

COLOR Tester AK42



INSTRUCTION MANUAL

2. ACCESSORIES

Items included with the Color Tester:

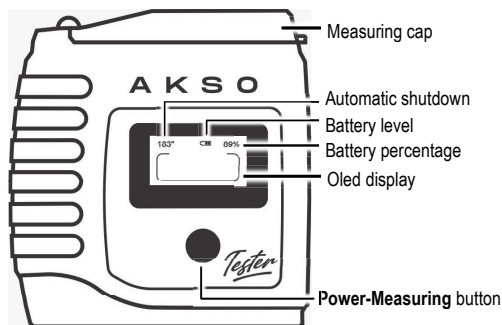
- 2 glass cuvette with lid (Ø18.8 mm x 68mm)AK4551
- 1 cleaning wipe
- 1 plastic case
- 1 instruction manual

Items sold separately:

- Verification standard solution kit (0, 100 PCU) AK4106
- Kit with 5 filters for true color analysis AK4107

Before use, examine the instrument carefully. If you detect any abnormalities, contact AKSO.

3. OVERVIEW



4. OPERATING INSTRUCTIONS

MEASUREMENT

Preparation

- 1) Press the **Power-Measuring** button to turn on the instrument. **Insert reference** will appear;
- 2) Wash the glass cuvette with distilled or deionized water;
- 3) Fully fill the cuvette with ultrapure water (12ml) of 0PCU;
- 4) Close the cuvette with its cover;
- 5) Clean and dry the outer wall of the cuvette, using a cleaning wipe or soft towel paper, to eliminate residues, grease and moisture the may interfere with the measurement;
- 6) Insert the cuvette into the measuring compartment of the instrument;
- 7) Measuring alignment: for better accuracy insert the cuvette with the volume indication forward;
- 8) Close the measuring cover over the glass cuvette to avoid interference in readings;
- 9) With the instrument in the VERTICAL position, briefly press the button, the message **Analyzing reference** will appear on the display;
- 10) Wait until the display displays the **Insert sample** message;

Reading – Apparent Color

While **Insert sample** is on the display:

- 11) Open the measuring cover and remove the cuvette from the compartment;
- 12) With the aid of the syringe, collect at least 15mL of the sample to be analyzed;
- 13) With the sample in the syringe, fill in the glass cuvette (12ml);
- 14) Close the cuvette with its cover;
- 15) Clean and dry puter wall of the cuvette using a cleaning wipe or soft towel paper;
- 16) Insert the cuvette into the measuring compartment;
- 17) Measuring alignment: for better accuracy insert the cuvette always in the same position;
- 18) Close the measuring cover on the glass cuvette to avoid interference in the readings;
- 19) Briefly press the **Power-Measuring** button and wait. The display will display the Message Analyzing Sample, followed by the measurement result in PCU;
- 20) At the end of the measurement, discard the sample analyzed and immediately wash the glass cuvette with the distilled or deionized water.

NOTE:

- To obtain true color measurement values it is necessary to filter the sample to be measured using a membrane filter before reading.

5. CONFIGURATION

ACCESS AND NAVIGATION

- To access the instrument's configurable parameters menu, with the instrument off, briefly press the **Power-Measuring** button during the start-screen display, hold the **Power-Measuring** button, the display will display **CONFIGS** and options;
- To navigate between parameters that can be configured, briefly press the button;
- To access a parameter, hold down the **Power-Measuring** button;
- To confirm a setting. Hold down the button and the instrument will return to parameter selection;
- To return to a previous level or measurement mode, select **Back**, and hold down the button.

SETTINGS

ADJUSTMENT – measurement adjustment

- **Manual** – adjustment of the reading curve at the points (0, 100, 300, 500 PCU)
Note: You must adjust at all points.
- **Factory Standard** – restore the adjustment of the factory reading curve

LANGUAGE – language selection

PORTUGUESE, ENGLISH, SPANISH and ITALIAN.

6. MAINTENANCE

BATTERY INSTALLATION/REPLACEMENT

When the display displays Dead Battery, replace the battery as described below:

- 1) Switch off the instrument by holding down the **Power-Measuring** button until the display is switched off;
- 2) Remove the base clamping screw at the bottom of the instrument using a *Phillips* wrench;
- 3) Undock the base of the meter by pulling it carefully;
- 4) Remove the used battery from the compartment and disconnect it from the clip;
- 5) Connect the new battery in the clip and snap it into the compartment;
- 6) Replace the base of the instrument, observing its correct position;
- 7) Replace the *Phillips* screw by tightening it without forcing it.

BATTERY AND ELECTRONICS DISPOSAL



This product contains a battery and electronic components. Do not dispose of them with other common household waste. Please deliver them to the designated collection point as per local guidelines.

Important: Proper disposal of electronics and batteries prevents negative consequences for the environment and, consequently, for human health!

For more information about the service and/or waste disposal location, please contact your municipal government.

ERROR MESSAGES

MESSAGE	CAUSE	SOLUTION
Discharged battery	Battery without charge	Replace the battery
Low battery		
Concentration exceeded	Sample outside the measuring range of the instrument.	Perform a new reading within the measuring range of the instrument.
Inverted samples	Error in the measurement procedure.	Perform a new reading following the measurement procedure.
Damaged sensor	Failure to communicate with the sensor.	Contact Akso Technical Support.

Go to the product page on the Akso website and make sure your manual version is up to date.

1. SPECIFICATIONS

- **Measuring range:** 0 to 500 PCU
- **Resolution:** 1PCU
- **Accuracy:** ± (10PCU + 5% of reading)
- **Adjustment:** 4 points (0, 100, 300, 500)
- **Sample temperature:** 15 to 35 °C
- **Volume for analysis:** 12mL
- **Light source:** Light emitting diode
- **Wavelength:** 455nm
- **Measuring cell:** Glass cuvette
- **Automatic shutdown:** After 2 minutes
- **Display:** Oled
- **Languages:** English, Spanish, Italian and Portuguese
- **Operating temperature:** 0 to 50 °C
- **Operating humidity:** 10 to 90 % UR (non-condensing)
- **Power supply:** 9Vdc (1 battery 9V)
- **Dimensions (WxHxD):** 73 x 77 x 40 mm
- **Weight:** 120g (with battery)
- **Method:** Platinum-cobalt colorimetric method

IMPORTANT!

1PCU = 1Pt-Co = 1uH = 1uC



This instrument comes with a 2-year* warranty against manufacturing defects and a 6-month* warranty for the sensor/electrode/probe

*Legal warranty included
garantia@akso.com.br

