

MECHANICAL PROPERTIES

Comparative data

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Compounds formulated with epoxy plasticizers present greater resilience when compared to traditional plasticizers. This effect can be observed when both tensile strength and elongation (ASTM D 638) are greater for hardness-adjusted compounds.

The charts on the right show the comparative data of mechanical properties of Innoleic™ third generation products and traditional plasticizers adjusted for hardness at 70 Shore A (ASTM D 2240). As it is shown, both tensile strength and elongation are increased in formulations with the Innoleic™ MB plasticizers line, offering a compound that is more elastic or resilient than traditional formulations. This feature is valuable for various applications, providing higher resilience, which can result in a softer feel to the touch, greater durability for materials that undergo intermittent compression, or higher abrasion resistance.

This effect can also be observed on the tear resistance test (ASTM D 1004), as the chart shows. This is also a potential valuable characteristic, especially for applications such as upholstery, shoes, shower curtains, tarpaulins, or clothing.

