

3.12 Air permeability

Table 3: Air permeability

S. No	Samples	Mean value In 100pa 5 cm ²	Gain or loss over previous treatment	Percentage gain or loss
1.	BP	64.67	-	-
2.	BPO2	71.55	6.88	10.63
3.	BPA2	70.43	5.76	8.91

It is evident that the plasma treated samples had better air permeability than bleached. Oxygen treated samples had better air permeability than argon treated samples. There was significant difference between gases at 1% level.

4. Conclusion

Plasma treatment is a good substitute for chemical finishing as it causes no environmental pollution. From the study it may be concluded that plasma treatment with oxygen gases is superior to argon gases. As it improves absorbency, drape and air permeability. As the treatment timing was increased most of the physical properties were improved. Tensile strength decreased with increased exposure to the plasma gases. Plasma treatment done after dyeing seemed to improve the qualities of the fabric better than when done before dyeing.

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