

## BEST IN CLASS FOR KJELDAHL ANALYSIS

AUTOMATIC DISTILLATION + TITRATION + RESULT CALCULATION



C. Gerhardt presents the brand new flagship of its worldwide successful VAPODEST® line.

VAPODEST 500® is the best option for professional labs emphasizing a safe, reliable and highly flexible instrument, which guides operators interactively through analyses and SOP's and fulfils the highest data management requirements.

Designed for results to fully conform DIN EN ISO, AOAC, EPA, ASTM, EC regulation, APHA, Ph. Eur. 2.5.33 method 7, procedure A.



### UNRIVALED EASE OF USE

- + Smart interactive communication concept: icons and clear text messages
- + Different user levels with clear assigned rights
- + Quick start concept: pre-defined methods, favourite method on top
- + Sample weight import from balance, LIMS or via touch pen, finger, mouse, keyboard
- + Data Logging according to ISO 9001, 17025, GLP
- + Data export to LIMS
- + Back-lit glass components for transparent analysis processes
- + Easy-clean surface

### ECONOMIC

- + Simultaneous distillation and titration saves analysis time
- + Stand-by mode saves energy – next analysis can start at any time
- + Inbuilt workflow management

### ROBUST

- + Designed for high sample throughput and long life
- + Particularly resistant distribution head
- + Maintenance-free steam generator and titrant dosing pump
- + Chemical resistant, corrosion-free housing

### RELIABLE

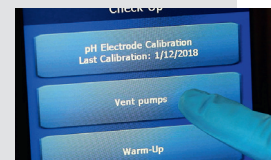
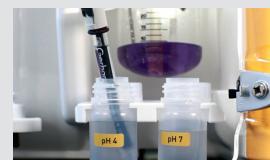
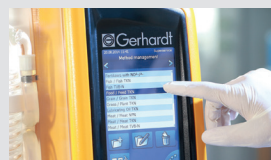
- + Dosing pump for titration can be calibrated acc. to ISO 8655
- + Reagent pumps can be calibrated acc. to lab situation
- + Traceable and transparent process

### SAFE

- + Intelligent supervision of vital functions: cooling water, sample tube, steam generator, tanks
- + Components meet highest safety standards
- + Steam Soft Start function to manage strong reactions and crystallized samples
- + Overcurrent circuit breaker protects system

### FLEXIBLE

- + Huge range of glassware options: tubes 250 ml to 1200 ml and Kjeldahl flasks 250 to 750 ml for maximum analytical flexibility
- + Best for all established Kjeldahl methods, for ammonium, nitrate or TVBN analyses
- + Tank level control set (option) fits standard tanks 5L, 10L and 20L, frees lab personnel from dangerous decanting of chemicals
- + Additional sodium hydroxide can be manually added during distillation





## TITRATION - PRECISION WORK

The integrated titration unit developed by C. Gerhardt evaluates the analysis by means of potentiometric, automatic end point detection using a pH combined electrode. The titration solution is metered by a high-precision, almost wear-free micro dosing pump made of ceramic that can be calibrated.

- ✦ Minimal flow rate deviation
- ✦ Virtually unlimited service life
- ✦ Flow rate can be calibrated
- ✦ Online titration for quicker analyses
- ✦ pH measurement for maximum accuracy and transparency
- ✦ Time saving: no daily calibration required
- ✦ Cost saving: no indicator or ph-adjustment of boric acid required

## ACCESSORIES

Tanks, level sensors for tanks, catalyst tablets, different sizes of glassware and many more accessories are available on request.

## APPLICATIONS

Benefit from our analytical know how and our comprehensive C. Gerhardt Application Data Base.

## SERVICE

Our authorized, well-trained, C. Gerhardt partners offer service and maintenance for your Gerhardt System according to our guidelines.

## TECHNICAL INFORMATION

Technical Specifications	VAP 500
Integrated titration	yes
Variable steam power	10 - 100 %
Size of Display	7 inch, 480x800 pixel, touchscreen
Stand-By-Mode	Yes
Distillation time / sample	2 - 4 min
Recovery	> 99.5 %
Reproducibility	± 1 %
Detection limit	0.1 mg N absolute
Safety door	Yes
KJELDATHERM®-tube KTG 250/300 ml volume	Standard configuration
Digestion tubes 250, 400, 800 and 1.200 ml can be used	yes
Kjeldahl-flasks 250, 500 and 750 ml can be used	yes
Connection to level control	yes
Level sensors for tanks	Optional
Cooling water pressure	0.5 - 6 bar
Nominal voltage*	230 V, 50 Hz
Nominal wattage	2200 W
Weight	approx. 39 kg
Dimensions (W x D x H)	527 x 390 x 697 mm
Pre-defined methods	Yes
Customer defined methods	Yes
Pump calibration	Yes
Order-no. VAPODEST® 500	12-0500

\* Other voltages on request

Since 1846  
C. Gerhardt



EN ISO  
9001:2008

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Technical details correct as from 08/2018  
Later modifications possible