



# Polyester Elastomer (ER72)

Material Data Sheet  
M-74 (Rev. 00; 08-18-20)

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## Overview

ER72 is a polyester elastomer with high flexibility and conformance properties and excellent sealing effectiveness. It is often chosen for sealing applications where surface finish is poor and surface irregularities prevent the use of materials with a lower degree of elasticity.

In addition, ER72 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.

ER72 is recommended for use in temperatures from  $-320^{\circ}\text{F}$  to  $+475^{\circ}\text{F}$  ( $-196^{\circ}\text{C}$  to  $+246^{\circ}\text{C}$ ).

## Chemical Compatibility

ER72 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.

## Compliance

ER72 is made from FDA compatible and compliant resins and materials. SP191 is a composition which contains ingredients that meet FDA regulation 21 CFR 170.39 for use in food contact applications. Bal Seal Engineering defines its compositions as "FDA Compliant" if each of the ingredients in the composition have been found by the FDA to be "safe for use in food contact," or "acceptable for use in food contact."

## Color

Tan

## Mechanical Properties of ER72

Tensile Strength (typical)	Elongation (typical)	Hardness (typical)
6650 psi	360%	72 ShoreD (54 Rc)

## Advantages

- Low abrasion to soft materials
- Can conform to irregular surfaces
- High compatibility with chemicals and abrasive particles

## Application Examples

- Welding equipment seals
- Electronics/semiconductor equipment
- Sensors

## Other Information

For more information, contact a technical sales representative, or e-mail us at [solutions@balseal.com](mailto:solutions@balseal.com)

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