

Flash-Point with Closed/Open Cup - Rapid Tester "Series 3" (automatic flash detection)

ASTM D 3278-A, ASTM D 3278-B, ASTM D 3828-A, ASTM D 3828-B, ASTM D 4206, ASTM D 7236, ASTM E 502, ISO 3679, ISO 3680, ISO 9038, DIN 55680 (obs.), EN 456 (obs.), IP 303-1 (obs.), IP 303-2 (obs.), IP 523, IP 524, JIS K2265-2, NF T30-068 (obs.), NF T60-616 (obs.), NF T60-617 (obs.), BS 3900-A11, BS 6664-3 (obs.), BS 6664-4 (obs.), CFR 49-173.120, UN Class 3 L.3, UN Class 3 N

Product group(s): Flash Point

User group(s): Aerosols, Airports & Aviation, Asphalt, Automotive, Batteries, Beverages, Biofuel, Chemicals, Coating, Cosmetics, Diesel, Dyes, Electrical Cables, Engineering, Engine Oil, Fats, Fuel, Gasoline, Jet Fuel, Jet Lube, Lube Oil, Marine, Motor Vehicles, Paint, Petroleum, Pharmaceuticals, Plastics, Polishes, Polymers, Power Generation, Regulatory Authorities, Road Research, Rubber, Solvent, Turbine Oil, Varnish, Wax

Scope: Used to define and classify "flammable" & "combustible" substances.

Closed Cup Model:

For flash-point temperature determination of a sample in an closed small-scale cup, or detecting whether a product will or will not flash at a specified temperature (flash / no flash).

Open Cup Model:

Methods for sustained burning of liquid mixtures using the small scale open-cup apparatus.

Rapid Tester "Series 3"

A range of unparalleled features ensures ease of operation and requires a minimum of operator skill.

Test parameters are set via the keypad and a digital display provides temperature, sample size, test time, and flash detection status. Default "auto" values are available for standard test conditions.

- simple calibration
- automatic flash-point detection
- determination of flash-point in less than 2 minutes
- small sample size (2 or 4 ml)

An extended operating temperature range allows tests from 0 to +300 °C. Flash-point is automatically detected using a thermally activated detector, reducing the risk of operator error and minimizing the potential danger of inhaling fumes during a test.

A rechargeable gas tank with on/off switch and fine adjustment are integral to the unit.



Flash-Point Rapid Test Equipment

to be composed of:

- Rapid Flash-Point Tester "Series 3"
(closed, non-corrosive or open cup)

Technical Data

<u>Temperature Range:</u>	<u>12-1240/1:</u> ambient to +300 °C (ambient to +572 °F) (sub ambient using opt. accessory 12-0076) <u>12-1260:</u> +10 to +110°C (+50 to +230°F)
<u>Cooling:</u>	<u>12-1240/1:</u> optional <u>12-1260:</u> electronic peltier cooling
<u>Ignition:</u>	gas
<u>Sample Size:</u>	2 ml (flash-points up to +100 °C) 4 ml (flash-points above +100 °C)
<u>Test Time:</u>	1 to 99 min.
<u>Cup:</u>	<u>12-1240/1:</u> made of aluminum <u>12-1260:</u> made of stainless steel
<u>Dimensions:</u>	Width 28 cm, Depth 25 cm, Height 25 cm
<u>Weight:</u>	4 kg

Main Unit

12-1240	<p>Rapid Flash-Point Tester - Series 3 (closed cup)</p> <p><u>Flash-Point Method:</u> IP 523 (IP 303-1) - ASTM D 3828-B - ISO 3679 (BS 6664-4, EN 456, NF T60-616) - JIS K2265-2 ASTM D 3278-B - UN Class 3 N - ASTM E 502</p> <p><u>Flash / no Flash Method:</u> IP 524 (IP 303-2) - ASTM D 3828-A - ISO 3680 (BS 6664-3, DIN 55 680, NF T60-617) ASTM D 3278-A</p> <p><u>Consisting of:</u> housing with touch-key panel and LC-display, integrated aluminum cup, cover with shutter assembly, built-in gas igniter at the cover, timer, digital temperature pre-selection in °Celsius/Fahrenheit, automatic flash-point detection</p> <p><u>Supplied with:</u> 1 syringe 2 ml 1 rechargeable gas tank with igniter</p> <p>Temperature Range: ambient to +300 °C (Note: sub ambient requires accessory 12-0076)</p> <p>Power supply: 115/220 V, 50/60 Hz (switchable)</p>
12-1260	<p>Rapid Flash-Point Tester - Series 3 (non-corrosive cup + active cool)</p> <p><u>Flash-Point Method:</u> IP 523 (IP 303-1) - ASTM D 3828-B - ISO 3679 (BS 6664-4, EN 456, NF T60-616) - JIS K2265 ASTM D 3278-B - UN Class 3 N - ASTM E 502</p> <p><u>Flash / no Flash Method:</u> IP 524 (IP 303-2) - ASTM D 3828-A - ISO 3680 (BS 6664-3, DIN 55 680, NF T60-617) ASTM D 3278-A</p> <p><u>Ramp Method:</u> ASTM D 7236</p> <p><u>Consisting of:</u> Like 12-1240, but fitted with special stainless steel cup, suitable for testing corrosive samples and electronic Peltier cooling with rapid cool down.</p> <p>Temperature Range: +10 to +110 °C (Note: sub ambient requires accessory 12-0076)</p> <p>Power supply: 115/220 V, 50/60 Hz (switchable)</p>
12-1241	<p>Rapid Flash-Point Tester - Series 3 (open cup)</p> <p><u>Fire-Point Method:</u> ASTM D 4206 - ISO 9038 (NF T30-068) - BS 3900-A11 UN Class 3 L.3 - CFR 49-173.120</p> <p><u>Consisting of:</u> like 12-1240, but with an <u>open cup</u> for flash / no flash, finite determinations or sustained combustion tests.</p> <p>A manually operated flame-sweeping arm is fitted to the cup and gas is supplied from the integral tank via the control valve. The flash or sustained combustion characteristics of the sample are observed visually by passing the test flame over the sample.</p> <p>Temperature Range: ambient to +300 °C (Note: sub ambient requires accessory 12-0076)</p> <p>Power supply: 115/220 V, 50/60 Hz (switchable)</p>

Options & Accessories

12-0076	<p>Coolant Module (for 12-1208 / -1240 / -1241) for pre-cool the cooling block when measuring sub-ambient (charged with dry ice)</p>
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12-0086	Cooling Block aluminum, to cool-down the sample cup after testing without cooling-water
12-1243	Adapter for power supply allows instrument to be operated from 12 V supply
12-1244	Carry Case <u>Consisting of:</u> foam cutouts to house instrument, gas tank, power supply and syringe Dimensions (HxWxD): 21 x 40 x 30 cm
12-1248	Sample Removal Kit with pump and trap to extract and collect used sample from cup after test.
12-1252	Reference Liquid (Kerosene) certified 50 ml, nominal value +66 °C

Spare Parts

12-1245	Thermometer Range: 0 to +110 °C (officially certified)
12-1247	Thermometer Range: +100 to +300 °C (officially certified)
12-0081	Syringe, 2 ml
12-1246	Syringe, 4 ml for high temperature tests above +100 °C, which needs a larger size
12-1250	Gas Tank (portable and refillable) <u>Consisting of:</u> 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.

Order Guideline

Minimum equipment: 1x 12-1240 or 1x 12-1260 or 1x 12-1241
 Spares (approx. 1 year): Thermometer, 12-1246, 12-1252
 Additional requirements: Liquefied Petroleum Gas Supply