

79. Title: Multifunctional Disperse Dyes

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Keywords: Mosquito-repellent, Dyes, Dyeing, Functional Finishing

Domain: Textiles (Functional textiles)

Summary:

Mosquito bite to humans is a great cause of concern all over the world as it serves as a vector to spread deadly diseases. As most of the body parts are covered with textiles, it is an attractive substrate to achieve protection against mosquitoes. Thus, the development of mosquito-repellent textiles is an ideal approach to protect human beings from mosquitoes. A large portion of accessible research concerning mosquito repellent textiles discussed the utilization of mosquito repellent chemicals in the textile finishing stage.

The present technology discloses a novel disperse dyes (Novel chemical compounds) for mosquito-repellent-cum-multifunctional finishing of thermoplastic fibers. Therefore, the technology relates to a novel Disperse dyeing and multifunctional (mosquito-repellent, antibacterial, UV-protective) finishing of textiles.

Advantages:

- » Protective textiles can be prepared
- » Can be applied by conventional exhaust and continuous processes
- » High efficacy of functional effects
- » Efficient mosquito repellency of finished textiles
- » Excellent durability of functional effects on textiles

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

Scale of Development: Prototype developed and characterization done

Technology Readiness Level: 4

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