# Air permeability of gauze for infant products

Yi-lam Stephanie Yau, Chi-wai Kan School of Fashion and Textiles, The Hong Kong Polytechnic University, Hung Hom, Kowloon, Hong Kong Corresponding author: <u>tccwk@polyu.edu.hk</u>

#### Abstract

Gauze is an excellent material for infant product and has have attracted great attention in baby care market. Air permeability is a significant factor for textile materials, which can be used to evaluate the breathability of fabrics, especially for the infant fabric products. This study aims to evaluate the air permeability of the gauze fabric in baby care products. Air permeability tester, KES-F8, was used to test the air permeability of gauze samples. The KES-F8 was designed to measure the air permeability of a wide range of samples from high permeability to low permeability such as gauze fabric and waterproof fabric. Experimental results revealed that the fibre content and structure of fabric were the major parameters that affects the air permeability of gauze for infant products.

## Keywords: air permeability, fibre content, infant, baby care, gauze

### **Content:**

Gauze is an important material for infant apparel which can made in various forms and has drawn the attention in baby care market recently. Those products should have good properties such as non-toxic, good water absorption, soft handle and smooth surface are desirable. Air permeability is a significant factor for textile materials, which can be used to evaluate the breathability of fabrics, especially for the infant fabric products. This study aims to identify the air permeability property of the gauze fabrics in baby care products by comparing the current brands of infant gauze products in marketplace.

Air permeability of samples		
No.	R (kPa·s/m)	
1	0.024	
2	0.017	
3	0.026	
4	0.016	
5	0.032	
6	0.012	
7	0.010	
8	0.013	
9	0.231	

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Amor	Mides cotton	Minimoto Min
Mothercare	NUK	Softtouch
Suzuran 10 mm		Mides bamboo

Microscpic view of different samples