

## Aplicación

The most advanced instrumentation for flash point verification. Simple to operate, the Rapid Tester® is ideal for routine flash point testing including

- **Quality Assurance** Verify the formulation of liquid products with flammable ingredients.
- **Compliance Testing** Often required by regulatory agencies before transport or disposal of liquids.

**Fuel Dilution** Determine the relative percentage of fuel in engine crank case oil to forecast the need for engine rebuilding.



	Testing Temperature Range	Cup Type	Sample Size
RT-01	-22 to 572 °F -30 to 300 °C	Closed	2 mL below 212°F (100°C) 4 mL above 212°F (100°C)
RT-02	Ambient to 212 °F Ambient to 100 °C	Open	2 mL

## Standards

The Rapid Tester® is a semiautomatic instrument for determining the flash point temperature/combustibility of flammable liquids. Closed cup test temperatures from ambient to 572°F (300°C) are automatically controlled by the set-a-temp adjustable digitally preset target temperature circuitry. Integral digital LCD display, NIST traceable thermometer, disposable fuel tank and electronic timer are standard.

In accordance with:

- ASTM D 3278 -: "Flash Point of Liquids by Small Scale Closed Cup Apparatus"
- ASTM D 3828 -: "Flash Point by Small Scale Closed Tester"
- ASTM D 4206 -: "Sustained Burning of Liquid Mixtures by Set a flash Tester (Open Cup)"
- BS 3900 Part A11 -: "Small Scale Test for Combustibility"
- BS 3900 Part A13 -: "Rapid Test for Flash Point - Danger Classification"
- BS 3900 Part A14 -: "Rapid Tests for Flash Point - Paints and Varnishes"
- CPSC CFR 16-1500.43a -: "Federal Hazardous Substances Act Regulations"
- DOT CFR 49-173.115 -: "Flammable, Combustible, and Pyrophoric liquids, definitions"
- IATA Resolution 618 Attachment A Section -: 3.3.4 and 3.3.5
- IP 303 -: Flash Point by Closed Rapid Tester"
- ISO 3679 -: "Paints, Varnishes, Petroleum and Related Products - Determination of Flash Point - Rapid Equilibrium Method"
- ISO 3680 -: "Paints, Varnishes, Petroleum and Related Products - Flash/No Flash Test - Rapid Equilibrium Method"
- OSHA 29CFR 1910-106 -: "Program Directive 100"
- OSHA 29CFR 1910-1200 -: "Hazard Communication"

## General features

### Digital Accuracy

Achieve the high level of digital performance offered only by the Rapid Tester®. The high contrast LCD display has 1/2" characters for ease of reading and is switch selectable between degrees Fahrenheit and Centigrade. A thermometer traceable to the National Institute of Standards & Technology is also included.

Unique set-a-temp circuitry permits simple adjustment and precise automatic regulation of test temperatures. Depress the Preset switch while turning the Temperature Control knob until the target temperature is displayed. Release the switch and set-a-temp takes over. Test cup temperature is automatically shown on the digital LCD display.

### Fast Test-Small Sample

Test time is only one minute with a 2 ml sample for flash points below 212°F (100°C). You can run ten tests with the Rapid Tester® in the time that it takes to perform just one by other methods - an impressive accomplishment. The 2 ml/4 ml sample is a fraction of the large sample required by other flash point methods. This reduces sampling and disposal problems while improving safety.

### Compare Result

Independent laboratory testing has demonstrated that the ASTM D 3828 test method utilized by the Rapid Tester® correlates well with other flash point methods. In ASTM D-2 Round Robin testing it was found that the ASTM D 3828 test method has the following correlation coefficients:

D 3828 (Rapid Tester®) vs. D 56 (Tag) = 0.9949

D 3828 (Rapid Tester®) vs. D 93 (Pensky-Martens) = 0.9943

D 56 vs. D 93 = 0.9926

With better than 99% comparability you can use the Rapid Tester® with confidence.

## General features

Testing Temperature Range	-22 to 572 °F -30 to 300 °C
Repeatability at 70°C	0.5 °
Repeatability at 150°C	2 °
Reproducibility at 70°F	2 °
Reproducibility at 150°C	7.5 °
Test Time	1 min above 212°F (100°C) 1 min below 212°F (100°C)
Cup Type	Closed
Cup Material	Aluminum 316 Stainless Steel
Dimensions	15 x 3.4 x 6.3 in 38.1 x 8.64 x 16.25 cm
Display	LCD Digital and NIST traceable mercury-in-glass thermometer
Voltage	115/230 V
Frequency	50/60 Hz
Sample Size	2 mL below 212°F (100°C) 4 mL above 212°F (100°C)
Net Weight	10 lbs 4.6 kg