

ISO 13736:2021 (E)

Determination of flash point — Abel closed-cup method

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Principle
5	Chemicals and materials
6	Apparatus
7	Apparatus preparation
7.1	Location of the apparatus
7.2	Cleaning the test cup
7.3	Apparatus examination
7.4	Heating and cooling
7.4.1	Liquid baths
7.4.2	Solid metal baths
7.4.3	Test cup and cover
7.5	Apparatus verification
8	Sampling
9	Sampling handling
9.1	General
9.2	Subsampling
9.3	Samples containing undissolved water
9.4	Sample mixing
10	Procedure
11	Calculation
12	Expression of results
13	Precision
13.1	General
13.2	Repeatability, r
13.3	Reproducibility, R
14	Test report
Annex A	(normative) Abel flash point apparatus
A.1	Manual apparatus
A.1.1	General
A.1.2	Test cup
A.1.3	Test cup cover assembly
A.1.4	Stirrer
A.1.5	Heating vessel

- A.1.6 Heating device
- A.2 Automated apparatus
- A.2.1 General
- A.2.2 Test cup
- A.2.3 Test cup cover assembly
- A.2.4 Stirrer
- A.2.5 Heating vessel
- A.2.6 Heating device
- A.2.7 Flash detector

Annex B (normative) Positioning and fixing of test cup and heating vessel thermometers into thermometer collar

- B.1 Thermometer
- B.2 Position

Annex C (normative) Temperature measuring device specifications

- C.1 Digital contact thermometer
- C.2 Liquid in-glass thermometers

Annex D (normative) Apparatus verification

- D.1 General
- D.2 Reference material
- D.3 Procedure
- D.4 Evaluation of test result
- D.4.1 General
- D.4.2 Single test
- D.4.3 Multiple tests
- D.4.4 Test conformance
- D.4.5 Test non-conformance

Annex E (informative) Flash point values of chemicals

Page count: 24