

ISO/TR 11827:2012-06 (E)

Textiles - Composition testing - Identification of fibres

Contents		Page
Foreword		iv
Introduction		v
1	Scope	1
2	Safety note	1
3	Normative references	2
4	Terms and definitions	2
5	Principle	2
6	Apparatus and preparation of solutions	3
6.1	Apparatus	3
6.2	Preparation of solutions	3
7	Techniques	4
7.1	Microscopy	4
7.2	Flame tests	6
7.3	Staining Tests	7
7.4	Solubility Tests	7
7.5	Infrared Spectroscopy	8
7.6	Thermal Analysis	12
7.7	Density measurement methods	14
7.8	Other Instrumental Methods	14
8	Examples of procedures	15
8.1	Procedure using microscopy, solubility tests and FT-IR tests (examples)	15
8.2	Procedure using solubility tests (examples)	17
8.3	Procedure using combustion tests and melting point determination (example)	19
8.4	Procedure using microscopy, FT-IR analysis and thermal analysis, case of bicomponent fibres (examples)	19
Annex A (informative) Characteristics relative to fibre identification testing		24
Annex B (informative) Photomicrographs of Fibres (Light Microscopy)		29
Annex C (informative) Scanning Electron Micrographs of Fibres		34
Annex D (informative) Solubility of fibres		42
Annex E (informative) Examples of Infrared Spectra		45
Annex F (informative) Thermal transition temperature		50
Annex G (informative) Density		54
Annex H (informative) Alphabetical index of figures		55
Bibliography		58