

SMALL SCALE FLASH POINT

Small scale flash point testers are universally specified in many international regulations to define and classify 'flammable' and 'combustible' substances. They provide the most precise and fastest means of carrying out flash point tests on a definitive 'flash/no flash' basis, both in the laboratory and the field. A 2ml sample size and 1 minute test time for low temperature tests make these instruments ideally suited for many applications. Petrochemicals, Biodiesel (FAME), adhesives, foods, flavours, cosmetics, paints/varnishes, waste, pharmaceuticals, polishes and aerosols are just some of the products routinely tested.

Fully meeting the requirements of Rapid Equilibrium methods ISO 3679/3680, Setaflash Testers are the only small scale instruments with flash detection. Setaflash is specified by ASTM D1655 and the UK DEFSTAN 91-91 for testing Aviation Turbine Fuels, Diesel (D975), Fuel Oil (D396), Gas Turbine Fuel (D2880) and Kerosine (D3699), and is the only instrument recommended for testing waterborne paints. In Europe it is specified in the specifications for FAME Heating and Automotive Fuels - EN 14214 and EN 14213.



Setaflash Series 3 Range



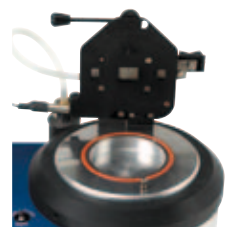
Portable



Simple to Use



Electrical Ignitor



Small Sample Size



Easy to Use Menu System



Setaflash Series 8

Ramp	Flash O/C
Cup temperature	46.8°C
Ramp range	51°C to 81°C
Test temperature	51°C
Sample ID :	DEMO 11MAY
Operator ID :	STEVE
Test no. :	000228 Ignitor W/re
Adjust	Menu

Large Colour Display

SETAFLASH SMALL SCALE FLASH POINT

82100-0 SETAFLASH SERIES 8 'ACTIVECOOL' CLOSED CUP TESTER

ASTM D3278; D3828; D7236; E502; IP 523; IP 524; IP 534; ISO 3679; ISO 3680; BS 3900 Part 13; BS 6664 Parts 3 & 4; UN Class 3 Non-viscous Flammable Liquids; CHIPS Regulations; EPA 1020 A & B

- -20 to 130°C (-4 to 266°F) temperature range
- Small sample size, 2 or 4ml
- Flash/No Flash & Ramp modes
- Electric ignitor (with gas option)
- Automatic dipping and flash detection
- ActiveCool electronic Peltier cooling
- 64 Test memory & RS232 interface
- °C or °F temperature display



The Series 8 'ActiveCool' is an automated closed cup flash point tester with a temperature range of 10 to 130°C (50 to 266°F) with no external cooling required. When connected to a suitable water supply, the range is extended down to -20°C (-4°F).

There are two modes of operation; Flash/No Flash and Ramp. The ramp mode increases the sample temperature at a rate of 2°C/min and automatically dips the ignitor every 1°C up to 100°C (every 2°C above 100°C), until either a flash is detected or the end of test temperature is reached.

The automatic flash detection system is tuned to ignore halo and other false flash effects, enhancing precision and accuracy. Barometric pressure is measured by an internal barometer, and the correction is automatically applied to the test result.

Peltier cell technology is used for heating and cooling, ensuring precise temperature control and rapid cooldown after a test is completed. The ignitor uses a new electrical hot wire (a gas flame option is available).

The bright colour LCD display shows test parameters and the test result. The text and colour of the top line indicates instrument status. All functions are accessed via menus, navigated by the keypad. Up to 64 test results can be stored in memory, each tagged with a sample reference and operator name. Results can be downloaded to a PC or printer via the RS232C port (USB or LAN ports options available). The firmware is upgradeable for future developments.

SUPPLIED WITH: Ignitor, 2ml syringe, mains lead and instruction manual.

