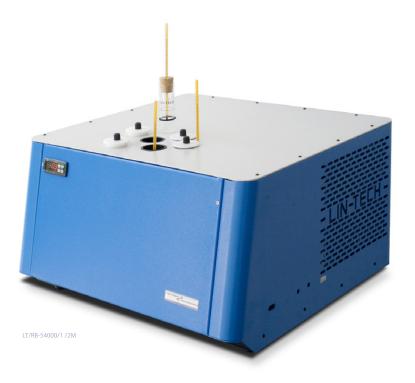
Cloud and Pour Point Refrigerator





ASTM D2500 ASTM D5853 ASTM D6922 DIN 51428 DIN 51597 IP 15 IP 219 IP 309 ISO 3015

ISO 3016

ASTM D97

Pour Point of Petroleum Products

This test method is intended for use on any petroleum product.
Suitable for black specimens, cylinder stock, and non-distillate fuel oil and for testing the fluidity of a residual fuel oil at a specified temperature is described.

Cloud Point of Petroleum Products

This test method covers only petroleum products that are transparent in layers 40 mm in thickness, and with a cloud point below 49°C.

Pour Point of Crude Oils

Homogeneity and Miscibility in Automotive Engine Oils (D6922)

Determination if an automotive engine oil is homogeneous and will remain so, and if it is miscible with certain standard reference oils after being submitted to a prescribed cycle of temperature changes.

LT/RB-54000/1-M Manual refrigerator, dry bath, 1 temperature, 4 places, bench model

- Bench top instrument with steel structure painted with anti-epoxy products.
- Circular aluminium metal block bath deeply coated equipped with heating element to heat up the bath up to +60°C.
- 4 x dry wells for glassware introduction and 1 x thermometer hole.
- 4 × stand-by plastic covers with handle.
- Temperature controlled by a digital thermoregulator with PID function that control the temperature trough an A class PT100 sensor with resolution 0,1°C and stability +/- 0.1°C.
- Cooling provided by motor compressor system single-stage grant temperature up to -51°C.

Power supply

220 or 115 Vac, 50/60 Hz

Power consumption

• 0.7 Kw

Dimensions

- Width 66 cm
- Depth 60 cm
- Height 42 cm

Weight

• 70 kg

LT/RB-54000/2-M

Manual refrigerator, dry bath, 1 temperature, 4 places, bench model

- Bench top instrument with steel structure painted with anti-epoxy products.
- Circular aluminium metal block bath deeply coated equipped with heating element to heat up the bath up to +60°C.
- 4 × dry wells for glassware introduction and 1 × thermometer hole.
- 4 × stand-by plastic covers with handle.
- Temperature controlled by a digital thermoregulator with PID function that control the temperature trough an A class PT100 sensor with resolution 0,1°C and stability +/- 0.1°C.
- Cooling provided by Motor compressor system single-stage grant temperature up to -69°C.

Power supply

· 220 or 115 Vac, 50/60 Hz

Power consumption

• 1.5 Kw

Dimensions

- Width 66 cm
- Depth 60 cm
- Height 42 cm

Weight

• 70 kg



Cloud and Pour Point Refrigerator







LT/RB-53300-M

Manual refrigerator, dry bath, Pour Point of Petroleum Products, 3 temperature

- Floor model instrument made in die-casted aluminium covered by special plastic material fitted with four wheels allowing movement.
- 3 x dry aluminium block bath with 4 wells each for accommodation of glassware and a small 1 for thermometer/ each block.
- Low-voltage anti-condensing system and 12 stand by covers made in plastic material.
- Motor compressor system with CFC free gases.
- 3 × digital thermoregulator with PT100 A class grant resolution and precision of 0,1°C.
- Standard block temperature configuration: 0, -18, -33°C.
- Available working temperature (on last position): up to -33°C.

Power supply

· 220 or 115 Vac, 50/60 Hz

Power consumption

• 1.8 Kw

Inrush current

• 5.5 Kw

Dimensions

- Width 110 cm
- Depth 60 cm
- · Height 92 cm

Weight

• 170 kg

LT/RB-53300-M+

Manual refrigerator, dry bath, for Pour Point of Petroleum Products, 3 temperature

- Floor model instrument made in die-casted aluminium covered by special plastic material fitted with four wheels allowing movement.
- 3 x dry aluminium block bath with 4 wells each for accommodation of glassware and a small 1 for thermometer/ each block.
- Low-voltage anti-condensing system and 12 stand by covers made in plastic material.
- Motor compressor system with CFC free gases.
- 3 x digital thermoregulator with PT100 A class grant resolution and precision of 0,1°C.
- Standard block temperature configuration:
 0 -18 -51°C
- Available working temperature (on last position): up to -51°C.

