Enhancing the electro-mechanical properties of polydimethylsiloxane elastomers through blending with poly(dimethylsiloxane-co-methylphenylsiloxane) copolymers

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Electrical treeing

Failure of insulation material

Phenyl group - electron-trapping effect
Disturbance of cloud of \( \pi \)-electrons - anion radicals
Voltage stabiliser
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Anionic Ring-Opening Polymerisation

Phenyl-PDMS copolymer in PDMS matrix
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Thank you