

ASPHALTENES

21200-0 ASPHALTENES APPARATUS



21200-0 with 24410-4 & 24500-0

ASTM D6560; IP 143; BS 2000 Part 143; DIN 51 595; NF T60-115

Determines the amount of wax free material insoluble in n-heptane but soluble in hot toluene. Applicable for gas oil, diesel fuel, fuel oil, lubricating oil, bitumen, and crude petroleum which has been topped to an oil temperature of 260°C. Comprises condenser, extractor, stoppers, stirrer, funnel and evaporation dish.

ACCESSORIES - Asphaltene Apparatus

REQUIRED

22160-0	RECEIVER, 100ml, pack of 3.
24401-0	GLASS FLASK, 500ml capacity.
24410-4	FLASK HEATER, suitable for one 500ml flask (for details see page 31).
	OR
24530-4	FLASK HEATER, suitable for up to three 500ml flasks, requires multiples of 21200-0 and other accessories (for details see page 31).
	OR
24540-4	FLASK HEATER, suitable for up to six 500ml flasks, requires multiples of 21200-0 and other accessories (for details see page 31)

ACCESSORIES - Continued

REQUIRED

99310-0	EVAPORATION BATH
	Temp. range: ambient to 100°C
	Tank capacity: 6 litres
	Voltage: 110/120V, 50/60Hz 220/240V, 50/60Hz
	Power: 1.5kW
	Size (HxWxD): 28 x 33 x 21cm
	Weight: 10kg
24500-0	SETA STEEL STAND, for use with 24410-4 heater only.
24520-0	CLAMP
24650-2	BOSSHEAD, for fitting clamp to stand.

Note: Other items which may be required include: Filter paper, Forceps, Toluene and Heptane.

OPTIONAL

22750-2	DIGITAL STOPWATCH, 0.1s resolution, (for details see page 141).
24403-0	FLASK, 150ml capacity.
24404-0	FLASK, 250ml capacity.
99100-2	ANALYTICAL BALANCE, (for details see page 141).
99200-2	LABORATORY OVEN, (for details see page 137).

ANILINE POINT

10000-0 THIN FILM APPARATUS



10000-0 (25000-3 supplied separately)

ASTM D611 Method B; IP 2 Method B; BS 2000 Part 2; BS 7391 (obs); ISO 2977; FTM 791 3601; NF M07-021; JIS K2256

The Thin Film Apparatus is designed to determine the Aniline Point in samples that are too dark to be determined using ASTM D611 Method A or IP 2 Method A.

SUPPLIED WITH: stand, clamp, mains lead and instruction manual.



CALIBRATION & VERIFICATION MATERIALS

SPECIFICATIONS

Power:	10W
Voltage:	110/120V, 50/60Hz 220/240V, 50/60Hz
Size (HxWxD):	78 x 17 x 50cm
Weight:	5.9kg

10160-0 GLASSWARE FOR ANILINE POINT METHODS

ASTM D611 Method A; IP 2 Method A; BS 2000 Part 2; BS 7391 (obs); ISO 2977; FTM 791 3601; NF M07-021; DEF STAN 05-50/01 Method 1

Comprises borosilicate glass test tube, jacket, iron wire stirrer and cork.



CALIBRATION & VERIFICATION MATERIALS

ACCESSORIES - Thin Film Apparatus

REQUIRED

10120-2	TRANSFORMER UNIT, for 6.5V lamp. Incorporates a brightness control for viewing sample.
	Voltage: 110/120V, 50/60Hz 220/240V, 50/60Hz
	Power: 10kW
	Size (HxWxD): 11 x 16 x 23cm
	Weight: 1.7kg
25000-3	SETA-HOT, 1000W electric heater with variable heat control, (for details see page 147).

THERMOMETERS:

ASTM33C/IP20C or ASTM 34C/IP21C or ASTM35C/IP59C.

Note: Two thermometers of the same range are required.

OPTIONAL

99100-2	ANALYTICAL BALANCE, (for details see page 141).
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CALIBRATION, VERIFICATION & TRAINING

99850-0	MULTI-TEST VERIFICATION MATERIAL, ASTM D611 Kerosine, (for details see page 150).
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ACCESSORIES - Glassware for Aniline Point Methods

REQUIRED

24500-0	STEEL STAND, Base 23 x 14cm, column 76cm x 1.3cm dia, stainless steel.
24250-0	CLAMP, 2 to 90mm capacity.
24650-2	BOSSHEAD, for fitting Seta 24520-0 to steel column.

THERMOMETERS:

ASTM33C/IP20C or ASTM 34C/IP21C or ASTM35C/IP59C.

OPTIONAL

99100-2	ANALYTICAL BALANCE, (for details see page 141).
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CALIBRATION, VERIFICATION & TRAINING

99850-0	MULTI-TEST VERIFICATION MATERIAL, ASTM D611 Kerosine (for details see page 150)
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