

Forming Temperature Guidelines

Material	Mold & Set		Lower		Orienting		Normal Forming		Upper	
	Temperature		Processing Limit		Temperature		(core) Temp.		Processing Limit	
	°F	°C	°F	°C	°F	°C	°F	°C	°F	°C
Acrylonitrile Butadiene Styrene (ABS)	185	85	260	127	280	138	300-310	149-154	360	182
Acetate	160	71	260	127	280	138	310	154	360	182
Acrylic (PMMA)	185	85	300	149	325	163	350	177	400	204
Acrylic / PVC alloy	175	79	300	149	315	157	355	179	370	188
Butyrate	175	79	260	127	275	135	295	146	360	182
Oriented Polystyrene (OPS, Biax PS)	185	85	258	126	275	135	258-268	126-131	360	182
Polylactic Acid (PLA)							190-210	90-100		
Polycarbonate (PC)	290	143	335	168	350	177	375	191	400	204
Polyester, amorphous (APET)	100 -140	38 - 60	285	141	-	-	305	152	390	199
Polyester, thermoplastic (PETG)	135	57	250	121	275	135	285	140	330	166
Polyethersulfone (PES)	400	204	525	274	560	293	600	316	700	371
Polyethersulfone, glass filled	410	210	535	279	560	293	650	343	720	382
Polyethylene, high density (HDPE)	180	82	260	127	270	132	295	146	360	182
Propionate	190	88	260	127	270	132	295-300	146-149	360	182
Polyphenyl Sulfone (PPSU)	330-360	166-182	490	254	-	-	525	274	560	293
Polypropylene (PP)	190-240	88-116	265	129	280	138	320-350	160-177	370	188
Polysulfone	325	163	374	190	415	213	475	246	575	302
Polystyrene (PS, HIPS)	65-185	18-85	260	127	275	135	300	149	360	182
Teflon® (FEP)	300	149	450	232	490	254	550	288	620	327
Thermoplastic Polyurethane (TPUR)	170-180	77-82	340	171	-	-	380	193	420	216
Thermoplastics Polyolefin (TPO)	160-180	71-82	320	160	-	-	300-350	149-177	350	177
Polyetherimide (PEI, e.g. Ultem)	325	163	445	229	-	-	475	246	550	288
PVC, Rigid	140	60	240	116	260	127	280-300	138-149	350	177
PVC, rigid foam	140	60	240	116	260	127	240-280	116-138	350	177

NOTE: Lower limit, Orienting and Forming Temperatures shown are "core" (center of the sheet) temperatures.