Kjeltec[™] 8100 distillation unit

Semi-automated distillation for Kjeldahl analysis



Kjeltec[™] 8100 is a semi-automated distillation unit designed primarily for Kjeldahl analysis, but widely used for many different distillation chemistries.

A versatile solution that reduces operational costs

A self-adjusting cooling water system saves water and reduces cost, while long-life components ensure minimal downtime. Corrosion-free materials and alkali resistant plastic splash head/tube draining vessel secure long instrument lifetime.

Innovative features and built in safety

Ensure safe operations with patented SAFE feature for safe distillation of samples that form salt cakes and bellow pumps for accurate reagent dispensing. A variable output steam generator broadens the application area to other volatile components.

Automatic dispensing of reagents

Automatic dilution, alkali addition, distillation and tube emptying provides ease of use. Pre-programming of reagent addition and distillation time supports the production of accurate results independent of operator.





Sample type

Raw materials and finished products in food, feed and agriculture

Parameters

Nitrogen, protein

Technology

Semi-automated distillation for Kjeldahl and other nitrogen based chemical analysis.

Approvals

Officially approved (AOAC, EPA, DIN, ISO) for simplified validation

Specifications

Performance data at 230 V	
Analysis time	3.5 minutes at 30 mg N (6.5 minutes at 200 mg N)
Distillation capacity	~ 40 ml/min at 230 V (at 100% steam addition)
Measuring range	0.1 – 210 mg N
Reproducibility	1% RSD (including the digestion step)
Recovery	> 99.5% at nitrogen levels between 1 – 200 mg N
Tube draining	200 ml in less than 10 seconds
Reagent pump volumes	0 – 150 ml in steps of 10 ml
Delay	0 – 1800 seconds
SAfE (Patented)	0 – 15 seconds
Variable steam addition	30-100 % in steps of 10 %

Installation requirements	
Power supply	200 – 240 V 50 – 60 Hz
Tolerable voltage variation	± 10 %
Power consumption	2 200 W
Water consumption (during distillation only)	3 I/min at water temp of 25°C* 1 I/min at water temp of 15°C *Circulating Cooler recommended at >25°C
Ambient temperature	5 - 40°C
Ambient humidity	max. 80% relative
Drain	For cooling water only
Weight net	35 kg
Dimensions (w×d×h) cm	48 × 58 × 69

Accessories

- Titration unit complete, 50 ml
- Basket for 20 receiver flasks (250 ml)
- Receiver flasks, 250 ml (set of 10)