ISO 22702:2026-10 (E)

Utility lighters - Safety specifications

Contents

Page

Foreword vi

Introduction vii

1 Scope 1

2 Normative references 1

3 Terms and definitions 1

4 Functional requirements 4
4.1 Flame generation 4
4.2 Flame heights 4
4.2.1 General 4
4.2.2 Non-adjustable postmixing burner utility lighters 4
4.2.3 Non-adjustable premixing burner utility lighters 5
4.2.4 Adjustable postmixing burner utility lighters 5
4.2.5 Adjustable premixing burner utility lighters 5
4.2.6 Adjustable postmixing burner utility lighters (flame height on first ignition) 5
4.2.7 Adjustable premixing burner utility lighters (flame height on first ignition) 5
4.2.8 Adjustable postmixing burner utility lighters (flame height at lowest setting) 5
4.2.9 Adjustable premixing burner utility lighters (flame height at lowest setting) 5
4.2.10 Dual flame type utility lighters 5
4.2.11 Multiple flame type utility lighters 5
4.3 Flame-height adjustment 6
4.4 Resistance to spitting or sputtering and flaring 6
4.5 Flame extinction 7
4.5.1 Adjustable postmixing burner utility lighters 7
4.5.2 Adjustable and non-adjustable postmixing burner utility lighters 7
4.5.3 Adjustable and non-adjustable premixing burner utility lighters 7
4.5.4 Dual flame type utility lighters 7
4.5.5 Multiple flame type utility lighters 7
4.6 Volumetric displacement of fuel 7
4.7 Mass of fuel 7

5 Structural-integrity requirements 7
5.1 General 7
5.2 Resistance to dropping 8
5.3 Resistance to elevated temperature 8
5.4 Burning behaviour 8
5.5 Resistance to continuous burning 9
5.6 Resistance to cyclic burning 9
5.7 External finish 9
5.8 Compatibility with fuel 9
5.9 Resistance to internal pressure 9

6 Refilling of utility lighters 9

7 Instructions and warnings 10
7.1 General 10
7.2 Location 10
7.3 Textual safety information 10

7.4 Signs 11
7.4.1 General 11
7.4.2 Safety signs 11
7.4.3 QR code or data matrix code or website address 12
7.5 Refilling instructions 13

8 Test methods 13
8.1 Test specimens and test sequencing 13
8.1.1 Test specimens 13

8.1.2 Test sequencing 13
8.2 Flame height measurement 13
8.2.1 General 13
8.2.2 Apparatus 13
8.2.3 Test specimens 13
8.2.4 Procedure 13
8.3 Spitting, sputtering and flaring tests 14
8.3.1 General 14
8.3.2 Apparatus 14
8.3.3 Test specimens 14
8.3.4 Procedure 15
8.4 Flame extinction test 15
8.4.1 General 15
8.4.2 Test specimens 15
8.4.3 Apparatus 15
8.4.4 Procedure 16
8.5 Drop test 16
8.5.1 General 16
8.5.2 Significance 16
8.5.3 Apparatus 16
8.5.4 Test specimens 16
8.5.5 Procedure 17
8.6 Elevated temperature test 17
8.6.1 General 17
8.6.2 Significance 17
8.6.3 Apparatus 17
8.6.4 Test specimens 17
8.6.5 Procedure 18
8.7 Continuous-burning-time test 18
8.7.1 General 18
8.7.2 Test specimens 18
8.7.3 Apparatus 18
8.7.4 Procedure 19
8.8 Cyclic burning time test 19
8.8.1 General 19
8.8.2 Significance 19
8.8.3 Test specimens 19
8.8.4 Procedure 19
8.9 Fuel compatibility test 20
8.9.1 General 20
8.9.2 Test specimens 20
8.9.3 Apparatus 20
8.9.4 Procedure 20
8.10 Internal-pressure test 21
8.10.1 General 21
8.10.2 Significance 21
8.10.3 Apparatus 21
8.10.4 Test specimens 21
8.10.5 Procedure 21
8.11 Refilling test 22
8.11.1 General 22
8.11.2 Apparatus 22

8.11.3 Procedure 22
8.12 Volumetric fuel-displacement test 23
8.12.1 General 23
8.12.2 Apparatus 23
8.12.3 Test specimens 24
8.12.4 Procedure 24

9 Product marking 25

Annex A (normative) Test sequencing 26

Bibliography 28