

DIN EN ISO 3679:2023-03 (E)

Determination of flash point - Method for flash no-flash and flash point by small scale closed cup tester (ISO 3679:2022)

Contents		Page
European foreword		3
Foreword		4
Introduction		5
1 Scope		6
2 Normative references		6
3 Terms and definitions		6
4 Principle		7
4.1 Rapid equilibrium procedures A and B.....		7
4.2 Non-equilibrium procedure C.....		8
5 Reagents and materials		8
6 Apparatus		8
7 Preparation of apparatus		9
7.1 General.....		9
7.2 Location of apparatus.....		9
7.3 Cleaning of the test cup assembly and accessories.....		9
7.4 Apparatus verification.....		9
8 Sampling		10
9 Sample handling		10
9.1 Petroleum products and fatty acid methyl esters.....		10
9.1.1 Subsampling.....		10
9.1.2 Samples liquid at ambient temperature.....		10
9.1.3 Samples solid or semi-solid at ambient temperature.....		11
9.1.4 Samples containing dissolved or free water that is not part of the product.....		11
9.2 Paints, varnishes, and related materials.....		11
10 Procedures		11
10.1 General.....		11
10.2 Procedure A — Flash no-flash test.....		11
10.3 Procedure B — Flash point determination.....		12
10.4 Procedure C — Flash point determination.....		14
11 Calculation		14
11.1 Conversion of barometric pressure reading.....		14
11.2 Correction of the detected flash point.....		14
12 Expression of results		15
13 Precision		15
13.1 General.....		15
13.2 Repeatability, <i>r</i>		15
13.3 Reproducibility, <i>R</i>		15
13.4 Relative bias between the procedures C and B.....		16
14 Test report		16
Annex A (normative) Flash point apparatus		17
Annex B (normative) Verification of apparatus		22
Annex C (informative) The use of a cup insert		26
Annex D (normative) Sub-ambient procedures A and B for manual apparatus		27
Annex E (normative) Temperature measuring device specifications		28
Annex F (informative) Flash point values of chemicals		29
Bibliography		30