

ISO/TS 10818:2023-08 (E)

Nanotechnologies - Textiles containing nanomaterials and nanostructures - Superhydrophobic characteristics and durability assessment

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Normative references	1
3	Terms, definitions and abbreviated terms	1
3.1	Terms and definitions	1
3.2	Abbreviated terms	3
4	Mandatory and recommended measurement characteristics and their measurement methods	3
4.1	General	3
4.2	Ageing for superhydrophobic durability assessment	4
4.2.1	General	4
4.2.2	Washing and dry cleaning	4
4.2.3	Ironing	4
4.2.4	Mechanical abrasion	4
4.2.5	Light exposure	5
4.3	Nanomaterial and nanostructure evaluation	5
4.3.1	General	5
4.3.2	Size and size distribution	5
4.3.3	Nano-roughness (recommended characteristics)	6
4.3.4	Morphology	6
4.3.5	Chemical composition	7
4.4	Superhydrophobicity	8
4.4.1	General	8
4.4.2	Contact angle	9
4.4.3	Dynamic contact angle	9
4.5	Superhydrophobic durability assessment	9
4.5.1	General	9
4.5.2	Grade of superhydrophobic durability	9
4.5.3	Index of durability performance	11
5	Reporting	12
5.1	General	12
5.1.1	Introduction	12
5.1.2	General information	12
5.1.3	Measurement results	12
5.2	Table format example for reporting	13
Annex A (informative) Safety, health and environmental issues		14
Annex B (informative) Superhydrophobicity		16
Bibliography		17