



KELSIUS



Cooking Oil Tester and App

Cooking oil costs continue to increase year on year. For every food business this now represents a significant cost that needs to be managed effectively, while always ensuring a consistently safe standard of cooking oil quality.

Improve oil quality and reduce costs

The Cooking Oil Tester works with the Kelsius Oil Pro App which captures and stores all your cooking oil data in one easily accessible location from any web-enabled device. The system allows you to:

- cut cooking oil costs by up to 35% while ensuring you serve only the best quality food by maintaining your oil in its best condition.
- reduce cooking oil costs by extending the life of the oil while maintaining oil quality.
- eliminate unnecessary oil changes and reduce your operating costs.
- reduce your CO₂ emissions by eliminating unnecessary oil collection and oil disposal.

Multi-site operators can compare site performance and site cooking oil costs. Benefits include:

- Providing an objective measure of your oil quality on one site or across all sites.
- Oil data that drives operational efficiencies across all sites.
- Providing a simple solution for storing waste disposal documents.
- Easy to access and easy to audit waste disposal records.
- Eliminates paper records and paper record storage costs.



KELSIUS

The Cooking Oil Tester from Kelsius is a portable measuring instrument designed to quickly detect the aging of frying oil. The TPM value (total polar material) reflects the deterioration of edible oil due to high temperature during the frying process.

The tester uses the change in capacitance value to determine the TPM content by unit of percent (%). The Cooking Oil Tester performs the following measurement tasks:

- Displays the temperature value of the frying oil: Accurately indicates the actual oil temperature of frying oil and corrects the accuracy of self-contained thermometer of the frying pan.
- Displays TPM value: An indication of the degree of deterioration of frying oil.

How it works

Edible oil is an important source for energy and nutrition and an important raw material for processed foods. Fried foods are popular with consumers for their unique flavour. Edible oils used for frying undergo a series of physical and chemical changes during high-temperature frying, which produce substances that are harmful to health.

The Cooking Oil Tester is a fast, safe and efficient quality detector for edible oil that quickly detects the content of polar compounds in edible oils. This product can be used in high oil temperature environments and is suitable for quality inspections of various fried edible oils.

Total Polar Materials (TPM)

Total Polar Materials (TPM) is a method used to determine the degradation of frying oil. TPM refers to all products present in frying oil due to oxidation processes, including free fatty acids, products of low molecular weight decomposition, and polymerised substances. The EU has adopted a value of 25 to 27% as the acceptable upper limit for fats and oils.

Individual customers may choose to set their own values for upper and lower limits. Limits may vary by oil type.





KELSIUS

Standard Operating Procedure:

- Heat the oil to between 50°C – 200°C.
- Switch on tester using the power button.
- Immerse tip of the tester in the oil.
- Stir around in the oil.
- Read the measurement.

- Green Light <20% TPM Fresh oil, continue to use.
- Amber Light 20% to 24% TPM Questionable oil. Remove solids and continue to use but monitor closely.
- Red Light >24% TPM Old oil. Dispose of oil.



Signal Lamp

NextStep



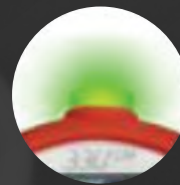
immerse



stir



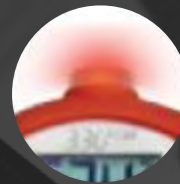
read



fresh oil



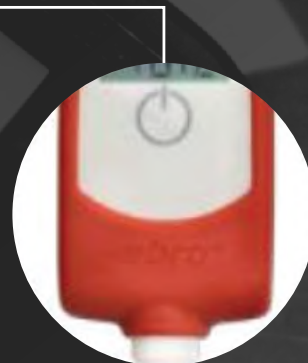
questionable oil



old oil



FOM 330-4 with four visible buttons for frequent changes of the settings



FOM 330-1 with four visible buttons for frequent changes of the settings

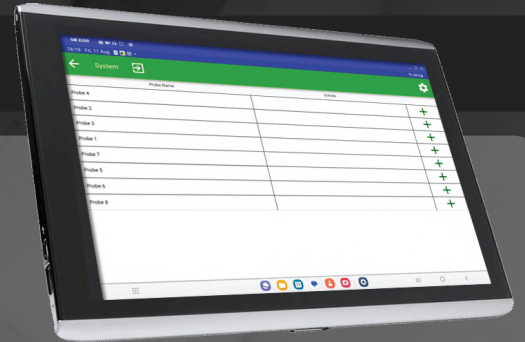


KELSIUS

Technical Data:

Measurement range: Oil 0 % - 40 % TPM
(oil temperature of +50°C to +200°C / +122°F to +392°F)

Accuracy: Oil resolution - Oil typically $\pm 2\%$ 0.5 % $\pm 1^\circ\text{C}$



Get in Touch:

www.kelsius.com

sales@kelsius.com

Tel. UK: 02045 799 048

Tel. IRL: 074 916 2982



KELSIUS



KELSIUS

www.kelsius.com

