

## **[Keynote Talk]: A Comparative Study on Air Permeability Properties of Multilayered Nonwoven Structures**

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**Abstract :** Air permeability plays an important role for applications such as filtration, thermal and acoustic insulation. The study discussed in this paper was conducted in an attempt to investigate air permeability property of various combinations of nonwovens. The PROWHITE air permeability tester was used for the measurement of the air permeability of the samples in accordance with the relevant standards and a comparative study of the results were made. It was found that the fabric mass per unit area was closely related to the air-permeability. The air permeability decreased with the increase in mass per unit area. Additionally, the air permeability of nonwoven fabrics decreased with the increase in thickness. Moreover, air permeability of multilayered SMS nonwoven structures was lower than those of single layered ones.

**Keywords :** air permeability, mass per unit area, nonwoven structure, polypropylene nonwoven, thickness

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