82100-0



BIO-FUEL TESTING



CALIBRATION & VERIFICATION MATERIALS



SETAPLUS EXTENDED WARRANTY AVAILABLE



TECHNICAL DATASHEETS AVAILABLE

Flash/no flash	Flash O/C
Cup temperature	46.8°C
Test temperature	50.8°C
Test duration	: 1 min
Sample ID	: DEMO 11MAY
Operator ID	: STEVE
Test no. : 000228	Ignitor Wire
Adjust	Menu

Ramp	Flash O/C
Cup temperature	46.8°C
Ramp range	51°C to 81°C
Test temperature	51°C
Sample ID	: DEMO 11MAY
Operator ID	: STEVE
Test no. : 000228	Ignitor Wire
Adjust	Menu

82150-0 SETAFLASH SERIES 8 'ACTIVECOOL' (CORROSION RESISTING)

- Corrosion resisting stainless steel cup insert variant of 82100-0

Similar to the 82100-0 with a corrosion resisting insert in the sample cup.

SUPPLIED WITH: Ignitor, 2ml syringe, mains lead and instruction manual.

ACCESSORIES - Setaflash Series 8

OPTIONAL	82100-0	82150-0	82000-0
13747-0 SETA SOLID SAMPLE DISPENSER (for details see page 15).	●	●	●
13770-311 SYRINGE, 4ml, for tests above 100°C.	●	●	●
26000-0 LIQUID RECOVERY SYSTEM, with pump and trap to remove hot sample from cup, (for details see page 15).	●	●	●
71001-0 SETA VENT, (for details see page 19).	●	●	●
99300-2 LOW TEMPERATURE CIRCULATOR, for low temperature tests in high ambient temperatures (see page 139).	●	●	●
45001-0 SETAPLUS EXTENDED 12 MONTH WARRANTY	●	●	●
CALIBRATION, VERIFICATION & TRAINING			
99878-3 SMALL SCALE CERTIFIED FLASH POINT MATERIAL, (for details see page 15).	●	●	●
99928-0 SETATHERM, digital thermometer, -20 to 150°C, (for details see page 129).	●	●	●

Note: For gas options please contact Seta

SETAFLASH SMALL SCALE FLASH POINT

82000-0 SETAFLASH SERIES 8 CLOSED CUP TESTER

ASTM D3278; D3828; D7236; E502; IP 523; IP 524; IP 534; ISO 3679; ISO 3680; BS 3900 Part 13; BS 6664 Parts 3 & 4; UN Class 3 Non-viscous Flammable Liquids; CHIPS Regulations; EPA 1020 A & B

- Ambient +5 to 300°C (ambient +9 to 572°F) temperature range
- Small sample size, 2 or 4ml
- Flash/No Flash & Ramp modes
- Electric ignitor (with gas option)
- Automatic dipping and flash detection
- 64 Test Memory & RS232 Interface
- °C or °F Temperature Display
- Integral Barometer & Auto Correction

The Series 8 is an automated closed cup flash point tester with a temperature range of ambient +5 to 300°C (ambient +9 to 572°F). The instrument uses an electric hot wire ignitor (gas flame option).

There are two modes of operation; Flash/No Flash and Ramp. The ramp mode increases the sample temperature at a rate of 2°C/min, allowing determination of a flash point in accordance with ASTM D7236 and IP 534. The dipping sequence occurs automatically every 1°C up to 100°C (every 2°C rise above 100°C), until either a flash is detected or the end of test temperature is reached. The ignitor uses a new electrical hotwire (a gas flame option is available).

The bright colour LCD display shows test parameters and the test result. The text and colour of top line of the display indicates the instrument status. All functions are accessed via menus, navigated by the keypad. Audible prompts are given when an action is required from the operator.

The automatic flash detection system is tuned to ignore halo and other false flash effects, reducing the chance of mis-interpretation of the test result, and enhancing repeatability. Barometric pressure is measured by an internal barometer, and the correction is automatically applied to the test result. At the end of a test, the sample cup is cooled by forced air to reduce the cycle time between tests.

Up to 64 results can be stored in memory, tagged with operator and sample references, and can be downloaded to a PC or printer via the RS232C port (USB or LAN ports available as options). The firmware is upgradeable for future developments.

SUPPLIED WITH: Ignitor, 2ml syringe, mains lead and instruction manual.