Power supply

· 220 or 115 Vac, 50/60 Hz

Power consumption

1.8 Kw

Inrush current

• 5.5 Kw

Dimensions

- Width 110 cm
- Depth 60 cm
- Height 92 cm

Weight

• 170 kg

LT/RB-50000/M Manual refrigerator, dry bath, 4 temperatures, 4 places

- Floor type instrument with steel structure painted with anti-epoxy products.
- 4 x Circular aluminium metal block bath deeply coated, last position equipped with heating element to heat up the bath up to +60°C.
- For each block:
- \cdot 4 × dry wells for glassware introduction and 1 × thermometer hole.
- \cdot 4 × stand-by plastic covers with handle.
- Fitted with four wheels allowing easy movement in laboratory.
- · Working temperatures:
 - · 1st position: ambient to 0°C.
 - \cdot 2nd position: ambient to -18°C.
 - · 3rd position: ambient to -33°C.
 - \cdot 4th position: +60 to -51°C.
- · Automatic defrosting device low voltage.
- Temperature controlled by 4 independents digital thermoregulators with PID function that control the temperature trough an A class PT100 sensor with resolution 0,1°C and stability +/- 0.1°C.
- Cooling provided by Motor compressor system double-stage equipped with CFC free gases.

Power supply

· 220 or 115 Vac, 50/60 Hz

Power consumption

• 2.5 Kw

Inrush current

• 8 Kw

Dimensions

- · Width 140 cm
- · Depth 60 cm
- Height 92 cm

Weight

• 240 kg





Cloud and Pour Point Refrigerator

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LT/RB-50000-W/M

Manual refrigerator, 4 temperatures

- Floor model instrument made in die-casted aluminium covered by special plastic material fitted with four wheels allowing movement.
- · 4 × small bath with 4 wells each for accommodation of glassware and a small 1 for thermometer/pouring medium liquid.
- · Low-voltage anti-condensing system and 16 stand by covers made in plastic material.
- Motor compressor system with CFC free gases.
- \cdot 4 imes digital thermo-regulator with PT100 A class grant resolution and precision of 0,1°C.
- · Standard block temperature configuration:
- · 1st position: ambient to 0°C.
- · 2nd position: ambient to -18°C.
- · 3rd position: ambient to -33°C.
- · 4th position: ambient to -51°C.

Power supply

220 or 115 Vac, 50/60 Hz

Power consumption

4 Kw

Inrush current

12 Kw

Dimensions

- Width 140 cm
- Depth 60 cm
- · Height 92 cm

Weight

265 kg

LT/RB-53100/M

Manual refrigerator, dry bath, 5 temperatures, 4 places

- · Floor type instrument with steel structure painted with anti-epoxy products.
- 5 × Circular aluminium metal block bath deeply coated, last 2 positions equipped with heating element to heat up the bath up to +60°C.
- · For each block:
- \cdot 4 \times dry wells for glassware introduction and $1 \times$ thermometer hole.
- \cdot 4 \times stand-by plastic covers with handle.
- · Fitted with four wheels allowing easy movement in laboratory.
- · Working temperatures:
- · 1st position: ambient to 0°C
- · 2nd position: ambient to -18°C
- · 3rd position: ambient to -33°C
- · 4th position: +60° to -51°C
- · 5th position: +60° to -69°C
- · Automatic defrosting device low voltage.
- Temperature controlled by 5 independents digital thermoregulators with PID function that control the temperature trough an A class PT100 sensor with resolution 0,1°C and stability +/- 0.1°C.
- Cooling provided by motor compressor system double-stage equipped with CFC free gases.

Power supply

· 220 or 115 Vac, 50/60 Hz

Power consumption

4 Kw

Inrush current

• 12 Kw

Dimensions

- Width 170 cm
- · Depth 60 cm
- · Height 92 cm

Weight

· 260 kg

Accessories ASTM D97 / D2500

- 1050: test jar graduated glassware ASTM, pack of 4 pcs.
- · 5334: cork cover for centring thermometer, pack of 4 pcs.
- 7183: cork disk for test jar, pack of 4 pcs.
- · 11143: insulating gasket, pack of 4 pcs.
- T-AS5C: thermometer ASTM 5C IP 1C.
- · T-AS6C: thermometer ASTM 6C IP 2C.

Accessories for manual determination of CFPP

• LT/CF-254000/M: Manual Cold Filter Plugging Point EN116 / IP 309.

Instrument to be used with the article LT/RB-5x000/M or others refrigerators.

- · Test tube with level mark.
- \cdot Stopper with relevant holes.
- · Spacer, centring basket.
- · Calibrated glass aspiration pipette.
- · Filter assembly complete with filter.
- OilLab 250: vacuum generator
- \cdot 2 × glass bottles according to IP method.
- · U-tube
- $\cdot \, \mathsf{Stopper} \, \, \mathsf{with:flow} \, \mathsf{regulating,valve} \, \, \mathsf{manual,} \, \,$ funnel Vinyl tube for connections.
- · 3087: compact diaphragm air/vacuum pump
- · Vacuum and compression application.
- · Flow rate max. 5 l/min.
- · Pressure max. 0.3 bar rel.
- · Ultimate vacuum max. 300 mbar (abs.).
- · Weight 0.85 Kg.
- · Dimensions $72 \times 72 \times 180$ mm.
- · Valve material NBR coated.
- · 4 mm connector included.
- · Maintenance free.
- · Power supply: 220 Vac, 50-60 Hz.

Spare Parts for CFPP

- · 2505: calibrated aspiration pipette for CFPP.
- · 7054: o-ring (small) for CFPP filter.
- 7055: o-ring (big) for CFPP filter.
- · LAB-200/013-02-SS: stainless steel filter holder with $10 \times \text{mesh}$ interchangeable.