

Flash-Point with Open Cup - TAG Method (semi-automatic) ASTM D 1310

ASTM D 1310, ASTM D 3143, AASHTO T79 (obs.)

Product group(s): Bitumen, Flash Point

User group(s): Bitumen, Engine Oil, Mastics, Paint, Regulatory Authorities, Varnish

Scope: For Flash- and Fire-Point measurements of liquids having flash-points between -18 and 165°C (0 and 325°F) and fire-points up to 165°C according to ASTM D 1310 and of cutback asphalt having flash-points below +93°C according to ASTM D 3143.

Flash-point and fire-point of a liquid are used to define their flammability hazards.

Summary of Method

The specimen is placed in the cup of a Tag Open-Cup Apparatus and heated at a slow, but constant rate. A small test flame is passed at a uniform rate across the cup at specified intervals until a flash occurs.

The **flash point** is the lowest temperature at which the vapor at the liquid surface will flash.

For the **fire point**, the test is continued until the test flame causes the specimen to ignite and burn for at least 5 s.



Flash-Point TAG Test Equipment

to be composed of:

- Flash-Point Tester, TAG Method
- Pre-Regulating Valve

Technical Data

<u>Temperature range:</u>	... to +93 °C (... to +199 °F)
<u>Ignition:</u>	gas
<u>Dimensions:</u>	31 x 29 x 33 cm (W x D x H)
<u>Weight:</u>	6 kg

Main Unit

12-1540 **Semi-Automatic Flash-Point Tester, TAG Method**
ASTM D 1310 - ASTM D 3143 (AASHTO T79)

Consisting of:
stainless steel housing, electric heater, electrically driven sweep arm for the test flame application

Supplied with:
1 open glass cup

Note: pre-regulating valve for gas or LPG-gas tank and thermometer are required.

Power supply: 220-240 V, 50/60 Hz, 500 W

Options & Accessories

12-0629 Pre-Regulating Valve
for gas supply with hose adapter, suitable for all types of burning gases

12-1250 Gas Tank (portable and refillable)
Consisting of:
built-in on/off switch, igniter and stand



Supplied with: 1 m gas tubing

Note:

To be filled by using any standard gas lighter refill cartridge. We highly recommend to buy the LPG - refill container locally, because it would require special shipment as hazardous goods.

50-9114 Reference Liquid - Flash-Point - TAG
ASTM D 56
Certified Value: +55 °C
Content: 255 ml
Note: Requires special shipment as hazardous goods.

Spare Parts

12-0683 Thermometer ASTM 9C / IP 15C
Range: -5 to +110 : 0.5 °C
Length: 290 mm, Immersion: 57 mm, Ø 6.5 mm

12-0689 Thermometer ASTM 9C / IP 15C
Range: -5 to +110 : 0.5 °C (officially certified)

13-0161 Thermometer ASTM 33C / IP 20C
Range: -38 to +42 : 0.2 °C
Length: 420 mm, Immersion: 50 mm, Ø 7 mm

13-0162 Thermometer ASTM 33C / IP 20C
Range: -38 to +42 : 0.2 °C (officially certified)

12-1542 Cup, made of glass

12-0108 Silicone Tubing, 4 m

Order Guideline

Minimum equipment: 1x 12-1540, 1x 12-0629
Spares (approx. 1 year): 2x 12-1542, 1x 12-0108
Additional requirements: Gas supply