



Recycle #	Acronym	Name	Group	Thermoplast ic/ Thermoset	Amorphous / Crystalline	Material qualities / properties	Types of products	Typical Brand Name
1	PET	Polyethylene terephthalate	Thermoplastic Polyesters	ThermoP lastic	Cr	tough, strong, stiff, abrasion& chemical resistant, food safe, high temp capable	plastic soda bottles , Mylar film.	
2	HDPE	High-density polyethylene	Olefins	ThermoP lastic	Cr	lightweight, waxy, tough, chemically resistant, not stiff, low UV resistance	plastic gas cans , milk jugs, sheet stock for fabrication	
3	PVC	Polyvinylchloride (aka vinyl)		ThermoP lastic	Am	hard & soft grades, good surface gloss and colourability, flame retardant, high UV resistance	plumbing fittings, garden hose, extruded siding , window frames, bottles, blister packs, many soft toys, the base for any form of vinyl:	
4	LDPE	Low-density polyethylene	Olefins	ThermoP lastic	Cr	LDPE is softer, more flexible and melts at a lower temperature than HDPE	food containers	
5	PP	Polypropylene	Olefins	ThermoP lastic	Cr	glossy surface, lightweight, relatively high melting point, integral hinge use, stiff, hard	food containers , luggage, plastic trim in cars, telephone housings, rope, syringes	
6	PS	Polystyrene	Styrenes	ThermoP lastic	Cr	available clear, colourable, stiff, hard, optical qualities, brittle, susceptible to cracking	disposable plastic knives , forks, spoons, clear packaging, foamed PS -> coffee cups, take-out food containers	STYROFOAM
7 (other)	ABS	Acrylonitrile-Butadiene-Styrene	Styrenes	ThermoP lastic	Cr	tough, strong, high gloss, colourable, highly processable, stiff, hard, impact reisant	telephone housings , power tool housings, small appliances	
	PC	Polycarbonate	Engineering	Thermo Plastic	Cr	high performance, hard high gloss surface, tough, impact resistant	tail light lenses, CD's , telephone housings, power tool housings,	LEXAN
	PA	Polyamide	Nylons	Thermo Plastic	C->A	waxy, tough, chemically resistant, stiff, tough, impact resistant, low friction co-efficient	mechanical parts , handles, power tool housings	
	TPE	Thermoplastic Elastomers (TPE's)	Thermoplastic Elastomers (TPE's)	Thermo Plastic		properties of thermoset rubber with processability of thermosplastics	soft touch grips, garden hose , swim fins, wiper blades, footwear	Santoprene
	PE	Polyethylene	Olefins	Thermo Plastic	Cr	lightweight, waxy, tough, chemically resistant, not stiff, low UV resistance	pails, buckets , garbage cans, playground structures, toys	
	PMMA	Polymethylmethacrylate	Acrylates	Thermo Plastic	Am	clarity, 92% light transmission, range of colours- translucent & opaque, stiff hard, strong, but brittle, low impact strength	brochure racks fabricated from sheet material , display cases, signs , disposable plastic knives, forks, spoons,	ACRYLITE
	CAB	Cellulose-Acetate-Butyrate	Cellulosics	Thermo Plastic	Am	scratch resistant, colourable, tactile quality, tough, clear grades, suited for metal embedments	tool handles , toys, RV windows	
	POM	Polyacetal homopolymer	Polyacetals	Thermo Plastic	Cr	high surface gloss, low friction co-efficient,tough, strong, creep resistant, good for snap-fit apps.	buckles on backpacks , power tool housings, mechanical parts	DELRIN
	EVA	Ethalene-vinyl acetate	Olefins	Thermo Plastic		rubber-like, flexible, tough, impact strength	flexible toys , power cable jackets, medical tubing, films for packaging, shrink wrap	TEFLON
	MF	Melamine Formaldehyde	Aminos	Thermo Set		Hard, scratch resistant, good mechanical properties and heat resistance	plastic laminate , knobs, tableware, flatware	Formica
	UP	Unsaturated Polyester	Polyesters	Thermo Set		resin& catalyst, good strength and stiffness when combined with glass fibre & fillers, resistant to weather. & temperature. good chemical and flame	boat hulls , kayaks, automotive body panels, benches, hot tubs	
	PUR	Polyurethane	Urethanes	Thermo Set		brown>dark colours, range from soft to rigid, low to high density, non & self-skinning foams, micro- cellular closed cell elastomers	dashboards, sculptural imitation castings , variety of foams, shoe components, car headrests.	
	SI	Silicone (RTV=room temperature vulcanization)	Silicones	Thermo Set		maintains properties over wide temperature range, flexible, tactile surface quality	non-stick baking forms , diving masks, sealants	
	PF	Phenol Formaldehyde	Phenolics	Thermo Set		High performance engineering, stiff, high temperature capability, chemical resistance	mechanical parts, toaster oven parts , handles, backing for plastic laminates (the brown layer)	