

# Coating Tomorow's Innovations

## Isoprene, synthetic (IR)

Rubber, urethane and other polymers are used to provide optimized coating properties for a substrate.

Polyisoprenes, natural rubber, and synthetic rubber are noted for outstanding resilience, resistance to tear and abrasion, excellent elasticity, and flex fatigue resistance. Polyisoprenes also have excellent tensile strength characteristics and can operate in low-temperature environments. Polyisoprenes are not recommended for environments that contain high heat, ozone, sunlight, petroleum, or hydrocarbon.

The purity of synthetic polyisoprene provides more consistent dynamic properties with better weather resistance. Synthetic polyisoprene's lack of "tree organics" also gives a relatively odorless rubber.

### **General Polymer Characteristics**

Abrasion Resistance	Excellent	Gas Permeability	Fair
Compression Set	Excellent	Low Temperature Flexibility	Excellent
Elongation	Excellent	Tear Resistance	Excellent
Flame Resistance	Poor		

#### **General Properties**

Excellent physical properties, including abrasion and low temperature resistance, poor resistance to petroleum-based fluids

#### **Resistant to**

Most moderate chemicals, wet or dry, organic acids, alcohols, ketones, aldehydes

#### Attacked by

Ozone, strong acids, fats, oils, greases, and most hydrocarbons



At Trelleborg, our eyes are on tomorrow as our in-house expert technical teams work in partnership with an increasing range of customers to bring industry-changing ideas to actualization with coated materials– whether it's your concept or ours. Email: ECF@Trelleborg.com