

WHEATON®

Typical Properties of Plastics

	LDPE	HDPE	PP	PMP (TPX)	PC	PS	PMMA	PTFE	PBT	
Max usage Temp. °C	80	120†	135	145	135	90	50	260	150	
Min usage Temp. °C	-50	-100	-20††	-180	-135	-40	-60	-200	-40	
Transparency	Translucent	Translucent	Translucent	Clear	Clear	Clear	Clear	Opaque	Opaque	
Flexibility	Flexible	Rigid	Rigid	Rigid	Rigid	Rigid	Rigid	Rigid	Rigid	
Specific Gravity	0.92	0.95	0.9	0.83	1.2	1.05	1.2	2.2	1.31	
Microwaveable	Yes	No	Yes	Yes	Marginal	No	No	Yes	No	
Autoclavable	No	No	Yes	Yes	Yes	No	No	Yes	Yes	
Sterilization	Gas	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	
	Dry Heat	No	No	No	Yes	No	No	Yes	No	
	Radiation (Gamma)	Yes	Yes	No	No	Yes	Yes	No	Yes	
	Disinfection	Yes	Yes	Yes	Yes	Yes	Some	Some	Yes	Yes
Permeability*	N ₂	180	42	48	8,000	50	25	3	Unknown	Unknown
	O ₂	500	185	240	32,000	300	400	12	308	Unknown
	CO ₂	2,700	580	800	115,000	1,075	1,500	68	Unknown	Unknown
	Water Absorption (%)	<0.01	<0.03	<0.2	0.01	0.35	0.05	0.35	<0.01	Unknown
Cytotoxic	No	No	No	No	No	No	No	No	Unknown	