

## 78. Title: Novel Finish Based on Silicone for Multifunctional Finishing of Textiles

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**Keywords:** Mosquito-repellent, Finishing, Silicone softener

**Domain:** Textiles (Functional textiles)

### Summary:

In recent years, due to the gradual improvement of living standards, people are increasingly demanding functional textiles. Due to the health and hygiene concerns, antibacterial textiles are in demand. To suppress the bad odour, the fragrance finish can be applied to textiles. Mosquitoes are the common vectors to spread deadly diseases like dengue, malaria and chikungunya.

The present technology discloses a silicone-based finish for multifunctional (mosquito-repellent, antibacterial, softening, fragrance) finishing of textiles. It relates to a novel emulsion composition comprising of silicone oil, antimicrobial agents and other ingredients.

### Advantages:

- » Protective textiles can be prepared
- » Can be applied by conventional padding process
- » High efficacy of functional effects Efficient mosquito repellency of finished textiles
- » Retention of hydrophilicity of cellulosic textiles after finishing

**Applications:** Textile materials (Protective textiles and Mosquito-repellent products)

**Scale of Development:** Prototype emulsion developed and characterization done

**Technology Readiness Level:** 5

**IP Status:** Indian Patent Application 202011002216