

DIN EN ISO 20347:2022-06 (E)

Personal protective equipment - Occupational footwear (ISO 20347 :2021)

Contents		Page
European foreword		4
Annex ZA (informative) Relationship between this European Standard and the essential requirements of PPE Regulation (EU) 2016/425 aimed to be covered		5
Foreword		7
1	Scope	9
2	Normative references	9
3	Terms and definitions	9
4	Classification and designs	15
5	Basic requirements for occupational footwear	16
5.1	General	16
5.2	Design	18
5.2.1	General	18
5.2.2	Height of upper	18
5.2.3	Heel area	18
5.3	Whole footwear	19
5.3.1	Constructional performance	19
5.3.2	Leak proofness	19
5.3.3	Specific ergonomic features	19
5.3.4	Slip resistance	20
5.3.5	Innocuousness	20
5.3.6	Seam strength	20
5.4	Upper	20
5.4.1	General	20
5.4.2	Thickness	22
5.4.3	Tear strength	22
5.4.4	Tensile properties	22
5.4.5	Flexing resistance	22
5.4.6	Water vapour permeability and coefficient	22
5.4.7	Resistance to hydrolysis	23
5.5	Lining	23
5.5.1	General	23
5.5.2	Tear strength	23
5.5.3	Abrasion resistance	23
5.5.4	Water vapour permeability and coefficient	23
5.6	Tongue	24
5.6.1	General	24
5.6.2	Tear strength	24
5.7	Insole, insock and footbed	24
5.7.1	Thickness	24
5.7.2	Water permeability	24
5.7.3	Water absorption and desorption	24
5.7.4	Abrasion resistance	24
5.8	Outsole	25
5.8.1	General	25

5.8.2	Design	25
5.8.3	Tear strength	25
5.8.4	Abrasion resistance	26
5.8.5	Flexing resistance	26
5.8.6	Resistance to hydrolysis	26
5.8.7	Interlayer bond strength	26
6	Additional requirements for occupational footwear	26
6.1	General	26
6.2	Whole footwear	27
6.2.1	Perforation resistance	27
6.2.2	Electrical properties	29
6.2.3	Resistance to inimical environments	29
6.2.4	Energy absorption of seat region	29
6.2.5	Water resistance	29
6.2.6	Ankle protection	30
6.2.7	Cut resistance	30
6.2.8	Scuff cap abrasion	30
6.2.9	Slip resistance	30
6.3	Upper -- Water penetration and absorption	31
6.4	Outsole	31
6.4.1	Resistance to hot contact	31
6.4.2	Resistance to fuel oil	31
6.4.3	Ladder grip	31
7	Marking	32
8	Manufacturer's instructions and information	33
8.1	General	33
8.2	Electrical properties	34
8.2.1	Partially conductive footwear	34
8.2.2	Antistatic footwear	34
8.3	Insocks	35
8.4	Perforation resistance	35
8.5	Date of obsolescence	35
Annex A	(normative) Customized occupational footwear (occupational footwear adapted to fit an individual user or a single unit to fit an individual user)	37
Annex B	(informative) Assessment of the footwear by the wearer	41
Annex C	(informative) Slip resistance	43
Bibliography	46