82000-0

- BIO-FUEL TESTING
- CALIBRATION & VERIFICATION MATERIALS
- SETAPLUS EXTENDED WARRANTY AVAILABLE
- TECHNICAL DATASHEETS AVAILABLE



SPECIFICATIONS			
Seta Part No:	82100-0	82150-0	82000-0
Temperature Range:	Air: 10 to 130°C (50 to 266°F) Water Assisted: -20 to 130°C (-4 to 266°F)	Air: 10 to 130°C (50 to 266°F) Water Assisted: -20 to 130°C (-4 to 266°F)	Ambient +5 to 300°C (Ambient +9 to 572°F)
Sample Size:	2 or 4ml according to method	2 or 4ml according to method	2 or 4ml according to method
Ignitor:	Electrical Hot Wire (optional Gas Flame)	Electrical Hot Wire (optional Gas Flame)	Electrical Hot Wire (optional Gas Flame)
Test Modes:	Rapid Equilibrium and Ramp	Rapid Equilibrium and Ramp	Rapid Equilibrium and Ramp
Test Duration Rapid Equilibrium Mode:	1 minute below 100°C, 2 minutes above 100°C, FAME 1 minute or user defined 1 to 99 minutes	1 minute below 100°C, 2 minutes above 100°C, FAME 1 minute or user defined 1 to 99 minutes	1 minute below 100°C, 2 minutes above 100°C, FAME 1 minute or user defined 1 to 99 minutes
Test Duration Ramp Mode:	Typically 7 minutes	Typically 7 minutes	Typically 7 minutes
Cool Down Time:	80 to 20°C (176 to 68°F) in 4 minutes	80 to 20°C (176 to 68°F) in 4 minutes	N/A
Sample Cup Material:	Aluminium	Corrosion resisting steel insert, aluminium cup	Aluminium
Heating/Cooling Method	Peltier Cell	Peltier Cell	Ceramic Pad, Forced Air (post-test cooldown)
Computer Interface:	RS232C (USB & LAN options)	RS232C (USB & LAN options)	RS232C (USB & LAN options)
Power:	300W (maximum)	300W (maximum)	300W (maximum)
Voltage:	100 to 250V, 50/60Hz (2x AA dry cell batteries required for internal clock)	100 to 250V, 50/60Hz (2x AA dry cell batteries required for internal clock)	100 to 250V, 50/60Hz (2x AA dry cell batteries required for internal clock)
Size (HxWxD):	30 x 34 x 38cm	30 x 34 x 38cm	30 x 34 x 38cm
Weight:	8kg	8kg	8kg

SETAFLASH SMALL SCALE FLASH POINT

33200-2 SETAFLASH SERIES 3 ACTIVE COOL

ASTM D3278; D3828 ; D7236; E502; IP 303 (obs); IP 523; IP 524; IP 534; ISO DIN 3679; ISO 3680; BS EN 456; BS 3900 Part A13; BS 6664 Part 3 & 4; UN Class 3 Non-viscous Flammable Liquids; CHIPS Regulations; EPA 1020 A & B; Classification of Dangerous Goods for Carriage: Viscous and Non Viscous Liquids;

- Flash/No Flash & Ramp modes
- 10 to 130°C temperature range
- Flash point test in less than 2 minutes
- Small sample size (2 or 4ml)
- Automatic flash detection
- Electronic peltier cooling
- Audible and on-screen prompts
- Portable operation
- °C or °F display



Active Cool is the latest instrument in the Setaflash Series 3 range. It has been designed to rapidly and efficiently carry out Flash/No Flash tests and to determine the flash point of liquids and semi-solids in the 10 to 130°C (50 to 266°F) temperature range.

When used in Ramp mode the temperature of the sample increases at a rate of 2°C/min. An audible prompt to carry out a flash test occurs every 1°C rise up to 100°C (every 2°C rise above 100°C), until a flash is detected, allowing rapid determination of a flash point in accordance with ASTM D7236 and IP 534.

The sample cup is heated/cooled by peltier cells. This gives very accurate and stable sub-ambient test temperatures and the benefit of rapid temperature normalisation between tests.

All functions are accessed via a two button keypad and the Seta Multifunctional And Rotational Test (SMART) control feature. The digital display shows test parameters, instrument status, and the test result. An audible prompt is sounded when an action is required from the operator.

