Protective cover, board, knife sheath, electrical insulation, knee pads, bicycle fenders
Main Feature	Optical clarity, formability, easy to work with, glue & bend	Optical clairty, impact resistance, formability	Light weight, flexible, economical, break resistance,	layered material (2 colors) which a laser machine etches off to reveal underlying color, fast efficient way to create signs and decals	low friction surface, textured, high compressive load,	Ultra low friction surface, smooth, high compressive load, machineable	High dimensional stability, machineable, stiffness, rigid, low friction	Very thin, flexible,	Thin, low cost, easy to form, good asthetics, FDA compliant	Tough, break resistant
UV Stability	★★★	★★★	★	★★	★★	★★	★★	★	★	★★
UV transmission	★★★	★★★	None	None	None	None	None	★	★	None
Optical Clairty	★★★	★★★	None	None	None	None	None	★	★	None
Flexibility	★	★	★★★★	★	★	★	★	★★★★	★★★★	★★
Break Resistance	★	★★★★	★★★★	★	★★★★	★★★★	★★★★	★	★	★★★★
Wear Resistance	★	★	★	★	★★★★	★★★★	★★★★	★	★	★★
Sheen	Glossy/Matte	Glossy	Semi gloss	Various	Semi Gloss/Matte	Semi Gloss	Semi Gloss	Glossy	Glossy	Matte
Colors	Clear/Colors	Clear/Tints	Colors	Yes	White	White	White/Black	Clear/White	Clear	Black