

Kjeltec™ 8400 analyser

Kjeldahl analyser with optional Kjeltec 8420 and 8460 auto samplers for food and feed



Kjeltec™ 8400 is a fully automated Kjeldahl analyser with self-cleaning colorimetric titration and optional auto samplers for fully unattended operation of up to 60 samples. Take your protein and nitrogen analysis to new levels of efficiency with renowned accuracy, cost effectiveness and safety.

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 bellows pumps for accurate reagent dispensing. A variable output steam generator broadens the application area to other volatile components.

Easy data handling

Compass software provides easy data-handling and reporting. Register samples and track results online for improved operations and traceability. Works perfectly with your LIMS system.

Sample type

Raw materials and finished products in food, feed and agriculture

Parameters

Nitrogen, protein

Technology

Kjeldahl and other nitrogen based chemical analysis.

The superior performance of a FOSS Kjeldahl titration system is based on colorimetric measurement of a precise chemical reaction for end-point detection.

Approvals

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

Specifications

Performance data at 230 V	
Autosampler capacity	Kjeltec™ sampler 8420, 1 rack with 20 Kjeldahl tubes 250 ml or 400 ml Kjeltec™ sampler 8460, 3 racks with 20 Kjeldahl tubes 250 ml or 400 ml
Storage capacity	40 batches (with Compass unlimited)
Analysis time	3.5 minutes at 30 mg N (6.5 minutes at 200 mg N)
Distillation capacity	~ 40 ml/min
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
Burette volume	35 ml
Burette resolution	2.4 µl/step
Delay	0 – 1800 seconds
SAfE (Patented)	0 – 15 seconds

Installation requirements			
Power supply	200 – 240 V 50 – 60 Hz		
Tolerable voltage variation	± 10 %		
Power consumption	2200 W		
Water consumption (during distillation only)	3 l/min at water temp of 25°C* 1 l/min at water temp of 15°C		
Ambient temperature	5 - 40°C		
Ambient humidity	max. 80% relative		
Drain	For cooling water only		
	Kjeltec™ 8400	Sampler Kjeltec™ 8420	Sampler Kjeltec™ 8460
Weight net	35 kg	71 kg	89 kg
Dimensions (w x d x h)	48 x 58 x 69 cm	64,5 x 84 x 90 cm	100 x 80 x 90 cm

*Circulating Cooler recommended at >25 °C

Accessories

- Compass, PC software for Kjeltec™ 8400 Analyser unit
- Tank for titrant, complete with tubing
- Burette Dosing device for calibration of burette
- Top loaded level sensor for waste tank
- Top loaded level sensor for reagent tank
- Tank 20 l (Alkali/water/waste) without level sensors.
- Level sensor kit for waste
- Level sensor kit for reagents
- Adapter for Büchi tubes
- Handling device for digestion tubes

FOSS

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