

Oil Content and Solvent Extractables in Petroleum Waxes



K17690 Evaporation Cabinet and Cooling Bath

Oil-Solvent Extractables Content Apparatus

- Conforms to ASTM D721, D3235 and related specifications

Determines oil content or solvent extractables content in petroleum waxes in accordance with ASTM specifications. Includes Filter Stick Assembly; Cooling Bath; Air Pressure Regulator; and Evaporation Cabinet.

Filter Stick and Assembly – Filters petroleum wax samples per ASTM specifications. Consists of 10mm diameter sintered glass filter stick with air pressure inlet tube and delivery nozzle, and a 25x170mm test tube. Inserts in Cooling Bath.

Cooling Bath – Accommodates three (3) 25x170mm test tubes for cooling samples and filter stick assemblies. Insulated stainless steel tank with finished steel exterior. Removable composition top plate has thermometer port, filling port and three 25.4mm (1") test tube ports. Fill tank with suitable cooling mixture.

Air Pressure Regulator – Controls air flow to the filter stick assembly at the required rate. Mercury bubbler-type, with 250mL glass cylinder, T-tube and rubber stopper.

Evaporation Cabinet – Thermostatically heated cabinet evaporates solvent from filtrate per specifications. Accommodates four weighing bottles. Delivers air stream vertically downward into bottles through glass jets. Manifold assembly is adjustable for positioning of jets at the correct height above the sample surface. Controls temperature at $35 \pm 1^\circ\text{C}$ ($95 \pm 2^\circ\text{F}$). Finished steel cabinet with composition front plate and hinged glass door.

Test Method

Oil content or solvent extractables in wax can affect key properties such as strength, hardness, melting point, etc. The sample is dissolved in methyl-ethyl ketone or a 50-50 mixture of methyl-ethyl ketone and toluene, cooled to precipitate the wax, and filtered. The oil content or solvent extractables content of the filtrate is then determined by evaporating the solvent and weighing the residue.

Specifications

Conforms to the specifications of:

ASTM D721, D3235; IP 158; ISO 2908; DIN 51571, 51572; FTM 791-5431

Electrical Requirements:

115V 60Hz, Single Phase, 0.8 A

220-240V 50/60Hz, Single Phase, 0.4 A

Included Accessories

Weighing Bottles, 15 mL (4)

Filter Stick Assembly (K17630)

Air Pressure Regulator (K17640)

Dimensions lwxh,in.(cm)

Cooling Bath: 8x6x9 (20x15x23)

Evaporation Cabinet: 9x5x16 (23x13x41)

Net Weight:

Cooling Bath: 6 lbs (2.7 kg)

Evaporation Cabinet: 7 lbs (3.2 kg)

Shipping Information

Shipping Weight: 24 lbs (10.9 kg)

Dimensions: 5 Cu.ft

Ordering Information

Catalog No.

K17600 Oil-Solvent Extractables Content Apparatus, 115V 60Hz

K17690 Oil-Solvent Extractables Content Apparatus, 220-240V 50/60Hz

Accessories

K17605 Mechanically Refrigerated Cooling Bath, 115V 60Hz, Ambient to -35°C

K17695 Mechanically Refrigerated Cooling Bath, 230V 50/60Hz, Ambient to -35°C

332-004-009 Test Tube, 25 x 170 mm

250-000-71F ASTM 71 F Thermometer
Range: -35 to $+70^\circ\text{F}$