

Simple Identification Methods for Plastics

	Nylon	Acetal	PET	PE	PP	PC	PMMA	PVC	PEEK	PPS	PVDF	PTFE	PSU
Behavior in water													
Floats (density < 1 g/cm3)				✓	✓								
Sinks (density > 1 g/cm3)	✓	✓	✓			✓	✓	✓	✓	✓	✓	✓	✓
Behavior in water saturated with kitchen salt													
Floats (density < 1.22 g/cm3)	✓			✓	✓	✓	✓						
Sinks (density > 1.22 g/cm3)		✓	✓					✓	✓	✓	✓	✓	✓
Burning behavior													
burns very easily, continues burning when removed from flame		✓		✓	✓		✓						
burns in flame and slowly extinguishes when removed	✓		✓										✓
difficult to ignite, extinguishes when removed from flame						✓		✓	✓	✓	✓		
does not burn, just glows												✓	
Color of flame													
bright yellow			✓			✓					✓		✓
blue with yellow tip				✓	✓								
bluish with yellow edge forming	✓												
clear smokeless blue, almost invisible		✓											
yellow, edge of flame is slightly green								✓					
no flame, just glows												✓	
Formation of soot													
burns sooty			✓			✓		✓					
no or almost no formation of soot	✓	✓		✓	✓		✓						
Odor of vapor/smoke													
very irritating (formaldehyde)		✓											
irritating											✓	✓	
sweetish irritating			✓										
paraffin-like odor (candle wax)				✓									
slightly perfumed, candle-like					✓								
sweetish fruity							✓						
burnt horn	✓												
sulphur-like (rotten eggs)										✓			