

The Relationship Between the Cross-Linking Irradiation Doses of Polyethylene and their Mechanical Properties ¹

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Abstract

The use of cross-linking polyethylene was increased, especially for the medium & high voltage electrical cables instead of paper and oil insulating materials. The radiated low density polyethylene is the best technique in the process of cross-linking instead of chemical method.

The purpose of this study is to find the relation between mechanical properties of polyethylene samples and the dose rate of irradiation to cross – link the polyethylene materials and to get the best properties.

This paper illustrates also the important results, that we have obtained in this study.

¹ For the paper in Arabic see Pages (59- 81).

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