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The effects of 2% alkaline gluteraldehyde solution on the elastic properties of elastomeric chain

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ABSTRACT

The effect of two proprietary alkaline gluteraldehyde solutions on the strength (failure load) and the required displacement or stretching to achieve a force of 500g was studied for six types of elastomeric chains. The effect of disinfection (short-term exposure) and sterilization (long-term exposure) as well as repeated immersion cycles on these parameters was evaluated.

The findings showed that exposure to gluteraldehyde solution affected the strength and the distention required to deliver a force of 500g of certain elastomeric chains. However, the resultant changes were relatively small and are probably insignificant in the clinical setting.

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KEY WORDS: Elastic properties, Elastomeric chain, Disinfection, Sterilization.

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