Cleveland Open Cup Flash and Fire Point Tester

LT-AS0105 | Open cup flash and fire temperature determination

Controlled heating • Gas test flame • Brass Cleveland cup



Cleveland

OPEN CUP TEST METHOD

11 kg

INSTRUMENT WEIGHT

ASTM D92 • EN 22592

Photographs and Test Components

Thermometer, heating control, brass cup and test flame assembly

The LT-AS0105 determines flash and fire points of suitable petroleum products by the Cleveland open cup method. The specimen is heated steadily while the operator applies the test flame and observes behaviour and corresponding temperatures.

THERMOMETER

The LT-AS0105/1 thermometer allows specimen temperature to be monitored throughout testing.

BRASS OPEN CUP

The LT-AS0105/2 Cleveland cup holds the specimen under open cup test conditions.

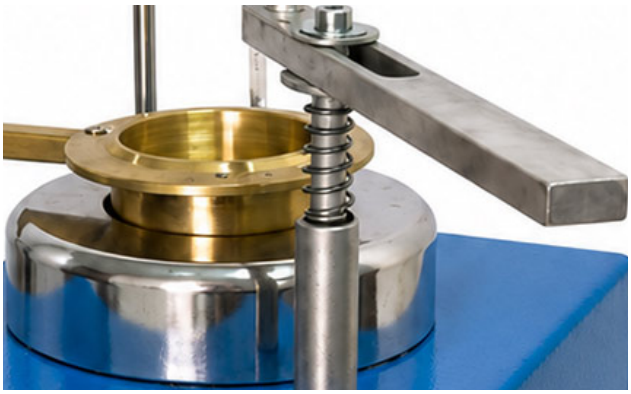


HEATING CONTROL

Analog control supports gradual specimen heating according to the method.

TEST FLAME ASSEMBLY

The gas or LPG unit allows the test flame to be passed across the specimen surface.



Brass Cleveland cup, thermometer and flame assembly



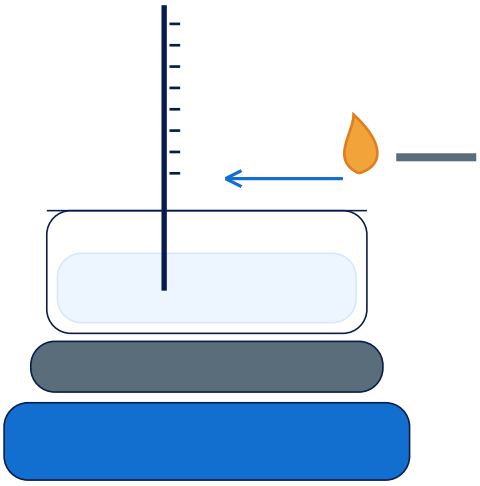
Analog heating control and front panel

LT-AS0105

Observing Flash and Fire Events

Prepare specimen • Heat steadily • Apply flame • Record temperatures

OPEN CUP + HEATING + THERMOMETER + FLAME



FLASH: MOMENTARY VAPOUR IGNITION

FIRE: CONTINUED COMBUSTION

MEASUREMENT: SPECIMEN TEMPERATURE AT EVENT

Record flash and fire temperatures separately

REPRESENTATIVE CLEVELAND OPEN CUP DIAGRAM • NOT TO SCALE

Prepare Specimen and Cup

Clean the brass cup and fill as specified. Position the thermometer correctly.

Heat and Apply the Test Flame

Increase temperature steadily. Apply the test flame at method-defined intervals.

Observe and Record

Record the flash temperature. Continue as specified when fire point determination is required.

Heating produces vapour above the specimen surface. The temperature at which momentary ignition occurs upon application of the test flame is evaluated as the flash point. Fire point determination follows the defined condition for continued combustion. Record both results using the selected method's observation and reporting rules.

Specimen and Heating Conditions

Prepare the specimen and fill level according to ASTM D92 or the applicable method. Maintain correct thermometer position and use the specified heating rate and flame application procedure.

Evaluate Cleveland open cup measurements with the method selected for the material. Keep specimen preparation and observation conditions consistent in comparative work.

Two Separate Temperature Records

Flash point describes momentary ignition of vapour above the specimen when exposed to the test flame. Fire point is the temperature at the method-defined condition for continued combustion.

Record specimen identification, method and both observations separately. Allow cup and assembly to cool after testing; clean the specimen cup before the next determination.

Technical Specifications and Component Codes

LT-AS0105 | Cleveland open cup system, thermometer and brass cup

Technical Specification	Value / Description
Product Code	LT-AS0105
Test Method	Cleveland open cup • Flash and fire points
Heating / Control	Electric heater • Analog control
Test Flame	Gas or LPG-operated unit
External Dimensions	25 × 30 × 25 cm
Weight / Power Supply	11 kg • 220 V • 50-60 Hz • 1 phase
Relevant Methods	ASTM D92 • EN 22592

Component Code	Description
LT-AS0105/1	Specimen temperature monitoring thermometer
LT-AS0105/2	Brass Cleveland open cup

Observe Events and Read Temperature Together

Check heating conditions, flame application and thermometer position according to the method. Record flash and fire observations separately with their corresponding temperatures.

Cleveland Open Cup Test Workflow

01
Prepare
Clean cup; position specimen and thermometer.

02
Heat
Increase temperature steadily as specified.

03
Apply Flame
Apply the test flame at specified intervals.

04
Record
Record flash and fire temperatures.

Product Page | liyatest.com.tr/en/urun/cleveland-open-cup-flash-and-fire-point-tester/