



The chemistry of bread

Straightforward determination of pH value
and total titratable acidity (TTA) in dough

HIGHLIGHTS

- Control the quality of sourdough starter
- Ensure consistent product quality
- Determination according to AOAC 943.02, 981.12, and AACC 02-31.01 standards

Consistent product quality by monitoring pH and titratable acidity

«The pH value bakes the bread and the titratable acidity makes it taste» is a proverb from the baking industry. Hence, monitoring these two parameters is crucial for consistent product quality.

Why is this so?

The pH value affects enzyme activity in the dough and thus the quality of the crumb. The taste of the bread, however, is largely determined by the ratio of lactic and acetic acid. This ratio can be monitored by determining the total titratable acidity (TTA).

Knowing both parameters (pH value and TTA) you can monitor dough quality for a consistent taste, aroma, and shelf life of your product.

Common pH and TTA values for various kinds of bread

Bread type	pH value	TTA
Wheat bread	5.4 – 6.0	4 – 6
Wheat mixed bread	5.0 – 5.3	6 – 8
Rye mixed bread	4.5 – 4.8	7 – 9
Rye bread	4.3 – 4.7	8 – 10
Rye bread (coarsely ground)	4.2 – 4.6	9 – 14

Eco Titrator – Swiss quality does not always mean expensive

The Eco Titrator offers everything you need for the fast, simple, and reliable determination of the pH value and TTA. Just select the titration method on the touch screen, press «Start», and the Eco Titrator takes care of the rest.

- Easy and convenient thanks to touch display
- Guided workflow prevents missing any crucial analysis step
- Routine and expert mode to protect titration methods from modification
- Results can be printed or stored on a USB memory stick
- Compact and robust design with integrated stirrer and stand for reagent bottle
- Value for money: Swiss quality at a competitive price

Local service and support – worldwide

With the Eco Titrator, you benefit from quality «Made in Switzerland» as well as professional service and support from our local sales organizations – wherever you are.

- Professional application support
- Technical service on site
- 3-year instrument warranty



INFORMATION

Information on analysis

AN-T-219 pH value and TTA in flour, dough, and bread

Ordering information

2.1008.1010 Eco Titrator Acid/Base