Gas for the test jet/shutter assembly is supplied from an integral gas tank, which is filled using a standard butane (lighter) refill cartridge.

The automatic flash detection system is tuned to ignore halo and other false flash effects, reducing the chance of mis-interpretation of the test result, and enhancing repeatability. Barometric pressure is measured by an internal barometer, and the correction is automatically applied to the test result.

The instrument is lightweight and suitable for mobile use when operated from the optional DC power adaptor.

SUPPLIED WITH: 2ml syringe, mains lead and instruction manual.

FOR SPECIFICATIONS, ACCESSORIES & CONSUMABLES, SEE PAGE 14.



33200-2



BIO-FUEL TESTING



CALIBRATION & VERIFICATION MATERIALS



SETAPLUS EXTENDED WARRANTY AVAILABLE



TECHNICAL DATASHEETS AVAILABLE

33250-2 SETAFLASH SERIES 3 ACTIVE COOL (CORROSION RESISTING)

- Corrosion resisting version of Setaflash 33200-2

The 33250-2 is similar to the 33200-2 with the addition of a corrosion resisting insert in the sample cup.

SUPPLIED WITH: 2ml syringe, mains lead and instruction manual.

FOR SPECIFICATIONS, ACCESSORIES & CONSUMABLES, SEE PAGE 14.



CALIBRATION & VERIFICATION MATERIALS



SETAPLUS EXTENDED WARRANTY AVAILABLE



TECHNICAL DATASHEETS AVAILABLE

33000-0 SETAFLASH SERIES 3 PLUS CLOSED CUP TESTER

ASTM D3278; D3828 ; D7236; E502; IP 303 (obs); IP 523; IP 524; IP 534; ISO DIN 3679; ISO 3680; BS EN 456; BS 3900 Part A13; BS 6664 Parts 3 & 4; UN Class 3 Non-viscous Flammable Liquids; CHIPS Regulations; EPA 1020 A & B; Classification of Dangerous Goods for Carriage: Viscous and Non Viscous Liquids

- Ramp mode for ASTM D7236 & IP 534
- Flash point test in less than 2 minutes
- Small sample size - 2 or 4ml
- Ambient to 300°C temperature range
- Automatic flash detection
- Audible and on-screen prompts
- Portable operation
- Simple calibration

33000-0 Setaflash 3 is an easy to use instrument that can complete a flash/no-flash test in less than two minutes, or determine the flash point of a sample within a temperature range of 0 to 300°C in typically 8 minutes.

All functions are accessed via a two button keypad and the Seta Multifunctional And Rotational Test (SMART) control feature. The digital display shows test parameters, instrument status, and the test result. An audible prompt is sounded when an action is required from the operator. An automatic flash detector reduces the chance of mis-interpretation of the test result by the operator, and enhances repeatability.

The temperature ramp mode allows rapid determination of the flash point of a sample in accordance with ASTM D7236 and IP 534. The cup is heated at a rate of 2°C per minute from the start temperature. An audible prompt to carry out a flash test occurs every 1°C rise up to 100°C, every 2°C rise over 100°C. For safety purposes, if no flash is detected when the temperature reaches 40°C above the start temperature, the flash tester automatically terminates the test. A new higher start temperature would have to be entered and the test started again.

Gas for the test jet/shutter assembly is supplied from an integral gas tank, which is filled using a standard butane (lighter) refill cartridge.

The instrument is lightweight and suitable for mobile use when operated from the optional 12 volt power supply adaptor.

SUPPLIED WITH: 2ml syringe, ignitor, mains lead and instruction manual.

Note: For close-to-ambient tests the sample cup requires cooling with 13870-0 Seta Coolant Module.

FOR SPECIFICATIONS, ACCESSORIES & CONSUMABLES, SEE PAGE 14.



33000-0



BIO-FUEL TESTING



CALIBRATION & VERIFICATION MATERIALS



SETAPLUS EXTENDED WARRANTY AVAILABLE



TECHNICAL DATASHEETS AVAILABLE

30000-0 SETAFLASH SERIES 3 CLOSED CUP TESTER

ASTM D3278; D3828 ; E502; IP 303 (obs); IP 523; IP 524; ISO DIN 3679; ISO 3680; BS EN 456; BS 3900 Part A13; BS 6664 Parts 3 & 4; CHIPS Regulations; EPA 1020 A & B; UN Class 3 Non-viscous Flammable Liquids; Classification of Dangerous Goods for Carriage: Viscous and Non Viscous Liquids

- Flash point test in less than 2 minutes
- Small sample size - 2 or 4ml
- Ambient to 300°C temperature range
- Cost effective
- Portable operation
- Simple calibration

The original Setaflash Series 3 tester. Basically a 33000-0 without the temperature ramp mode, the 30000-0 is a simple to use, reliable and cost effective instrument that is to be found in laboratories, refineries, storage and transport facilities world-wide.

SUPPLIED WITH: 2ml syringe, mains lead and instruction manual.

Note: For close-to-ambient tests the sample cup requires cooling with 13870-0 Seta Coolant Module.

FOR SPECIFICATIONS, ACCESSORIES & CONSUMABLES, SEE PAGE 14.



BIO-FUEL TESTING



CALIBRATION & VERIFICATION MATERIALS



SETAPLUS EXTENDED WARRANTY AVAILABLE



TECHNICAL DATASHEETS AVAILABLE



CALIBRATION CERTIFICATE (WORKS) (OPTIONAL)

SETAFLASH SMALL SCALE FLASH POINT

SPECIFICATIONS				
Seta Part No:	33200-2	33250-2	33000-0	30000-0
Temperature Range:	10 to 130°C (50 to 266°F)	10 to 130°C (50 to 266°F)	Ambient to 300°C (0 to 300°C with 13870-0)	Ambient to 300°C (0 to 300°C with 13870-0)
Cup Material:	Aluminium	Corrosion Resisting Steel Insert	Aluminium	Aluminium
Test Modes:	Rapid Equilibrium and Ramp	Rapid Equilibrium and Ramp	Rapid Equilibrium and Ramp	Rapid Equilibrium
Sample Size:	2ml for flash points up to 100°C 4ml for flash points above 100°C	2ml for flash points up to 100°C 4ml for flash points above 100°C	2ml for flash points up to 100°C 4ml for flash points above 100°C	2ml for flash points up to 100°C 4ml for flash points above 100°C
Test Duration, Rapid Equilibrium Mode:	1 minute below 100°C, 2 minutes above 100°C, or user determined 1 to 99 minutes	1 minute below 100°C, 2 minutes above 100°C, or user determined 1 to 99 minutes	1 minute below 100°C, 2 minutes above 100°C, or user determined 1 to 99 minutes	1 minute below 100°C, 2 minutes above 100°C
Ramp Rate:	2°C/min ramp	2°C/min ramp	2°C/min ramp	
Heating and Cooling System:	Peltier Cell	Peltier Cell	Cartridge heater	Cartridge heater
Power:	200W (maximum)	200W (maximum)	200W (maximum)	200W (maximum)
Voltage:	100/240V, 50/60Hz (switchable) 12Vdc with optional power adaptor	100/240V, 50/60Hz (switchable) 12Vdc with optional power adaptor	110/120V or 220/240V, 50/60Hz (switchable) 12Vdc with optional adaptor	110/120V or 220/240V, 50/60Hz (switchable) 12Vdc with optional adaptor
Gas Supply:	Laboratory gas, 3kPa (0.44psi) maximum pressure or Butane from optional Portable Gas Tank 13667-0	Laboratory gas, 3kPa (0.44psi) maximum pressure or Butane from optional Portable Gas Tank 13667-0	Laboratory gas, 3kPa (0.44psi) maximum pressure or Butane from optional Portable Gas Tank 13667-0	Laboratory gas, 3kPa (0.44psi) maximum pressure or Butane from optional Portable Gas Tank 13667-0
Size (HxWxD):	26 x 28 x 26cm	26 x 28 x 26cm	26 x 28 x 26cm	26 x 28 x 26cm
Weight:	5kg	5kg	4kg	4kg

