Dual Extraction Apparatus speeds up the determination of lead, acid and salt content and permits parallel analysis.

Brand:APACO
SAA450
IP77 New model

This test method covers the determination of salt in crude oils. For the purpose of this test method, salt is expressed as % (m/m) NaCl (sodium chloride) and covers the range from 0.0005 to 0.15 % (m/m).

- The limit of detection is 0.0002 % (m/m) for salt (as NaCl).
- The test method is applicable to nearly all of the heavier petroleum products, such as crude oils, residues, and fuel oils. It may also be applied to used turbine oil and marine diesel fuel to estimate seawater contamination. Water extractable salts, originating from additives present in oils, are codetermined. A knowledge of water extractable inorganic halides in oil is important when deciding whether or not the oils need desalting. Excessive halide, especially in crude oil, frequently results in higher corrosion rates in refining units.

Summary of Test Method

After homogenizing the crude oil with a mixer, a weighed aliquot is dissolved in xylene at 65°C and extracted with specified volumes of alcohol, acetone, and water in an electrically heated extraction apparatus. A portion of the aqueous extract is analyzed for total halides by potentiometric titration.

DESCRIPTION

Extraction Apparatus, made of SS304 Flask following component parts:

- Boiling Flask SS, 500 mL capacity.
- Hopkins Reflux Condenser, having a vapor outlet connected by a rubber tube to an outside vent or to a suction hood.
- Thistle Tube, approximately 70 mL capacity, with a line to indicate approximately the 50 mL level.
- Supports 4 sets of Flask
- Two independent heater controllers