

General Guide to Plastics for Storage

Plastic Identification Code	Type of plastic polymer	Properties	Common Packaging Applications	Insect Protection	Ageing
 01 PET	Polyethylene terephthalate (PET, PETE)	Clarity, strength, toughness, barrier to gas and moisture.	Soft drink, water and salad dressing bottles; peanut butter and jam jars	Insect proof	Stable
 02 PE-HD	High-density polyethylene (HDPE)	Stiffness, strength, toughness, resistance to moisture, permeability to gas.	Water pipes, hula hoop rings, five gallon buckets , milk, juice and water bottles; the occasional shampoo / toiletry bottle	If more than 10 mils thick, insect resistant	Can yellow textiles inside bag
 03 PVC	Polyvinyl chloride (PVC)	Versatility, ease of blending, strength, toughness.	Blister packaging for non-food items; cling films for non-food use. Not used for food packaging as the plasticisers needed to make natively rigid PVC flexible are usually toxic. Non-packaging uses are electrical cable insulation; rigid piping; vinyl records.	Insect resistant	Will yellow and acid damage textiles inside
 04 PE-LD	Low-density polyethylene (LDPE)	Ease of processing, strength, toughness, flexibility, ease of sealing, barrier to moisture.	Frozen food bags; squeezable bottles, e.g. honey, mustard; cling films; flexible container lids.	Susceptible to insect attack	Will yellow textiles inside bag

	Polypropylene (PP)	Strength, toughness, resistance to heat, chemicals, grease and oil, versatile, barrier to moisture.	Reusable microwaveable ware; kitchenware; yogurt containers; margarine tubs; microwaveable disposable take-away containers; disposable cups; plates.	Insect resistant	Breaks down with light; will yellow textiles stored inside it
	Polystyrene (PS)	Versatility, clarity, easily formed	Insulating foam: Egg cartons; packing peanuts; disposable cups, plates, trays and cutlery; disposable take-away containers;		When burns becomes liquid fire
	Other (often polycarbonate or ABS)	Dependent on polymers or combination of polymers	Beverage bottles; baby milk bottles. Non-packaging uses for polycarbonate: compact discs; "unbreakable" glazing; electronic apparatus housings; lenses including sunglasses, prescription glasses, automotive headlamps, riot shields, instrument panels	Insect proof	Stable