

# Cooking oil tester testo 270 - Ensure cooking oil quality and save costs



The cooking oil tester testo 270 easily, quickly and reliably determines the quality of cooking oil. To do so, it measures the so-called "Total Polar Material" (TPM) content in the oil and gives it as a percentage. If the oil is aged, it shows an increased TPM value. As a result, qualitatively inferior deep-fried goods are produced. In addition to this, it can contain potentially health-damaging substances. Regular measurement with the testo 270 can prevent this. The use of the measuring instrument also prevents too early replacement of the cooking oil. That reduces the cooking oil consumption by up to 20 %.

The new testo 270 stands out thanks to its ergonomic design, which prevents the direct exposure of the hand to the hot oil. The clear alarm via the coloured backlit display makes it even easier to evaluate the quality of the cooking oil: Green means the TPM content is OK. Orange: TPM value is borderline. Red: TPM value exceeded. The TPM limit values can also be individually defined, and can, like other instrument configurations, be protected from inadvertent alteration by a PIN.

### **Technical data / Accessories**

### testo 270

Cooking oil tester testo 270 in a case, with reference oil, short instructions, full instruction manual and training card, as well as calibration protocol and batteries



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Sensor type	Testo cooking oil sensor, cap.
	(%TPM); PTC (°C)
Measuring range	0.0 to 40.0 %TPM +40 to +200 °C
Accuracy ±1 digit	±2 %TPM (+40 to +190 °C)* ±1.5 °C *(typical, refers to Testo-internal reference, at ambient temperature 25 °C)
Resolution	0.5 %TPM 0.1 °C

#### **General technical data**

Cooking oil operating temperature	+40 to +200 °C
Storage temperature	-20 to +70 °C
Operating temperature	0 to +50 °C
Dimensions	50 x 170 x 300 mm
Weight	255 g
Display	LCD, 2-line, backlit
Battery type	2 AAA micro batteries
Battery life	approx. 25 h continuous operation (corresponds to approx. 500 measurements )
Housing material	ABS / ABS-PC fibre glass 10%
Reaction time	Approx. 30 s
Protection class	IP65
Calibratability	On-site calibration with reference oil ISO calibration by TIS
Alarm function	Upper and lower TPM limit value freely adjustable, visual alarm via 3-colour display backlighting (green, orange, red), values and illumination flash in the display until the measurement is ended (Auto Hold)

Accessories for measuring instrument	Part no.	
Storage case for testo 270	0516 7301	
Reference oil for calibrating and adjusting the cooking oil tester testo 270 (1 x 100 ml)	0554 2650	
ISO calibration certificate analysis; Calibration points approx. 3 %TPM and approx. 24 %TPM at 50 °C	0520 0028	

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# Multi-purpose infrared and penetration thermometer

# testo 104-IR - Multi-scanning with penetration control

Ideal for applications in the food sector

One product, two purposes: Infrared and penetration thermometer

Fits into any pocket thanks to folding mechanism

High-quality, robust folding joint for tough working use

Precise 2-point laser with 10:1 optics shows the exact measurement area, allowing error-free measurements

Emissivity freely selectable

Watertight (IP65) and HACCP-compliant



The testo 104-IR is a waterproof (IP65) penetration thermometer combined with an infrared sensor for noncontact temperature measurement. It can be used for all sorts of applications in the food sector. The testo 104-IR scans the surface temperature of individual foods or entire goods pallets without contact, particularly in the Incoming Goods department. If a limit value is exceeded or undershot, the hinged penetration probe is also able to measure the core temperature.

The multi-purpose instrument is handy and practical, because it fits into any jacket pocket. The penetration probe



is always securely stowed on the instrument itself. As soon as the probe is opened up, the display is activated. And the IR measurement starts at the touch of a button. Thanks to the large display, it is really easy to read the measurement result.

The few buttons are self-explanatory and any user will find it easy to operate them. No time-consuming measurements, no complicated handling, no compromises. Supply consumers with exclusively flawless goods using the testo 104-IR.



## **Technical data**

### testo 104-IR

testo 104-IR, infrared/penetration thermometer, waterproof, folding, incl. batteries and calibration protocol

Part no. 0560 1040



# Accessories

	Part no.	
ISO calibration certificate/temperature for air/immersion probes, calibration point -18°C	0520 0061	
ISO calibration certificate/temperature for air/immersion probes, calibration point 0°C	0520 0062	
ISO calibration certificate/temperature For air/immersion probes, calibration points -18°C; +60°C	0520 0043	
ISO calibration certificate/temperature for air/immersion probes, calibration points -18°C; 0°C; +60°C	0520 0001	
ISO calibration certificate/temperature infrared thermometers, calibration points -18°C, 0°C, +60°C	0520 0401	
ISO calibration certificate temperature Infrared thermometers, calibration points 0°C, +60°C	0520 0452	

Sensor type	NTC
Measuring range	-50 to +250 °C
Accuracy	±1 °C (-50.0 to -30.1 °C)
±1 digit	±0.5 °C (-30.0 to +99.9 °C)
	±1% of m.v. (+100 to +250 °C)
Resolution	0.1 °C/°F/°R
Response time	t <sub>99</sub> = 10 s (measured in moving liquid)
Sensor type	Infrared
Measuring range	-30 to +250 °C
Accuracy	±2.5 °C (-30.0 to -20.1 °C )
±1 digit	±2.0 °C (-20.0 to -0.1 °C)
	±1.5 °C or ±1.5% of m.v. (remaining range)
Resolution	0.1 °C
Measurement rate	0.5 s
Optics	10:1 + opening diameter of the sensor (12 mm)
Meas. spot marking	2 point laser
Spectral range	8 to 14 µm
Emissivity	0.10 to 1.00 (0.01 steps)
Laser marking	on / off
General technical dat	a
Measurement value	temperature °C/°F/°R
Measurement mode	Hold or auto hold (immersion probe)
Operating temperature	-20 to +50 °C
Storage temperature	-30 to +70 °C
Battery type	2 AAA micro batteries
Battery life	10 h (at +25 °C)
Display	LCD, single line, illuminated, with status line (°C, °F, °R, battery, hold/auto hold, min, max, laser, measurement, emissivity)
Protection class	IP65
Dimensions	281 x 48 x 21 mm (probe folded out) 178 x 48 x 21 mm (probe not folded out)
Probe length/diameter Probe tip diameter	106 mm / Ø 3 mm 32 mm / Ø 2.3 mm
Housing material	ABS / TPE / PC, diecast zinc, stainless steel
Weight	197 g (incl. batteries)
Standard	EN 13485