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## SATIN SILK

Silk is considered as one of the finest and delicate natural fibres suitable for the construction of textile products with elegant look. Intense appearance, gorgeous glow, and elegant drapeability, known with such quality. However, silk is sensitive for various chemicals as they it could be easily damaged. Hence, it is evident that silk should be protected so as to accommodate the necessary measurements in the end use products. In this context, in this research study three major methods to add value was chosen which was further processed with heat treatments and treated with polyurethane and acid dyes and then dyed with some selected natural colours and natural dyes. The treated and dyed silk fabrics were then subjected for different testing parameters such as tensile, tear, physical properties, UV radiation, colour properties, absorbance characteristics, etc. for better SEM and ESD analysis. The results obtained from this study compares the suitability for the conventional present-day and use products including the modern attire.



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# *Elegance*

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the art of fashion

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## SATIN SILK

Silk is considered as one of the finest and delicate natural fibers suitable for the construction of textile products with elegant look, lustrous appearance, gorgeous gloss, and elegant drapability. However, silk is sensitive for various chemicals so that it could be easily damaged. Hence, it is evident that silk should be protected so as to accommodate the necessary characteristics in the end use products. In this context, in this research work plain woven mulberry silk fabric was chosen which was further processed with basic treatments and treated with polyacrylic acid and chitosan and then dyed with some selected natural sources and reactive dye. The treated and dyed silk fabrics were then subjected for different testing parameters such as measuring physical properties, K<sub>2</sub> values, fastness properties, absorbency characteristics, antistat behavior, SEM, and XRD analysis. The results obtained from this study overview the suitability for the conventional garment/apparel and/or use products including the medical textiles.









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Silk is considered as one of the finest and delicate natural fibers suitable for the construction of textile products with elegant look, lustrous appearance, gorgeous glaze, and elegant drapability likewise with rich quality. However, silk is sensitive for various chemicals so that it could be easily damaged. Hence, it is evident that silk should be protected so as to accommodate the necessary characteristics in the end use products. In this context, in this research work plain woven mulberry silk fabric was chosen which was further processed with basic treatments and treated with polyacrylic acid and chitosan and then dyed with some selected natural sources and reactive dye. The treated and dyed silk fabrics were then subjected for different testing parameters such as measuring physical properties, K/S values, fastness properties, absorbency characteristics, antiodor behavior, SEM, and XRD analysis. The results obtained from this study convince the suitability for the conventional garment/apparel end-use products including the medical textiles.





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Silk is considered as one of the finest and delicate material whose suitable for the construction of textile products with elegant look, lustrous appearance, superior drape, and elegant drapability. However, silk is sensitive to various chemicals as that it could be easily damaged. Hence, it is evident that silk should be protected so as to accommodate the necessary characteristics in the end use products. In this context, in this research work plain rayon mulberry silk fabric was chosen which was further processed with laser treatment and treated with poly-urethane acid and titanium and then dyed with some selected natural dyes and reactive dye. The treated and dyed silk fabrics were then subjected for different testing parameters such as determining physical properties, IR spectra, surface properties, absorbance characteristics, moisture content, SEM, and XRD analysis. The results obtained from this study confirm the suitability for the conventional garmenting and use products including the modern fashions.





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## S A T I N   S I L K

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