

Softening-Point - Kraemer-Sarnow Method (manual)

DISCONTIUED - Spare Parts only!

DIN 1995 (obs.), DIN 52025 (obs.)

Product group(s): Bitumen

User group(s): Asphalt, Bitumen, Road Research, Tar

Scope: To determine the lowest temperature at which a mercury load deforms a sample under standardized conditions.

Suitable for carbonaceous materials like pitch and other materials melting above +30 °C.

A BARTA-tube filled with a sample is connected to a glass-tube and loaded with mercury. Two samples are heated in a liquid bath. At rising temperatures the sample deforms under the weight of the mercury. The softening point is reported as the temperature at which the mercury breaks through the softening sample.

- 4-places
- electric heating
- electronic power regulator



Kraemer-Sarnow Test Equipment

More details are mentioned in the "Order Number" section

Technical Data

Test places:	4
Working range:	approx. +25 to +200 °C
Dimensions:	16 x 18.5 x 20.5 cm (WxDxH)
Weight:	3 kg

Main Unit

10-0081

Manual Softening-Point Tester - Kraemer-Sarnow Method

(DIN 52 025 - DIN 1995 obs.) (Carbonaceous materials)

Consisting of:

electric heater (800 W) in stainless steel housing with electronic power regulator "M2", 4 heater rods, support with ring (for 250 ml beaker) and bored plate (for 4 glass-tubes & 1 thermometer).

Supplied with:

4 BARTA-tube (stainless steel)
 4 glass tube (Ø 8 x 100 mm)
 4 connecting hose (Ø 6 x 6 mm)
 4 rubber bung (7 mm bored)
 2 thermometers
 (precision made, 1 x ASTM 15C, 1 x ASTM 16C)
 2 glass beaker (1 x 250 ml, 1 x 600 ml)
 1 heater support board (bored, 38 mm / 1½")
 1 glass plate

Note: Mercury measuring device (5 g) is not included.

Power supply: 230 V, 50/60 Hz, 800 W, EU-plug


10-0082

Manual Softening-Point Tester - Kraemer-Sarnow Method

Like 10-0081 but:

Power supply: 115 V, 50/60 Hz, 800 W, US-plug

Options & Accessories

50-5315	Tongs (stainless steel with rubber cover) to handle beakers etc.
	
50-9167	Bath Liquid, silicon oil AR 200
1 kg, water clear, heat resistant up to approx. +250 °C, viscosity at +25 °C: 190 till 210 mPa·s	
10-0061	Thermometer ASTM 15C / IP 60C
Range: -2 to +80 : 0.2 °C Length: 395 mm, Immersion: total, Ø 7 mm	
10-0062	Thermometer ASTM 15C / IP 60C
Range: -2 to +80 : 0.2 °C (officially certified)	
10-0063	Thermometer ASTM 15F
Range: +30 to +180 : 0.5 °F Length: 395 mm, Immersion: total, Ø 7 mm	
10-0064	Thermometer ASTM 15F
Range: +30 to +180 : 0.5 °F (officially certified)	
10-0065	Thermometer ASTM 16C / IP 61C
Range: +30 to +200 : 0.5 °C Length: 395 mm, Immersion: total, Ø 7 mm	
10-0066	Thermometer ASTM 16C / IP 61C
Range: +30 to +200 : 0.5 °C (officially certified)	
10-0067	Thermometer ASTM 16F
Range: +85 to +392 : 1.0 °F Length: 395 mm, Immersion: total, Ø 7 mm	
10-0068	Thermometer ASTM 16F
Range: +85 to +392 : 1.0 °F (officially certified)	

Spare Parts

10-0087	BARTA-Tube, stainless steel, (Ø 8 x 5 mm), 1 piece
10-0089	Glass Tube (Ø 8 x 100 mm)
10-0096	Stopper, NBR-rubber (7 mm bored) as glass tube holder
10-0097	Hose, rubber (Ø 6 x 6 mm) connecting glass-tube with BARTA-tube
10-0057	Plate, glass, 120 x 120 x 6 mm
10-0084	Support - Kraemer-Sarnow
with ring (for 250 ml beaker) and bored plate (for 4 glass-tubes & 1 thermometer)	
10-0086	Beaker, 250 ml, glass, high shape without spout
13-0147	Beaker, 600 ml, glass, high shape with spout
11-0137	Support Board, center hole Ø 38 mm (1 ½")

glass ceramics (150 x 150 x 4 mm)

11-0018	Heater Rod 200 W, 115-230 V
11-0019	Heating Element with 4 heater rods Power supply: 230 V, 50/60 Hz, 800 W
11-0029	Heating Element with 4 heater rods Like 11-0019 but: Power supply: 115 V, 50/60 Hz, 800 W
25-0004	Control Module "m2" to regulate the heating power Power supply: 230 V, 50/60 Hz
25-0009	Control Module "m2" to regulate the heating power Like 25-0004 but: Power supply: 115 V, 50/60 Hz

Order Guideline

Minimum equipment:	10-0081
Spares (approx. 1 year):	Thermometer, Glass Beaker
Additional requirements:	Bath liquid, mercury, mercury metering device (5 g)