

TECHNICAL TUESDAYS

WELLNESS FINISH

REF: TT/ APRIL 2020 / WK 1

Introduction

Wellness finishes are specialty finish that provides skin care, fragrance making the body fresh along with smoothness and soft touch to natural fibers, synthetics and their blends.

Skin care finish acts against premature ageing, moisturizes the skin and enhances fitness. Some of these wellness finishes such as Aloe Vera finish provides an extra energy to the body by reducing the stress, stimulating blood circulation and imparting cooling effect on stressed skin. Fragrance finish imparts aroma and helps in elevating mood. The finished fabric or garment on abrasion or rubbing emits perfume, thus providing the environment a fresh feel.



How these finishes work?

Wellness finishes work by following micro-encapsulation process to deliver active ingredients like moisturizers, therapeutic oils, or even insecticides through the clothes onto skin directly where they are absorbed by the skin.

Through microencapsulation process a liquid or solid substance can be encapsulated in sealed micro spheres of size 0.5-2000 microns. These spheres form a suspension of tiny droplets surrounded by a thin membrane protecting the active agent before it is released, and are applied to a fabric through a simple pad-dry sequence. During wear, simple mechanical rubbing of fabric gradually ruptures the membrane releasing active agent for cosmetic, therapeutic, energy boosting, stress busting, moisturizing or deodorizing effects.

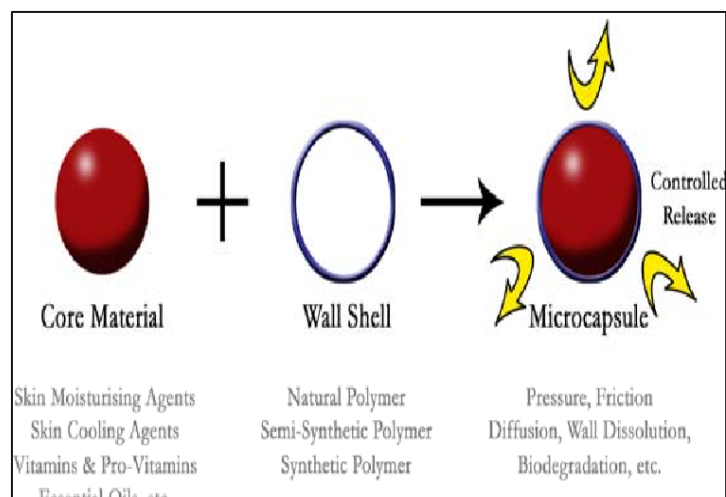


Fig 1.1 Mechanism of microencapsulation

Summary

A wellness finished textile has to be washable. Therefore, these products finished on textiles should not only last for long time but also withstand harsh washing conditions. Due to low affinity between encapsulated product and fabric, a fixing agent must be applied with the capsules. This improves their washable properties. These finishes have shown no effect on physical properties like tensile strength and stiffness of the textile substrate.

Wishing you a great week ahead!

Technical Tuesdays is a knowledge sharing initiative by Resil Chemicals Private Limited
arc@resil.com | www.resil.com.