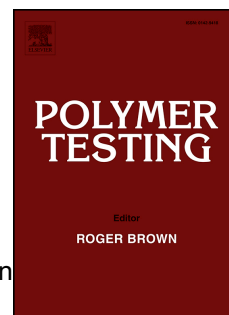


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## **An Improved Test Method for Characterising Touch Properties of Porous Polymeric Materials**

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### **Abstract**

A new test method and instrument was developed to provide overall evaluation and characterisation of touch properties of porous polymeric materials. The test method and instrument can simulate the dynamic contact process between human skin and porous polymeric materials and obtain the mechanical and physical performance during contact. In the improved test method, a new measurement principle was proposed, and the mechanical device was redesigned, including surface friction measurement components. Most indices were redefined and the grading and classification methods were studied to give a direct overall evaluation of the touch properties for industrial applications. The objective test results and analysis, subjective evaluation method and prediction model of touch properties are also presented. The improved test method provides an objective measurement of thermal-mechanical properties using a single measuring instrument for new product development and quality control of porous polymeric materials.

**Keywords:** Touch properties, Test method, Classification, Evaluation, Porous Polymeric Materials

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