

DIN SPEC 60015:2019-04 (E)

Quantitative measurement of the evaporative heat loss of smart textile materials for work, sports / outdoor and leisure; Text in English

| Contents | | Page |
|--|--|------|
| Foreword | | 3 |
| Introduction..... | | 4 |
| 1 Scope..... | | 5 |
| 2 Normative references | | 5 |
| 3 Terms and definitions..... | | 5 |
| 4 Requirements | | 7 |
| 5 Preparation of samples | | 7 |
| 6 Test method and Procedure..... | | 8 |
| 6.1 General..... | | 8 |
| 6.2 Apparel protocol for work, sports/outdoor and leisure | | 8 |
| 6.2.1 Procedure of the apparel protocol..... | | 9 |
| 6.3 Towel protocol | | 9 |
| 6.4 IR protocol | | 9 |
| 7 Evaluation..... | | 9 |
| 7.1 General..... | | 9 |
| 7.2 Calculation of parameters | | 12 |
| 7.2.1 Wicking power ($P_{wicking}$)..... | | 12 |
| 7.2.2 Cooling power ($P_{cooling}$) | | 12 |
| 7.2.3 Drying time (t_{drying})..... | | 13 |
| 7.2.4 Fabric Cooling Efficiency Index (I_{FCE})..... | | 13 |
| 7.2.5 Thermal barrier index..... | | 13 |
| 8 Test Report..... | | 13 |
| Annex A (informative) Further applications..... | | 14 |
| A.1 Towel protocol (Sports Medical/therapeutic applications for long-lasting cooling)..... | | 14 |
| A.2 IR protocol/Heating (heat gain electric, capture solar energy) in terms of counteractive evaporative heat loss | | 15 |
| Annex B (informative) Future applications..... | | 17 |