ACCESSORIES – Setaflash Series 3

OPTIONAL	33200-2	33250-2	33000-0	30000-0
13666-0 BUTANE REFILL CYLINDER, pack of 24.	●	●	●	●
13746-0 DRAUGHT SCREEN, SETAFLASH, stainless steel, size (HxWxD) 36 x 48 x 24cm.	●	●	●	●
13747-0 SETA SOLID SAMPLE DISPENSER, (for details see page 15).	●	●	●	●
13770-311 SYRINGE, 4ml, for tests above 100°C.	●	●	●	●
13870-0 SETA COOLANT MODULE, to reduce temperature of cup below ambient down to 0°C. Uses dry ice and methanol freezing mixture.			●	●
13880-0 SETA METAL COOLING BLOCK, to cool cup after test.			●	●
26000-0 LIQUID RECOVERY SYSTEM, with pump and trap to extract and collect hot sample from cup, (for details see page 15).	●	●	●	●
30005-0 ADAPTOR FOR 12V POWER SUPPLY, 12Vdc to 230Vac			●	●
30006-0 CARRY CASE	●	●	●	●
33205-0 PORTABLE POWER ADAPTOR, 12Vdc to 19Vdc	●	●		
45001-0 SETAPLUS EXTENDED 12 MONTH WARRANTY	●	●	●	●
CALIBRATION, VERIFICATION & TRAINING				
13751-0 THERMOMETER, 0 to 110°C.	●	●	●	●
13775-0 THERMOMETER, 100 to 300°C.	●	●	●	●
99878-3 SMALL SCALE CERTIFIED FLASH POINT MATERIAL, (for details see page 15).	●	●	●	●
99928-0 SETATHERM, digital thermometer, -20 to 150°C, (for details see page 129).	●	●	●	●

CONSUMABLES – Setaflash Series 3

2 Years/2000 Tests	Qty 33250-2	Qty 33200-2	Qty 33000-0	Qty 30000-0
13730-005 SILICONE RUBBER TUBE, 4 metres.	1	1	1	1
13740-004 SAMPLE WELL 'O' RING, Viton, (pack of 5).	4	4	4	4
13740-009 SYRINGE, 2ml.	2	2	2	2
13740-017 HEAT SINK COMPOUND	1	1	1	1
13770-004 SAMPLE WELL 'O' RING, Silicone, (pack of 5).	4	4	4	4
13770-311 SYRINGE, 4ml, for tests above 100°C.	1	1	1	1
13740-425 FLASH DETECTOR	2	2	2	2

99878-3 SMALL SCALE CERTIFIED FLASH POINT MATERIAL

ASTM D3278; D3828; D7236; IP 523; IP 524; IP 534; BS 3900 Part A13; ISO 3679; ISO 3680; UN Class 3 Non-viscous Flammable Liquids

Small Scale Certified Flash Point Material is suitable for Closed Cup test methods and is produced in accordance with ISO Guides 34 and 35 for closed cup test methods.

Nominal certified flash point value 74°C (uncertainty 0.3°C).

Supplied in 50ml bottles.



CERTIFICATE OF MEASUREMENT (WORKS)

99878-3

13667-0 PORTABLE GAS TANK

- Re-fillable
- On-Off switch
- Controllable flow

A portable Butane gas supply suitable for Setaflash instruments. The tank incorporates an On/Off switch and an adjustable flow control valve. The tank is easy to refill from an Butane cartridge.

The 13667-0 is integral to Setaflash Series 3, and will connect directly to the gas inlet on 'Series 8'.

SUPPLIED WITH: 30cm length of gas tubing, stand, ignitor, and instruction manual.

Note: Also suitable for use with all older models of Setaflash and replaces the 13745-0 gas valve.

SPECIFICATIONS	
Flow Rate:	0 - 20g/hr (adjustable)
Gas:	Butane (standard gas lighter refill cartridge)
Size (HxDia):	23 x 2.5cm
Weight (filled):	150g (sufficient for approx. 90 mins)

ACCESSORIES - Portable Gas Tank**OPTIONAL**

13666-0 BUTANE REFILL CONTAINER, pack of 10.

