

1,3-BUTADIENE

Derived Polymers Have Critical Uses

in Health and Medical Care Applications

1, 3-Butadiene is a chemical “building block” essential in the production of polymers that have critical uses in health and medical care applications.

1,3-Butadiene, Styrene-Butadiene Rubber, SBR

SBR is used to make drug and hospital sheeting and is useful to protect hospital beds/exam tables/surgical tables. Drug sheeting or rubber sheeting protects surfaces and individuals during the administration of drugs.

1,3-Butadiene, Solid nitrile Butadiene Rubber (NBR) and NBR Latex

These butadiene polymers are used to make nitrile exam and latex gloves that can be non-allergenic and can provide resistance to lubricants so that they maintain their integrity.

1,3-BD, ABS Resins, Polychloropene (neoprene), Nylon resins, Polychloropene (neoprene)

The function of the butadiene is to give these polymers the flexibility, stretchiness and abrasion resistance that permits them to form seals in gaskets used in pharmaceutical drug delivery devices such as asthma inhalers. These polymers are used in medical equipment/ parts/devices.

**1,3-BD, ABS Resins,
Polychloropene (neoprene),
Nylon resins,
Polychloropene (neoprene)**

Orthopedic
braces

Fluid Dispensing
Tubing

1,3-Butadiene, Nylon Resins

Ventilator
Parts/Valves

Catheter
Shafts/Tubing

Balloon Tubing

Feeding Tubes

Dialysis Tubing

**1,3-Butadiene,
High styrene-content
SBC resins (HS-SBC)**

Medical
Masks

Inhalers/
Inhaler
Housing

Wheelchair
positioning
harnesses

Medical Drainage Units

Tracheal
Tubes

Drip Chambers

Gloves

Connectors



While 1,3-Butadiene is not sold or used directly by consumers, it is reacted/polymerized and may be further processed to create a range of materials that can be used to make consumer goods.

1,3-Butadiene is a critical building block chemical, and it is important that EPA considers the best available science in its risk evaluation under the Toxic Substances Control Act to avoid any potential disruptions in the production, manufacture, or transportation of many critical products.