

# VOLATILITY AND RESIDUES IN LIQUEFIED PETROLEUM (LP) GASES

## Volatility of Liquefied Petroleum (LP) Gases Residues in Liquefied Petroleum (LP) Gases

### Test Method

The volatility of liquefied petroleum (LP) gases is determined by allowing a precooled sample to weather under specified conditions and observing the temperature when 95% has evaporated. Residues in LP gases are determined by weathering of a precooled sample and determination of the volume remaining at 100°F (37.8°C).

### Precooling Apparatus

- Conforms to ASTM and GPA specifications

Consists of brass cooling vessel with built-in 20 ft. (6m) copper cooling coil. Includes compression fittings and 1/8" needle valve at the downstream end.

### Specifications

Conforms to the specifications of: ASTM D1837; D2158; GPA 2140; ISO 13757

**Dimensions:** \*dia.xh.in.(cm) 3x11¼ (7.6x29.9)

\*Cooling Vessel

### Ordering Information

<b>Catalog No.</b> K48100	Precooling Apparatus
<b>Accessories</b>	
332-010-001	Weathering Tube, 100mL
339-000-001	Stand, for weathering tube
337-000-002	Clamp, for weathering tube
338-000-001	Clamp Holder
362-001-001	Syringe, 1mL (ASTM D2158)
K481-0-5	Needle, 8"/203mm (ASTM D2158)
250-000-99F	ASTM 99F Thermometer, Range: -55 to +41°F
250-000-99C	ASTM 99C Thermometer, Range: -50 to +5°C
250-000-05F	ASTM 5F Thermometer, Range: -36 to +120°F
250-000-05C	ASTM 5C Thermometer, Range: -38 to +50°C
250-000-57F	ASTM 57F Thermometer, Range: -4 to +122°F
250-000-57C	ASTM 57C Thermometer, Range: -20 to +50°C

*For NIST traceable certified thermometers, please refer to the ASTM Thermometer section on pages 184 through 191.*

# FILTERABILITY OF DIESEL FUELS BY LOW-TEMPERATURE FLOW TEST

### Test Method

Determines the filterability of Diesel fuels and Biodiesel blend fuels in some automotive equipment at low temperatures. The Low Temperature Flow Test results are indicative of the low temperature flow performance of the test fuel in some diesel vehicles. The test method is especially useful for the evaluation of fuels containing flow improver additives in a range of +10°C to -30°C.

### Automatic Low Temperature Filterability Test Analyzer (LTFT)

Up to (6) 300 ml test vessels are cooled at a specified rate of 1°C/h, and at every °C of cooling, a vacuum of 20 kPa is applied to a filter assembly immersed in the first sample. If the sample recovered in a graduated receiver vessel reaches the 180 ml in 60 sec., the analysis continues to the further 1°C test temperature (passed). When the sample doesn't reach the 180 ml within the 60 sec., the test is failed. The temperature of the last passing result test has to be recorded as minimum LTFT pass temperature.

The instrument is a six place floor model, equipped with a built in cooling system with a single stage CFC free motor compressor for temperatures as low as -45°C. Integrated Vacuum System consisting of a 350 kPa micropump, vacuum stabilizer and electronic control for vacuum regulation of 20 kPa. Fully automatic, controlled by an integrated panel pc with touch screen and a large display. All the parameters and the current status of the analysis are shown in real time.

### Specifications

Conforms to the Specifications of: ASTM D4539

Temperature Range: +80°C to -80°C

Resolution: 0.06°C

Accuracy: ±0.1°C

Repeatability / Reproducibility: Meets or exceeds ASTM specifications

Storage Capacity: Up to 60,000 analyses

Interface: USB Port (2)

Electrical Requirements: **CE**

115V ±15%, 60Hz

220V ±15%, 50/60Hz

**Dimensions:** wxdxh.in.(cm)

38½ x 23½ x 51¼ (98x60x130)

Net Weight: 176.5 lbs (80kg)



KLA-7 LTFT

### Ordering Information

<b>Catalog No.</b> KLA-7	Automatic Low Temperature Filterability Test Analyzer (LTFT), 115V 60Hz
KLA-7 (220)	Automatic Low Temperature Filterability Test Analyzer (LTFT), 220V 50/60Hz
<b>Accessories</b>	
KLA-PT100-CAL	Calibration Box and Cables
KLA-DB-KIT	Kit of Connectors and Cables for Cold range