

Hoses for Air & Fluid Service

Material Properties and Recommended Use

The reader is cautioned that the “General Properties” described are just that, properties which have been found to be generally applicable in the experience of persons familiar with rubber chemistry. However, the reader should always follow the fluid manufacturer’s recommendation as to the use of any particular composition, especially with respect to the resistance of the composition to the fluid it is intended to carry or protect against. Failure to do so might result in failure of the product to fulfill its intended purpose, and may result in possible damage to property and serious bodily injury.

Core Tube Material	General Properties
Buna-N (NBR)	Highly resistant to petroleum products. Good abrasion resistance. Not for: brake or hydraulic fluids, keytone solvents or concentrated acids.
Buna-S (SBR)	High strength and abrasion-proof ratings. Resists non-petroleum base lubes. Not for: petroleum products, strong chemicals, ozone.
PTFE (Tetrafluoroethylene Resin)	High strength and wear resistance. Best chemical and heat resistance. Totally absorption-proof.
Neoprene (CR)	Highly resistant to weathering. Good strength and resiliency. Good resistance to heat, flame and abrasion. Not for: keytone solvents, phosphate fluids.
Nylon	Extra strong plus high resistance to heat and abrasion. Inert non-reactive to most chemicals, fast solvents or petroleum. Not for: concentrated acids or oxidizing fluids.
Nylon Type II & 6	Some properties as Nylon plus Type II, 6, provide reduced moisture absorption.
Polyethylene	Good long term resistance to UV and weathering. Excellent flame-resistant. Good low temperature impact resistance.
PVC	Good weathering, moisture and flame resistance. General resistance to alkalines and weak acids. Good abrasion resistance.
Modified Polyamide	Good abrasion, chemical and fatigue resistance. Good long term resistance to high temperature. Low gas permeation and low co-efficient of friction.
EPDM	Excellent ozone, chemical and aging characteristics. Not for: petroleum-based fluids.
Nitrile	See Buna-N
Polyester	Good flex fatigue and low temperature properties. High resistance to deformation. Good resistance to abrasion, chemicals, hydraulic fluids and aromatic fuels.
Rubber	Excellent physical properties including abrasion and low temperature resistance. Not for: petroleum-based fluids.

Cautionary Statement

All hose and fitting products sold by Graco Inc., are in the nature of commodities and they are sold by our published specifications and not for particular purposes, uses or applications. The purchasers or users of the merchandise or products shall first determine their suitability for the intended purposes, uses or applications and they shall either conduct their own engineering studies or tests, or retain qualified engineers, consultants or testing laboratories and consult with them before determining the proper use, suitability or propriety of the merchandise or products for the intended purposes, uses or applications. Graco Inc. does not guarantee the merchandise or products for any particular purpose, use or application, and the purchaser or user thereof shall assume full responsibility for the suitability, propriety, use and application of the merchandise or products. The merchandise or products, including but not limited to, hose, tubing or coupling may fail due to the use or conveyance of substances at elevated or lowered temperatures or at excessive pressures, the conveyance of abrasive, injurious, flammable, explosive or damaging substances. Hose or tubing used in bent configurations will be subjected to increased abrasion. Hose clamps or couplings may loosen after initial installation and all sections of hose and tubing, including connections, couplings and clamps, should be inspected frequently, regularly and consistently, and should be replaced, adjusted or retightened for the avoidance of leakage, for the prevention of injuries or damages, and for general safety purposes. Except as indicated in its Limited Warranty, Graco Inc. shall not be liable or responsible for direct or indirect injuries or damages caused by or attributed to the failure or malfunction of any merchandise or products sold or distributed by it. Graco Inc. recommends that the purchasers or users of the merchandise or products frequently and consistently undertake inspections and protective measures with respect to the use and application of the merchandise and products which should include the examination of tube and cover conditions of the hose or tubing and the identification, repair or replacement of sections showing cracking, blistering, separations, internal and external abrasions, leaking or slipped couplings or connections and make proper proof tests.