

Information of Plastics Worksheet

#Eco360

Plastic Type & Symbol	Plastic Examples	Chemical Formula	Chemical Structure
PET (Polyethylene Terephthalate)	Beverage bottles, plastic cans, fabric fibers and carpets, some bottles for hygiene products	(C ₁₀ H ₈ O ₄) _n	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
HDPE (High-Density Polyethylene)	Bottles for household chemicals, milk jugs, juice containers, medicine bottles	(C ₂ H ₄) _n	More linear compared to LDPE: $ \begin{array}{ccccccccccccccccccccccccccccccccccc$
PVC (Polyvinyl Chloride)	Toys, blister wrap, cling wrap, detergent bottles, loose-leaf binders, blood bags, medical tubing	(C ₂ H ₃ Cl) _n	H ₂ Cl {C-C}- H n
LDPE (Low-Density Polyethylene)	Bags (grocery, dry cleaning, bread, frozen food bags, newspapers, garbage), plastic wraps; coatings for paper milk cartons and hot & cold beverage cups; some squeezable bottles (honey, mustard), food storage containers	(C ₂ H ₄) _n	More "branches" compared to HDPE: $ - \begin{bmatrix} H_2 & H_2 \\ C - C \end{bmatrix}_n \rightarrow $
PP (Polypropylene)	Thermal vests, car parts (bumpers), disposable diapers, sanitary pad liners, furniture	(C ₃ H ₆) _n	-{H₂ H}- C-C- CH₃
PS (Polystyrene)	Food containers, egg cartons, disposable cups and bowls, packaging, cosmetic bags	(C ₈ H ₈) _n	$-\left\{ \overset{H_{2}}{C}-\overset{H_{2}}{C}\right\} _{n}$



