

# Shelf-life studies

## OXITEST

Chemical reactions occurring between atmospheric oxygen and food sensitive components are some of the most important causes of quality alteration of foods and feeds. Specifically, the auto-oxidation of the lipids (rancidity) is recognised as one of the main factors which affects food shelf life (commercial duration).

For this purpose, has developed the OXITEST, an innovative instrument, able to provide the lab operator with high added value information related to the lipids oxidation in samples of foods, oils and fats.



The determination of the oxidation stability of samples (solid, doughy or liquid), in order to determine their quality or to determine their state of preservation is made directly on the whole sample, without preliminary fat separation.

The operational activities are extremely simple and intuitive and allow time-saving for the lab operator.

The evaluation of oxidation stability can be accelerated, using comparatively high temperatures (20 - 110°C), in the presence of a measurable oxygen pressure. Useful information is obtained by recording the decrease of oxygen pressure, since oxygen is consumed during fat oxidation.

The instrument is equipped with 2 separate titanium oxidation chambers in order to analyze the same sample in duplicate or to analyze different samples at the same time and in the same working conditions. Up to 2 instruments can be operated from a single PC with USB connection.

The software controls the entire operation in a user friendly way. The operator can visualize the data recorded in a database, compare tests, export the data to an Excel file, filter and order the data.

**Market sectors:** food and feed industries, fats and oils manufacturers, research centres.

**Fields of application:** oxidation stability of oils, fats or of food and feed samples, rapid comparison among different product formulas or verification of different lots of the same raw material, studies on food packaging, evaluation of the effectiveness of different antioxidants, oxidation stability of fuels generally known as biodiesel.

### Technical data:

#### GENERAL FEATURES

Number of oxidation chambers:	2
Capacity single chamber:	up to 100 ml
Interface:	USB
Power:	900 W
Power supply:	230 V / 50-60 Hz
Weight:	16.5 Kg
Dimension (WxHxD):	365x190x485 mm

#### PERFORMANCES

Temperature range:	from room temp. to 110°C
Pressure range:	0 -8 bar

**SAFETY**

Overpressure:

safety valve

Out-range temperature:

visual alarm

Damaged probe:

visual alarm

**Complete of** ■**10002948**Oxitest  
software**10003134**

USB cable

**10001985\***

6 Sample holder

**10001984\***

4 spacer

\*the code is referred to a single piece

**Seller:**

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