ABSTRACT

Healthcare and hygiene sectors are an important and most growing part of the textile industry, now a days. These applications include simple cleaning wipes to advanced barrier fabrics. Generally, medical textile industry is concentrating on cost effective way to protect both hospital staff and their patients from bacteria; viruses and body fluid invasions in operating room environments are being developed. This work is related to the healthcare and hygiene products used extensively today.

Feminine hygiene and baby care materials are diapers, skin protective towelettes for children, make-up remover towels, covet wipes, baby wipes, nappy (Diaper) liners, dry wipes (antimicrobial), disposable baby bibs, baby pillow and changing mats, baby blanket, dermo-protective children's towels, etc. The basic fundamental structure is not changed since many years. So, this one is the new technological development tend to synthesis of pH responsive polymer and microencapsulation of the same, which can be applied on hygiene textile materials.

The pH responsive material is synthesis by suitable polymerization method, and then it is characterized via different analytical procedures. The design of the assembly for polymerization set. Also, microencapsulation of the prepared polymer (super absorbent polymer) performs, and then the microcapsules applied on the sanitary napkin.

The prepares SAPs and mSAPs coated sanitary napkins are analytically compare with the commercially available napkins by checking free swell capacity, absorption under load, absorption capacity, wet back, strike through, wicking height, physical properties, effluent analysis, antimicrobial ability, pH, and comfort.

The Purpose of this research is to generate the sanitary napkin, which is finished with micro-capsulated pH responsive material and can balance the pH of feminine hygiene. It is also investigated the effect of such material on nearest skin area to the vaginal.