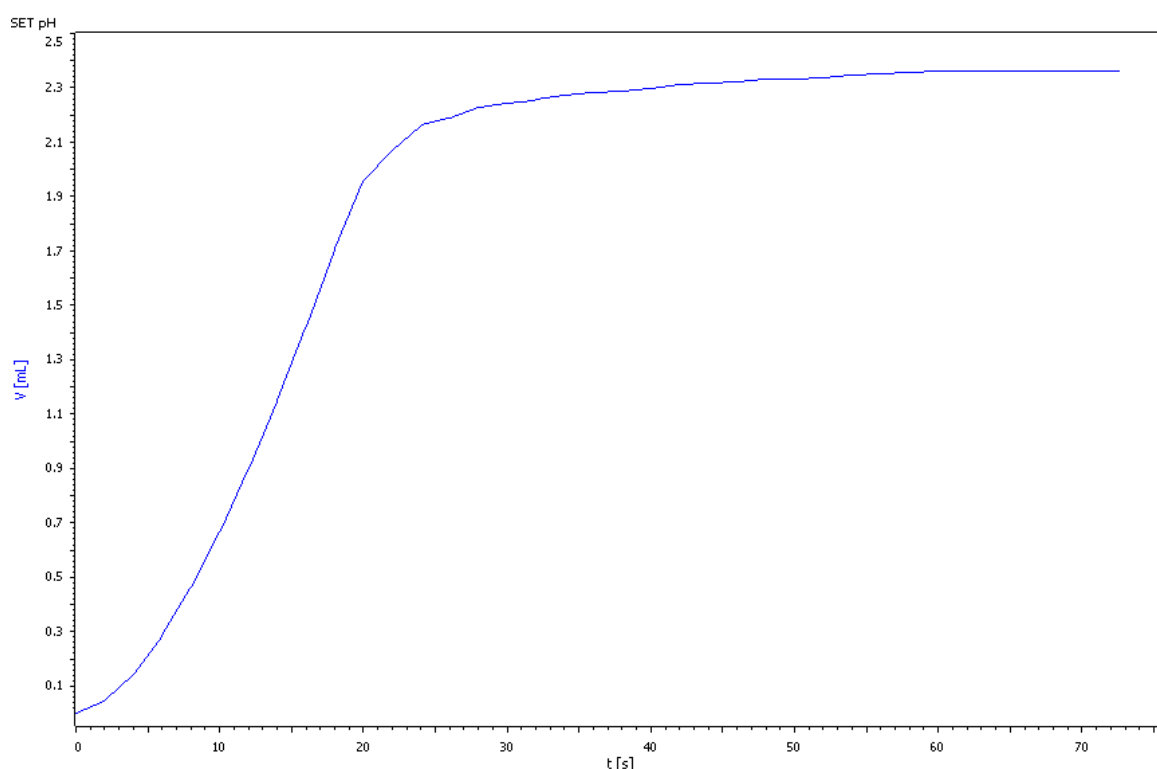


Titration Application Note T-099

# Fully automated determination of acidity in orange juice



The automated system determines acidity in all kind of juice samples. The high degree of automation (e.g., automated calibration, as well as automated titer determination) minimizes errors and guarantees an outstanding reproducibility.

# Method description

## Sample

Orange juice

## Sample preparation

10 mL sample is treated with 40 mL dist. H<sub>2</sub>O and heated until it starts to boil.

## Electrodes

Ecotrode plus	6.0262.100
---------------	------------

## Solutions

Titrant	c(NaOH) = 0.1 mol/L, if possible this solution should be bought from a supplier.
---------	-------------------------------------------------------------------------------------------

## Analysis

After cooling down the beakers with the prepared mixture, the samples are placed on the rack. Then titrate with c(NaOH) = 0.1 mol/L to pH = 8.5. After every sample, the electrode equipment is cleaned while stirring in a special beaker filled with distilled water.

## Parameters

Mode	SET pH
Time interval MP	2.0 s
Endpoint 1 at pH	8.50
Dynamics	off
Max. rate	10.00 mL/min
Min. rate	25.00 µL/min
Stop criterion	Drift
Stop drift	20 µL/min

## Instrumentation

862 Food/Beverage Compact Titrosampler	2.862.1010
-------------------------------------------	------------

or

848 Titropackage Plus	2.848.0110.
-----------------------	-------------

## Results

Parameter	Mean (n = 6)	Rel. standard deviation in %
Acidity	143.76 meq/L	0.34