

## Polyester Elastomer (ER-55)

**ER-55** is a polyester elastomer used in applications where the mating surface finish is poor and requires a sealing material with a high degree of flexibility that will conform to surface irregularities and offer excellent sealing ability.

In addition, **ER-55** is used in moist or wet food contact applications where a high degree of chemical compatibility is needed. This material has low abrasion to soft mating parts, and is suitable for sealing moist environments and aqueous solutions at low speeds.

**ER-55** is recommended for use in temperatures from -320 to +475 °F (-196 to +246 °C).

### Chemical Compatibility

**ER-55** has excellent chemical compatibility. This material is compatible with most fluids and gases, but it is not recommended for use with sulfuric and nitric acids, alkali metals, chlorine fluoride, lithium, potassium, and sodium at high temperatures. For more detailed information on chemical compatibility, reference Technical Report TR-60A in our online technical library at [www.balseal.com](http://www.balseal.com).

### FDA Compliance

**ER-55** is made from “FDA compatible and compliant” resins and materials, but it has not been submitted to the FDA for approval.

### Mechanical Properties

The mechanical properties of **ER-55** at ambient temperatures are:

Tensile strength	ASTM D638	5802 psi (408 kg/cm <sup>2</sup> )
Elongation	ASTM D638	500%
Shore Hardness	ASTM D2240	55

### Color

Tan

### Advantages of ER-55

- Made from “FDA compatible and compliant” resins and materials
- Low abrasion to soft materials
- High wear values compare to other SP-type materials

### Other Information

For additional information, please contact our Technical Sales Representative at (949) 460-2100. We maintain a vast library of material references and testing information.

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