Silicone elastomers with superior softness and dielectric properties

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$s = \frac{\varepsilon_r \varepsilon_0 (\frac{U}{d})^2}{Y}$

DMS-T22 (silicone-oil)

$\text{CH}_3\text{Si}-\text{O}-(\text{CH}_3\text{Si-O})_n\text{Si-CH}_3$

physical blending

LMS-152 (chloro-oil)

$\text{Cl-CH}_2\text{CH}_2\text{CH}_2\text{Si} \equiv$

Chemical modification

Chloropropyl-functional copolymer

\begin{align*}
\text{Alkyl chlorine unit: } & \quad \text{Variable dimethylsiloxy spacers: } \\
\text{Co-1: } 1200 \text{ g mol}^{-1}, & \quad \text{Co-2: } 580 \text{ g mol}^{-1} \\
\text{Allyl end-groups: } & \\
\end{align*}
1.2.8 Silicon elastomers with superior softness and dielectric properties

<table>
<thead>
<tr>
<th>Composition</th>
<th>Thickness (µm)</th>
<th>Breakdown (V/µm)</th>
<th>Young's modulus @ 5% strain (MPa)</th>
<th>Tensile strength (MPa)</th>
<th>Strain @ break (%)</th>
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