

Benefits and Uses of Cloth-Inserted Rubber

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There are several types of cloth-inserted rubber materials available at UIP, each offering its own unique benefits. Cloth-Inserted rubber consists of an elastomer such as SBR, Neoprene, or Nitrile/Buna-N, impregnated with one or more layers of fabric, usually polyester, nylon, or cotton. The fabric reinforcement significantly increases tear/tensile strength and provides high dimensional stability, while reducing gasket creep in flanged gasket applications with high compression loads.

UIP offers a variety of cloth-inserted rubber options in various widths and thicknesses, each with its own advantages. It is important to choose the right elastomer for your application.

Sheet Type 87 Cloth-Inserted Neoprene:

ASTM D2000 BC-607-A14-B14-C12-F17

Neoprene is an excellent all-purpose rubber with outstanding physical toughness. It offers heat, chemical, oil and ozone resistant properties and is a great choice for applications requiring maximum conformity and deformation resistance. The added 3.4 oz. nylon fabric makes it suitable for a variety of services including pads, chutes, rubber sleeves and safety guards. The inserted cloth reduces creep in seals and gasket services. Common applications of cloth inserted neoprene include meters, control devices, welding curtains, regulators, pumps, and diaphragms. It is suitable for use where petroleum, detergents and heavy oil resistance is required, and works well in environments where hot or cold water and gases are being conveyed.

Sheet Type 88 Diaphragm-Inserted Neoprene:

With a 14.5 oz. Nylon insert, Diaphragm Inserted Neoprene has better tear resistance than any other cloth-inserted rubber. This rubber can be used for applications requiring extreme fabric strength while still maintaining Neoprene's excellent physical properties.

Sheet Type 98 Cloth-Inserted Nitrile/Buna-N:

ASTM D2000 M5-BG-607-A14-B14-E034

Cloth Inserted Nitrile is the polymer of choice for dynamic applications requiring oil and solvent resistance. The 3.4 oz. Nylon insert along with the oil-resistant properties of Nitrile rubber make it an excellent choice for applications requiring oil and gasoline resistance and superior resistance to petroleum-based hydraulic fluids. Common applications of cloth inserted nitrile rubber include fuel tank gaskets, conveyor belts, work surface areas, aviation fuel liners, diesel tank gaskets, weather stripping for automotive applications and many other applications that require fuel and environmental exposure.

Sheet Type 96 Nylon-Inserted SBR:

ASTM D2000 M2-AA-603-A13-B13-EA14

Nylon Inserted SBR Rubber increases durability and stability in high compression applications. Its good physical properties and abrasion-resistance make it an ideal choice for various air, hot water, low-pressure steam, and hydraulic services. Its low resistance to oil and gas makes it a poor choice for petroleum-based applications. It offers excellent stretch, tear, and creep resistance, and low temperature flexibility.

UIP International offers an extensive range of industrial and commercial grade sheet rubber products manufactured under strict guidelines for exceptional quality. All Sheet Rubber supplied by UIP conforms to Reach, RoHS, Prop 65 and SDS directives. Many of our sheet rubber products are available to ship same day with excellent freight allowed terms. Contact one of our highly trained customer service representatives at sales@uipintl.com to find the right product for your application.