ISO/TR 29662:2020 (E)

Petroleum products and other liquids — Guidance for flash point and combustibility testing

Contents

Foreword

Introduction

1 Scope

2 Normative references

3 Terms and definitions

4 Outline of generic definitions and general statements in test methods

5 Brief history

6 Flash and fire point, and sustained combustion and burning

7 Why are flash point and combustibility tests required

8 Which test method should be used

8.1 First considerations
8.2 Open or closed cup
8.3 Non-equilibrium, equilibrium and rapid equilibrium tests
8.3.1 General
8.3.2 Non-equilibrium tests
8.3.3 Equilibrium tests
8.3.4 Rapid equilibrium tests
8.4 Flash point automation
8.4.1 Manual flash point test
8.4.2 Automated flash point testers
8.5 Correlation between methods
8.6 Precision
8.7 Valid temperature ranges

9 Testing environment

10 Safety

11 Calibration and verification

11.1 General
11.2 Calibration
11.3 Verification

12 Test samples

12.1 Sample handling
12.2 Samples containing volatile flammable components
12.3 Viscous and semi-solid samples
12.4 Biodiesel (B100 FAME- Fatty Acid Methyl Ester)
12.5 Mixtures of materials
12.6 Samples that form a skin during testing

13 Instrumentation

13.1 Ignition sources
13.2 Flash detection

13.3 Stirring
13.4 Temperature measurement
13.5 Care of the instrument
13.6 Sub ambient testing

14 Flash point testing effects

15 Test results

15.1 Barometric pressure correction
15.2 Expression and reporting of results

Annex A (informative) Major test methods used in specifications and regulations

Page count: 15