

polymer school

MATERIAL	STRUCTURE	SOLID DENSITY (gms/cc)	MELT DENSITY (gms/cc)	SOLID DENSITY (oz/cu in)	MELT DENSITY (oz/cu in)	SOLID DENSITY (lbs/cu in)	MELT DENSITY (lbs/cu in)
ABS	Amorphous	1.08	0.97	0.624	0.561	0.039	0.035
CA	Crystalline	1.22	1.14	0.705	0.659	0.044	0.041
CAB	Crystalline	1.15	1.08	0.665	0.624	0.042	0.039
CAP	Crystalline	1.17	1.10	0.676	0.636	0.042	0.040
FEP	Crystalline	2.12	1.49	1.226	0.861	0.077	0.054
HDPE	Crystalline	0.95	0.73	0.549	0.422	0.034	0.026
HIPS	Amorphous	1.05	0.97	0.607	0.561	0.038	0.035
IONMER	Crystalline	0.93	0.73	0.538	0.422	0.034	0.026
LCP	Crystalline	1.35	N/A	0.780	N/A	0.049	N/A
LDPE	Crystalline	0.92	0.76	0.532	0.439	0.033	0.027
LLDPE	Crystalline	0.93	0.70	0.538	0.405	0.034	0.025
PA 66	Crystalline	1.14	0.97	0.659	0.561	0.041	0.035
PBT	Crystalline	1.34	1.11	0.775	0.642	0.048	0.040
PC	Amorphous	1.20	1.02	0.694	0.590	0.043	0.037
PEI	Amorphous	1.27	1.08	0.734	0.624	0.046	0.039
PET	Crystalline	1.40	1.10	0.809	0.636	0.051	0.040
PFA	Crystalline	2.15	N/A	1.243	N/A	0.078	N/A
PMMA	Amorphous	1.20	1.05	0.694	0.607	0.043	0.038
POM	Crystalline	1.42	1.17	0.821	0.676	0.051	0.042
PP	Crystalline	0.90	0.75	0.520	0.434	0.032	0.027
PPE-PPO	Amorphous	1.08	0.90	0.624	0.520	0.039	0.032
PS	Amorphous	1.05	0.97	0.607	0.561	0.038	0.035
PSU	Amorphous	1.24	1.16	0.717	0.671	0.045	0.042
PVC-F	Amorphous	1.30	1.20	0.752	0.694	0.047	0.043
PVC-R	Amorphous	1.40	1.22	0.809	0.705	0.051	0.044
SAN	Amorphous	1.07	1.00	0.619	0.578	0.039	0.036