

## EXTRACTION RESIDUES SEDIMENT

### SULFONATION

**ASTM D1019 (obs) IP 145 (obs) ISO 3840 OLEFINIC PLUS AROMATIC HYDROCARBONS IN PETROLEUM DISTILLATES**  
*This method covers the determination of olefinic plus aromatic hydrocarbons in gasolines, naphthas, kerosenes, and other petroleum distillates that are substantially free from butanes and butenes*

Consisting of 4 places shaking machine, centrifuge, 4 standard sulfonation flask 100% graduated 2% (10 ml graduated 0.2ml), 4 buckets with rubber pads, 4 ice water jar.

#### 1200 SULFONATION NUMBER APPARATUS

#### ACCESSORIES ON REQUEST

|            |   |
|------------|---|
| 2470/BC160 | ELECTRONIC BALANCE<br>Range 160 g., readout 0.001, pan Ø110 |
| 480/40     | CRYOSTAT UP TO -40°C  |
| 10-1230    | PRECISION FLASK FOR SULFONATION<br>10 ml., pack of 4 pcs    |
| 10-1231    | PRECISION FLASK FOR SULFONATION<br>5 ml., pack of 4 pcs     |
| 10-1232    | BUCKET FOR PRECISION FLASK, pack of 4 pcs                   |

#### CONSUMABLES x 2 YEARS

|         |   |
|---------|---|
| 15-1223 | POLYURETHANE SUPPORT, pack of 4 pcs x2    |
| 15-1233 | STANDARD SULFONATION FLASK, pack of 4 pcs |
| 15-1202 | ICE WATER JAR, pack of 4 pcs x2           |

### UNSULFONATED RESIDUE

**ASTM D483 UNSULFONATED RESIDUE OF PETROLEUM PLANT SPRAY OILS**

*This test method covers the determination of unsulfonated residue in plant spray oils of petroleum origin and applies only to the petroleum oil content. It provides a measure of the degree of refinement of plant spray oils by determining the extent to which the oil is attacked by 98.61 % sulfuric acid under closely standardized conditions.*

Consisting of:

- four places centrifuge model for anti-vibration table, is equipped with a star wheel that has 4 rings swinging up to 90°, max. 2000 rpm speed, 482.6 mm maximum rotation diameter. Speed is regulated electronically and shown on a digital display. Centrifuging time is set by a digital timer which operates an electric brake (that can be excluded) when the test is finished, electric heating (that can be excluded) controlled by digital thermoregulator PID and overtemperature alarm. Max. temperature 80°C. The heater and the brake can be cut out. Lid fitted with safety device which stops the motor when the lid opens
- Structure in painted sheet composed of a water bath in stainless steel for temperatures up to 100°C ± 0.1°, 4 positions shaker with removable media for a fast and easy transfer of sulfonation flask to and from the bathroom, adjustment cycles per minute from 300 to 500 ±10 cycles/min, stopwatch for setting the shaking time,
- 4 Sulfonation flask 50% graduated 0.5% (5 ml graduated 0.05 ml) 50 ±5 ml to base of neck
- 4 buckets with Polyurethane support

#### CONSUMABLES x 2 YEARS

|         |  |
|---------|--|
| 15-1223 | POLYURETHANE SUPPORT, pack of 4 pcs x2 |
| 15-1211 | SULFONATION FLASK, pack of 4 pcs       |

#### ACCESSORIES ON REQUEST

|            |  |
|------------|--|
| 2470/BC160 | ELECTRONIC BALANCE<br>Range 160 g., readout 0.001, pan Ø110  |
| 1230       | WATER/OIL BATH<br>Structure made of stainless steel, temperature regulation by digital thermoregulator PID with PT100 probe class A and overtemperature alarm, stainless steel heater, cooling coil, motor stirrer, insulated double wall, safety internal level for low liquid with warning lamp. |

#### 1210 UNSULFONATED RESIDUE

