

Reference: **856**

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Type:

**Technical Brochures**

Title:

**Dielectric performance of insulating liquids for transformers**

Dielectric liquids, in combination with solids, have been used for insulating power transformers for more than a century. While mineral oils have dominated the market, new liquids with different molecular structures are now in common use. This brochure addresses the dielectric performance of the liquids as used in a transformer - including the potential influence of solid insulation on the behaviour of prebreakdown streamers in the liquid. Topics discussed include how the chemical composition of liquids influences the streamer velocities and breakdown, and how the electric field configuration may govern breakdown modes. The aim of this brochure is to review the dielectric requirements and test standards of dielectric liquids as seen from a transformer designer, to review the behaviour of dielectric liquids under various electric stresses, and finally, to identify knowledge gaps.

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More Informations :

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**File Size:**11,2 MB **Pages NB:**130 **Study Committee :** D1 **WG (TF):**WG D1.70 TF3 **Year:**2021

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