13667-0 connected to a Setaflash Series 7

13747-0 SETA SOLID SAMPLE DISPENSER

- Consistent sample size
- Clean, mess free operation

Accurately loads solids, pastes, powders and other samples which cannot be discharged from a hypodermic syringe into closed cup testers.



13747-0 filling a Sample Cup

26000-0 LIQUID RECOVERY SYSTEM

- Safe removal of hot residue
- Collection of spillage

Although intended for the safe removal and collection of hot residue from flash and fire point testers, this item will fulfil many similar uses in the laboratory. Comprises a small suction pump with an insulated sample trap, connecting tubes, pick-up tube and stopper.



26000-0

SETAFLASH SMALL SCALE OPEN CUP FLASH POINT

Test methods specified under UN and IATA Dangerous Goods Regulations, and others, determine whether a liquid sustains combustion when heated and exposed to a flame under specified test conditions. Certain substances classified as Flammable by Closed Cup Flash Point Testing may be reclassified as non-flammable by combustibility testing. This has significant potential cost implications for the packaging, storage and shipping of many substances.

31000-0 SETAFLASH SERIES 3 OPEN CUP TESTER

ASTM D4206; BS 3900 Part A11; ISO 9038; UN Class 3 Test L. 2; CFR 49-173.120; IATA Dangerous Goods Regs. Section 3.3.5; Health and Safety Comm. Carriage of Dangerous Goods by Road & Rail App. B

- Flash point test in less than 2 minutes
- Small sample size - 2ml
- Ambient to 300°C temperature range
- Audible and on-screen prompts
- Portable operation
- Simple calibration

The Setaflash 31000-0 is a simple to use and reliable open cup tester for flash/no flash, finite determinations or sustained combustion tests within a range of ambient to 300°C.

The manually operated flame sweeping arm is supplied from an integral gas tank that is filled using a standard butane (lighter) refill cartridge. The flash or sustained combustion characteristics of the sample are observed visually while the test flame is passed over the sample.

All functions are accessed via a two button keypad and the Seta Multifunctional And Rotational Test (SMART) control feature. The digital display shows test parameters and instrument status. An audible prompt is sounded when an action is required from the operator.

The instrument is lightweight and suitable for mobile use when operated from the optional 12 volt power supply adaptor.

SUPPLIED WITH: 2ml syringe, test flame height gauge, mains lead and instruction manual.



BIO-FUEL TESTING



CALIBRATION & VERIFICATION MATERIALS



SETAPLUS EXTENDED WARRANTY AVAILABLE



TECHNICAL DATASHEETS AVAILABLE

SPECIFICATIONS	
Temperature Range:	Ambient to 300°C
Sample Size:	2ml
Test Time:	1 to 99 minutes
Default Values:	1 minute for flash points up to 100°C 2 minutes for flash points between 100 to 300°C
Cup Material:	Blackened Aluminium
Voltage:	110/120V or 220/240V, 50/60Hz (switchable) 12V using optional power supply
Size (HxWxD):	25.6 x 28 x 25.6cm
Weight:	4kg



31000-0

ACCESSORIES – Setaflash Series 3 Open Cup Tester

OPTIONAL

13666-0	BUTANE REFILL CYLINDER, pack of 10.
13746-0	DRAUGHT SCREEN, SETAFLASH, size (HxWxD) 36 x 48 x 24cm, stainless steel.
26000-0	LIQUID RECOVERY SYSTEM, with pump and trap to extract and collect hot sample from cup, (for details see page 15)
30005-0	ADAPTOR FOR 12V POWER SUPPLY
30006-0	CARRY CASE, size (HxWxD) 21 x 40 x 30cm.
45000-0	SETAPLUS EXTENDED 12 MONTH WARRANTY

CALIBRATION, VERIFICATION & TRAINING

13751-0	THERMOMETER, 0 to 110°C.
13775-0	THERMOMETER, 100 to 300°C.
99928-0	SETATHERM, digital thermometer, -20 to 150°C, (for details see page 129).

CONSUMABLES – Setaflash Series 3 Open Cup Tester

2 Years/2000 Tests	Qty
13730-005 SILICONE RUBBER TUBE, 4 metres.....	2
13740-009 SYRINGE, 2ml	1