

RAW MATERIALS GUIDE

The information contained below is typical values intended for reference and comparison purposes only. They should not be used as a basis for design specifications or quality control.

Properties	PVC	PP	HDPE	HIPS	PC	PC/ABS
Temperature Resistance (°C)	- 25 +70	-30 +135	-100 +120	- -	-40 +140	- -
Impact Resistance (Kj/m ²)	2.0 - 45 Kj/m ²	3.0 - 30.0 Kj/m ²	-	10.0 - 20.0 Kj/m ²	60 - 80 Kj/m ²	55 Kj/m ²
Flammability UL 94	V0	V2	HB	HB	V0-V2	HB 0.85mm
Water Absorption (%) - 24 hours	0.06	0.08	0.01	0.20	0.15	0.25
Free of Halogen	No	Yes	Yes	Yes	Yes	Yes

PVC	Compatibility with many different kinds of additives - PVC can be clear or colored, rigid or flexible, formulation of the compound is the key to PVC's "added value".
PP	Rigid, opaque, good dimensional stability at high temperature and humidity conditions, difficult to process (blended to ease injection molding), tough.
HDPE	Flexible, translucent / waxy, weatherproof, good low temperature toughness, easy to process by most methods, low cost, good chemical resistance.
HIPS	Hard, rigid, brittle, low shrinkage translucent, impact strength up to 7 x PS, easy to process.
PC	Polycarbonates are strong, stiff, hard, tough, transparent engineering thermoplastics that can maintain rigidity up to 140°C and toughness down to -20°C or special grades even lower.

PVC	Polyvinyl chloride
PP	Polypropylene
HDPE	High density Polyethylene
HIPS	High impact Polystyrene
PC	Polycarbonate