

Names and General Properties of Parker Hose Materials

Refer to the guides on the following pages for specific applications.

Common Name	ASTM Designation D1418-64	Composition	General Properties	Primary Hose Elements
Butyl / Chlorobutyl	IIR	Isobutene-Isoprene	Very good weathering resistance, low permeability to air. Good physical properties. Poor resistance to petroleum based fluids.	Tube / Cover
Chlorinated Polyethylene (CPE)	CM	Chloropolyethylene	Good long term resistance to UV and weathering. Good oil and chemical resistance. Excellent flame resistance. Good low temperature impact resistance.	Tube
Cross Linked Polyethylene (XLPE)	XPE	Cross Linked Polyethylene	Excellent resistance to most solvents, oils and chemicals. Do not confuse with chemical properties of standard polyethylene.	Tube
EPDM	EPDM	Ethylene Propylene Diene	Good general purpose polymer. Excellent heat ozone, and weather resistance. Not oil resistant.	Tube / Cover
Epichlorohydrin	ECO	Ethylene Oxide Chloromethyl	Excellent oil and ozone resistance. Fair flame resistance and low permeability to gases. Good low temperature properties.	Tube / Cover
Ethyl Vinyl Acetate (EVA)		Ethylene Vinyl Acetate	Good abrasion and chemical resistance. Lightweight.	Tube / Cover
Hypalon®	CSM	Chlorosulfonated Polyethylene	Excellent ozone, weathering and acid resistance. Good abrasion and heat resistance. Can be compounded for good oil resistance.	Tube / Cover
Modified XLPE (MXLPE)		Proprietary	Excellent chemical resistance with good heat properties.	Tube
Natural Rubber	NR	Isoprene	Excellent physical properties, including abrasion resistance. Not oil resistant.	Tube
Neoprene	CR	Chloroprene	Excellent weathering resistance. Good oil resistance. Good physical properties.	Tube / Cover
Nitrile / Buna-N	NBR	Nitrile-Butadiene	Excellent oil resistance. Good physical properties.	Tube / Cover
Nylon		Nylon	Excellent chemical resistance. Good temperature resistance.	Tube
Poly Vinyl Chloride (PVC)		Poly Vinyl Chloride	Good abrasion, chemical and weathering resistance. Lightweight. Poor oil and temperature resistance.	Tube / Cover, Tubing
Poly Vinyl Chloride / Polyurethane (PVC/PU)		Poly Vinyl Chloride / Polyurethane Blend	Good abrasion, chemical and weathering resistance.	Tube / Cover
Polyurethane (PU)	AU	Polyurethane	Good abrasion, chemical and weathering resistance.	Tube / Cover
SBR	SBR	Styrene-Butadiene	Good physical properties, including abrasion resistance. Not oil resistant. Poor weathering and ozone resistance.	Tube / Cover
Santoprene® (TPV)		Thermoplastic Vulcanizate	Excellent chemical and ozone resistance. Good flexibility. Lightweight.	Tube, Tubing
Teflon®	FEP / PTFE	Fluorinated Ethylene Propylene / Polytetra-Fluoroethylene	Excellent chemical, solvent, and heat resistance, inert to most materials. Smooth anti-adhesive surface – easily cleaned.	Tube
Ultra-High Molecular Weight Polyethylene (UNMWPE)	UHMW	Ultra-High Molecular Weight Polyethylene	Excellent chemical and heat resistance.	Tube
Viton®	FKM	Fluorocarbon Rubber	Excellent high temperature resistance, particularly in air or oil. Very good chemical resistance.	Tube / Cover