

Acid Number - Potentiometric Titration - TAN (automatic)

ASTM D 664, IP 177

Product group(s): Grease, Lubricant, Oil

User group(s): Grease, Insulating Oil, Lube Oil, Lubricant, Lubricating Grease, Lubricating Oil

Scope: This method may be used to indicate relative changes that occur in oil during use under oxidizing conditions. Suitable for the determination of acidic constituents in petroleum products, lubricants and transformer insulating oils.

New and used petroleum products may contain acidic constituents that are present as additives or as degradation products formed during service, such as oxidation products. The relative amount of these materials can be determined by titrating with bases.

The acid number is a measure of this amount of acidic substance in the oil, always under the conditions of the test. The acid number is used as a guide in the quality control of lubricating oil formulations. It is also sometimes used as a measure of lubricant degradation in service.

- a user friendly instrument
- provides precise results even for non specialized users
- display of results in mg KOH/g
- Data Logger for the last 50 titration results



Total Acid Number Titrator

More details are mentioned in the "Order Number" section

Technical Data

<u>Differential</u>	- 2 BNC connectors
<u>measurement:</u>	- 1 miniDIN connector (external keyboard)
(inputs & outputs)	- 1 RS232C bidirectional connector (PC, printer, phone)
	- 1 RS232C connector (balance, phone)
<u>Stirrer control:</u>	On/Off and speed, RCA connector
<u>Electrical safety:</u>	EC, EN 61 010, EN 50 081-2 & EN 50 082-2
<u>Temperature max.:</u>	+10 °C to +40 °C
<u>Dimensions:</u>	130 x 160 x 300 mm (WxDxH)
<u>Weight:</u>	approx. 4 kg

Main Unit

17-1800

Total Acid Number Titrator - TAN

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Consisting of:

Enclosure: ABS and enameled steel, 7-key membrane keypad, graphic backlit LCD (128 x 64 dots)
Non-volatile memory: 3 titration programs depending on TAN content, blank titration, clock/calendar
Header text: 2 lines x 40 characters, up to 50 results stored in data logger
Languages: English, Spanish, French, Italian

Supplied with:

1 burette inlet tube with bottle cap (DIN 45 screw)
 1 burette outlet tube with antidiffuser device
 1 support for electrode & tubes with magnetic stirrer & vessel
 2 conical adapters (NS 14/23)
 2 caps for support holes
 1 TLL sample syringe (10 ml)
 3 titration beaker (250 ml)
 1 indicator electrode (pH & Pt) with S7 connector
 1 reference electrode (salt bridge), sleeve diaphragm with S7 connector
 2 cables for BNC connector
 1 vessel to calibrate (50 ml)
 1 Lithium Chloride in Ethanol, 1M-solution (250 ml bottle)
 10 O-rings for valves and pumps

Power Supply: 110-240 VAC, 50-60 Hz

Options & Accessories

16-3301	Thermal Printer (40 columns) RS232 interface
16-3302	Dot Impact Printer 40 columns, RS232 interface
16-3303	Software Kit- TiCom for communication between titrator & PC <u>Consisting of:</u> CD, DB-9 cable, USB licence key
16-3304	Cable to connect a balance <u>Note:</u> please specify pin out

Spare Parts

17-1801	Syringe (TLL SL), 10 ml
17-1802	Electrovalve for burette
17-1803	Titration Vessel, 250 ml, pack of 3
17-1804	Stirrer Bar
17-1805	Indicator Electrode (pH & Pt), with S7 connector

Order Guideline

Minimum equipment: 1x 17-1800
 Additional requirements: