

# SBR (Styrene-Butadiene Rubber)

SBR (Styrene-Butadiene Rubber) is a synthetic rubber material commonly used in gaskets due to its durability, flexibility, and resistance to abrasion. Here are some general specifications for SBR gasket material:

## 1. Physical Properties:

- Density: Typically ranges from 1.0 to 1.3 g/cm<sup>3</sup>.
- Hardness: Measured on the Shore A scale, typically ranging from 60 to 80 Shore A.
- Tensile Strength: Usually in the range of 7 MPa to 15 MPa.
- Elongation at Break: Generally around 200% to 600%.
- Compression Set: Resistant to compression deformation over time.
- Abrasion Resistance: SBR has good resistance to abrasion.

## 2. Chemical Resistance:

- Water Resistance: SBR has fair to good resistance to water and aqueous solutions.
- Ozone Resistance: Fair resistance to ozone exposure.
- Acids and Alkalis: Moderate resistance to acids and alkalis.
- Oils and Fuels: SBR has limited resistance to oils and fuels.

## 3. Temperature Range:

- SBR can typically withstand temperatures ranging from -40°C to 100°C (-40°F to 212°F) depending on the specific formulation and application.

## 4. Applications:

- Sealing: SBR gaskets are commonly used for sealing applications where moderate temperature and chemical resistance are required.
- Automotive: Used in automotive applications such as gaskets for engines, transmissions, and fuel systems.
- Industrial: Widely used in industrial settings for sealing purposes in machinery, pumps, and hydraulic systems.
- Construction: SBR gaskets are also utilized in construction for sealing joints and connections.

## 5. Standards and Certifications:

- SBR gasket materials may conform to various industry standards and certifications such as ASTM (American Society for Testing and Materials) standards or specific regulatory requirements depending on the intended application.

## 6. Customization:

- SBR gasket materials can be customized in terms of thickness, hardness, and other properties to suit specific application requirements.

It's important to note that the exact specifications of SBR gasket material can vary depending on the specific manufacturer, formulation, and intended application. Therefore, it's advisable to consult the manufacturer's datasheets or technical specifications for detailed information on a particular product.