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**Textiles — Determination of the  
total heat transfer through textiles in  
simulated environments**

*Textiles — Détermination du transfert de chaleur total à travers les  
textiles dans des simulations d'environnements*

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## Foreword

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This document was prepared by Technical Committee ISO/TC 38, *Textiles*.

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## Introduction

This document specifies the testing method for the determination of the amount of the heat transferred through clothing fabrics by the combined dry and evaporative heat emission under the simulated and specified conditions.

The amount of heat emission through clothing from our body is very important for comfort in hot environment or during vigorous activities. It is why we consider the comfort of our body as a thermal balancing among ambient climate, energy metabolism and the performance of clothing through removing the excessive heat from our body. The total heat transfer from the body occurs during both the dry heat transmission such as radiation, convection, conduction and the evaporative heat transmission by sweating at the same time. The amount of total heat transfer depends on both gradients of temperature and humidity, for example, the evaporative heat emission has more weight in hot environment with moderate humidity because the dry heat transfer is decreased by the reduction of the temperature difference between body and ambient climate.

Therefore, this document specifies the testing method for the determination of the amount of the heat transferred through clothing fabrics by the combined dry and evaporative heat emission simultaneously under the simulated and specified standard conditions using sweating guarded hot plate. It is for evaluating the performance of clothing fabrics for cooling down the excessive heat from our body.

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