## MATERIALS COMMONLY USED IN TITAN HOSE

ASTM Designation	Common Name	Composition	General Properties
BR	Polybutadiene	Butadiene	Excellent abrasion and low temperature resistance. High resilience.
CIIR	Chlorobutyl isoprene	Chlorinated isobutylene	Same general properties as Butyl (see IIR below).
CR	Neoprene®	Polychloroprene	Good weathering resistance and flame retarding. Moderate resistance to petroleum based fluids. Good physical properties.
CSM	Hypalon®	Chlorosulfonyl- Polyethylene	Excellent ozone, weathering and acid resistance. Good abrasion and heat resistance. Good resistance to petroleum based fluids.
EA	Vamac <sup>®</sup>	Ethylene-Acrylic Elastomer	Outstanding heat, ozone, and oil resistance.
EPDM	Ethylene Propylene Rubber	Ethylene-Propylene diene-terpolymer	Excellent ozone, chemical, and aging characteristics. Poor resistance to petroleum based fluids.
FEP	Teflon®	Fluorinated Ethylene Propylene	Excellent chemical resistance, electrical properties and flame resistance. Low coefficiency to friction, high strength at elevated temps, low permeability.
FKM	Fluoroelastomer	Fluorocarbon Rubber	Excellent high temperature resistance, particularly in air or oil. Very good chemical resistance.
IIR	Butyl	Isobutylene-isoprene	Very good weathering resistance. Low permeability to air. Good physical properties. Poor resistance to petroleum based fluids.
IR	Polyisoprene	Polyisoprene, synthetic	Same properties as Natural Rubber (see NR below).
Mod XLPE	Modified Cross-Linked Polyethylene	Proprietary	Excellent chemical resistance with good heat and electrical properties.
NBR	Nitrile	Acrylonitrile-butadiene	Excellent resistance to petroleum based fluids. Moderate resistance to aromatics. Good physical properties.
NR	Natural Rubber	Polyisoprene, natural	Excellent physical properties including abrasion and low temperature resistance. Poor resistance to petroleum based fluids.
SBR	SBR	Styrene-butadiene	Good physical properties, including abrasion resistance. Poor resistance to petroleum based fluids.
	UHMWPE	Ultra high molecular weight polyethylene	Excellent resistance to a broad range of chemicals with excellent abrasion resistance.
XLPE	Cross-Linked Polyethylene	Polyethylene and cross linking agents	Excellent chemical resistance with good heat and electrical properties.