

DIN EN ISO 11612:2015-11 (E)

Protective clothing - Clothing to protect against heat and flame - Minimum performance requirements (ISO 11612:2015)

Contents		Page
European foreword.....		4
Introduction.....		6
1	Scope	7
2	Normative references	7
3	Terms and definitions	8
4	General and design requirements	10
4.1	General.....	10
4.2	Size designation and fit.....	11
4.2.1	General.....	11
4.2.2	Protective clothing.....	11
4.2.3	Additional protective garments.....	11
4.3	Pockets and closures.....	11
4.4	Hardware.....	11
4.5	Additional design requirements for molten splash protective garments.....	12
5	Sampling and pre-treatment	12
5.1	Sampling.....	12
5.2	Pre-treatment.....	12
5.2.1	Pre-treatment by cleaning.....	12
5.2.2	Mechanical pre-treatment.....	13
5.3	Ageing.....	13
5.4	Conditioning.....	13
6	General performance requirements	13
6.1	General.....	13
6.2	Heat resistance.....	13
6.2.1	Heat resistance at a temperature of (180 ± 5) °C.....	13
6.2.2	Optional requirement — Heat resistance at a temperature of (260 ± 5) °C.....	14
6.3	Limited flame spread.....	14
6.3.1	General.....	14
6.3.2	Testing in accordance with ISO 15025, Procedure A (code letter A1).....	14
6.3.3	Testing in accordance with ISO 15025, Procedure B (code letter A2).....	15
6.4	Dimensional change of textile materials.....	16
6.5	Physical requirements.....	16
6.5.1	Tensile strength.....	16
6.5.2	Tear strength.....	16
6.5.3	Burst strength for knitted materials and seams.....	16
6.5.4	Seam strength.....	16
6.6	Fat content of leather.....	16
7	Heat transmission performance requirements	17
7.1	General.....	17
7.2	Convective heat (code letter B).....	17
7.3	Radiant heat (code letter C).....	17
7.4	Molten aluminium splash (code letter D).....	17
7.5	Molten iron splash (code letter E).....	18
7.6	Contact heat (code letter F).....	18

8	Summary of flame and heat transmission tests and corresponding letter codes (see Table 8)	19
9	Optional test — Whole garment test against fire exposure on thermal manikin	19
10	Marking	19
11	Information supplied by the manufacturer	20
	Annex A (normative) Mechanical pre-treatment for metallized materials	21
	Annex B (normative) Determination of property values for rating and classification	23
	Annex C (informative) Guidelines for clothing design	24
	Annex D (informative) Risk assessment	25
	Annex E (normative) Uncertainty of measurement	26
	Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 89/686/EEC	27
	Bibliography	28