

Common Processing Guide

Abbreviation	Material	Specific Gravity (g/cm ³)	Drying Time (hrs.)	Drying Temperature (°F)	Dew Point (°F)	Target End Moisture (%)	Mold Temperature (°F)	Melt Temperature (°F)	Mold Shrinkage (in/in)	
Hygroscopic	ABS	Acrylonitrile Butadiene Styrene	1.02-1.04	2 to 4	160-180	n/a	0.05 - 0.10	100-160	400-490	.003-.007
	ABS FR	Acrylonitrile Butadiene Styrene <i>Flame Retardant</i>	1.18	2 to 4	160-180	n/a	0.05 - 0.10	100-140	390-450	.003-.007
	ASA	Acrylonitrile Styrene Acrylate	1.07	2 to 3	175-200	n/a	<0.1	105-175	375-450	.004-.007
	COPE	Copolyester Elastomer***	1.23-1.29	1 to 4	195-250**	-40	0.02	70-140	410-482	.013-.020
	—	Copolyesters***	1.25-1.27	3 to 6	160	-20	0.02	100-160	480-540	.002-.003
	PA 12	Polyamide 12***	1.01	6 to 15	175-210	-20	<0.1	90-220	390-535	.006-.012
	PA 4/6	Polyamide 4/6***	1.18	2 to 4	250	-20	0.02 - 0.06	175-250	590-610	.019-.021
	PA 6	Polyamide 6***	1.13	2 to 4	180	-20	0.05 - 0.25	120-180	460-530	.010-.014
	PA 6/12	Polyamide 6/12***	1.06	2 to 4	180	-20	0.10 - 0.25	90-220	450-550	.010-.014
	PA 6/6	Polyamide 6/6***	1.14	2 to 4	175	-20	0.08 - 0.28	150-205	545-575	.017-.022
	PBT	Polybutylene Terephthalate***	1.3	2 to 4	250-280	-40	<0.04	100-210	460-520	.017-.023
	PC	Polycarbonate***	1.20	3 to 5	250	-20	<0.03	150-250	500-590	.005-.007
	PC/ABS	Polycarbonate/Acrylonitrile Butadiene Styrene Alloy***	1.08-1.22	3 to 4	175-230**	-20	<0.05	120-160	450-530	.005-.008
	PC/ABS FR	Polycarbonate/Acrylonitrile Butadiene Styrene <i>Flame Retardant</i> ***	1.08-1.22	3 to 4	170-185**	-20	<0.05	120-180	450-530	.004-.007
	PC/Polyester	Polycarbonate/Polyester Alloy***	1.20-1.28	3 to 4	240	-40	<0.03	80-180	460-520	.013-.015
	PEEK	Polyetheretherketone	1.30	2 to 3	320	-20	<0.1	320-400	680-720	.009-.011
	PEI	Polyetherimide	1.27	4 to 6	300	-20	<0.04	275-325	660-750	.005-.007
	PES/PESU	Polyethersulfone	1.37	3 to 4	350	-20	<0.05	245-305	660-680	.005-.007
	PET	Polyethylene Terephthalate***	1.44-1.73	2 to 4	275	-40	<0.02	140-290	470-560	.002-.005
	PMMA	Polymethyl Methacrylate (Acrylic)	1.18	2 to 5	165-200**	5	0.05 - 0.10	120-220	360-520	.002-.006
POM	Polyoxymethylene (Acetal)	1.41	1 to 4	160-245	n/a	0.10	140-180	370-410	.018-.022	
PPA	Polyphtalamide***	1.13-1.20	8 to 16	250	-20	0.15	175-350	610-650	.010-.021	
PSU	Polysulfone	1.38	3 to 4	275-300	-20	<0.05	275-320	660-690	.005-.009	
SAN	Styrene Acrylonitrile	1.07	2 to 4	160-200	n/a	0.10	105-180	375-450	.004-.007	
TPU	Thermoplastic Polyurethane***	1.12-1.23	1 to 4	180-220**	-40	<0.02	70-160	370-410	.008-.009	
Non-Hygroscopic	EVA	Ethylene Vinyl Acetate	.935-.955	3	120-150	n/a	0.05	50-70	300-400	.002-.007
	FPVC	Flexible Polyvinyl Chloride	1.15-1.48	1 to 2	140-150	n/a	0.1	50-100	330-390	.010-.024
	mPPO	Modified Polyphenylene Oxide	1.06	2 to 4	200-250**	n/a	0.05	160-220	540-610	.005-.007
	PE	Polyethylene*	.915-.965	2 to 3	120-150	n/a	0.05	70-150	380-450	.015-.025
	PPS	Polyphenylene Sulfide	1.68	2	300	-20	0.04	275-300	580-650	.002-.005
	PP	Polypropylene*	.900-.910	1 to 2	120-150	n/a	0.05	60-120	400-525	.017-.022
	PS	Polystyrene*	1.04	1 to 2	140-180	n/a	0.05	20-160	350-530	.004-.007
	RPVC	Rigid Polyvinyl Chloride	1.33-1.50	1 to 2	140-150	n/a	0.1	60-120	365-410	.003-.005
	TPE-S	Styrenic Thermoplastic Elastomer	0.980	2 to 4	125	n/a	0.1	40-150	370-460	.010-.012
	TPO	Thermoplastic Olefin	.900-.930	1 to 2	120-150	n/a	0.1	60-120	390-450	.008-.016
TPV	Thermoplastic Vulcanizate	.930-.968	1 to 2	120-150	n/a	0.1	50-150	360-465	.011-.023	

* Material typically does not require drying
 ** Required drying temperatures are grade specific
 *** Material will degrade with excess moisture

*Disclaimer: values on this guide are based on unreinforced (except PPS where 40% glass is most common) materials sold through Chase Plastics and are intended for injection molding. Values may vary between different grades and different manufacturers of materials. For grade-specific values check the datasheet or work with your Chase Plastics' representative to get the processing parameters for the exact grade you purchased."

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- ▶ Datasheets and Processing Guides
- ▶ Material Safety Datasheets (MSDS)
- ▶ Product certifications
- ▶ Product brochures and chips/plaques



Have an existing application that you would like to improve upon or make lighter, or an idea for a new one? We're up to the challenge! Call 844.411.CHASE or email us at 411Chase@chaseplastics.com

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