

Chemical Resistance Chart

Reagent	Concentration	HDPE		PP		Polyester	PVC	316SS	Nylon 66	Acetal
		70°	140°	70°	140°					
Wines ★	-	A	A	A	A	-	C	A	-	-
Xylene ■	-	C	C	C	C	B	C	A	A	-
Yeast	-	A	A	A	A	-	A	A	-	-
Zinc Bromide	Saturated	A	A	-	-	-	A	A	-	-
Zinc Carbonate	Saturated	A	A	-	-	-	A	A	-	-
Zinc Chloride	Saturated	A	A	A	A	A	A	A	B	-
Zinc Oxide	Saturated	A	A	A	A	-	A	A	-	-
Zinc Sterate	-	A	A	-	-	-	A	A	-	-
Zinc Sulphate	Saturated	A	A	A	A	A	A	A	-	-

CODES: HDPE - High Density Polyethylene PP - Polypropylene (-) Information not yet available.

(A) Resistant, no indication that serviceability would be impaired. (B) Variable resistance, depending on conditions of use.

(C) Unresistant, not recommended for service applications under any conditions.

(★) **Stress-crack agent** - Certain surface active materials, although they have no chemical effect on polyethylene, can accelerate the cracking of polyethylene when it is under stress.

(■) **Plasticizer** - Certain types of chemicals are absorbed to varying degrees by polyethylene, causing swelling, weight gain, softening, and some loss of yield strength. These plasticizing materials cause no actual chemical degradation of the resin. Some (e.g. Gasoline). Certain plasticizers are sufficiently volatile that if they are removed from contact with the polyethylene, the part will "dry" out and return to its original condition with no loss of properties.

(●) **Oxidizers** - Oxidizers are the only group of materials capable of chemically degrading polyethylene. The effect on polyethylene may be gradual even for strong oxidizers, and short term effects may not be measurable. However, if continuous, long-term exposure is intended, the chemical effects should be checked.

Notes: