

## Distillation Analysis of Cut-Back Bitumen - ASTM Type

ASTM D 402, EN 13358, IP 27, NF T66-003 (obs.), AASHTO T79 (obs.), BS 4453 (obs.)

**Product group(s):** Bitumen

**User group(s):** Bitumen

**Scope:** This procedure measures the amount of the more volatile constituents in cut-back asphaltic products.

The presence of silicone in the cut-back may affect the distillation residue by retarding the loss of volatile material after the residue has been poured into the residue container.

Suitable for the distillation of cut-back asphaltic (bituminous) products.

200 ml of a sample are distilled in a 500 ml flask at a controlled rate to a sample temperature of +360 °C (680°F) and the volumes of distillate obtained at a specific temperature are measured.

The residue from the distillation, and also the distillate, may be tested as required.

- **Ready-to-Go Unit**



### Cut-Back Bitumen Distillation - ASTM-Type Test Equipment

More details are mentioned in the "Order Number" section

## Main Unit

<b>10-0213</b>	<b>Cut-Back Bitumen Distillation ASTM-Type</b> ASTM D 402 (AASHTO T79) - EN 13 358 (NF T66-003) - IP 27 (BS 4453)
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Consisting of:

- 1 thermometer ASTM 8C (precision made) with holder (bored stopper)
- 1 distillation flask (500 ml)
- 1 flask shield with two-part ceramic cover
- 1 ring support with wire gauze
- 2 support rods with clamps and base plates
- 1 adjustable universal gas burner
- 1 condenser tube (400 mm) with special jacket
- 1 cylindrical graduated receiver (100 : 1 ml) and connection material (adapter etc)

## Spare Parts

<b>11-0155</b>	<b>Thermometer ASTM 8C / IP 6C</b> Range: -2 to +400 : 1 °C Length: 385 mm, Immersion: total, Ø 7 mm
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<b>11-0156</b>	<b>Thermometer ASTM 8C / IP 6C</b> Range: -2 to +400 : 1 °C (officially certified)
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10-0204	<b>Stopper, NBR-rubber (24/30 / bored Ø 12 mm)</b>
10-1205	<b>Flask Shield, stainless-steel</b> with ceramic insulation and mica windows
10-0208	<b>Insulating Cover made of ceramic, two-part, Ø 148</b>
10-0210	<b>Stopper, NBR-rubber (29/30 / bored Ø 6.5 mm)</b>
10-0214	<b>Connecting Tube, Silicon, 1 m (Ø 10 x 2 mm)</b>
10-0216	<b>Distillation Flask</b> 500 ml, 102 mm diameter, short-necked
10-0217	<b>Condenser Tube (400 mm long)</b>
10-0218	<b>Condenser Jacket</b>
10-0220	<b>Adapter</b>
11-0110	<b>Universal Gas Burner</b> for town gas (<800°C), butane, propane & natural gases (<1150°C)
11-0130	<b>Measuring Cylinder, 100 : 1 ml</b> borosilicate glass with plastic stand, 254 mm high
11-0150	<b>Distillation Thermometer Set acc. ASTM E 1</b> <u>Consisting of:</u> 16 thermometer (ASTM 2C / IP 62C to ASTM 107C / IP 88C)
11-0503	<b>Graduated Receiver, BS 658, 100 ml</b> 1ml division with conical lower part (0 ... 10 ml) and base
10-0178	<b>Ring Support with wire gauze</b>

### Order Guideline

Minimum equipment:	1x 10-0213
Spares (approx. 1 year):	10-0216, 11-0150, Thermometer, Stopper
Additional requirements:	Gas