Automatic Kjeldahl Titration Analyzer, 0.1-240 mg N, 3-8 min/Sample, Color Sensor Endpoint

Model **MSKJA-S1306SWISS** | Brand **Master Science**





The Automatic Kjeldahl Titration Analyzer runs the full Kjeldahl distillation and titration sequence automatically to determine nitrogen, protein content and cation exchange capacity. It adds alkali and acid, distills, titrates, discharges waste, cleans the titration cup, calibrates, checks faults, monitors reagent levels, calculates results and generates test reports without operator intervention.

KEY HIGHLIGHTS

- Hands-Off Testing
- Objective Endpoint
- Fast Results
- Full Traceability

AT A GLANCE

0.1-240 mg N	3-8 min per sample
MEASURING RANGE	MEASURING SPEED

Request a Quotation
Contact us for pricing, configuration options and delivery details.

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Overview

A high-precision 16-bit RGB color sensor detects the titration endpoint, with automatic or manual color calibration. The Automatic Kjeldahl Titration Analyzer measures 0.1-240 mg N in 3 to 8 minutes per sample with ≥ 99.5% recovery and ≤ 0.5% repeatability error, stores 1,000 complete data sets and shows the process live on a color touch screen.

> For indicator titration done by hand, see our Kjeldahl Distillation Analyzer, a simpler partner to the Automatic Kjeldahl Titration Analyzer.

> Manual Kjeldahl titration causes the issues below. The Automatic Kjeldahl Titration Analyzer resolves each one.

Overview

- 16-bit RGB color sensor endpoint detection
- Automatic or manual color calibration
- High-precision titration system with integrated plunger

Key Benefits

Hands-Off Testing
Dosing, distillation, titration, waste discharge and cup cleaning are all automatic.

Objective Endpoint
A 16-bit color sensor reads the indicator color change.

Fast Results
3 to 8 minutes per sample with automatic calculation.

Full Traceability
1,000 complete data sets and generated test reports.

Technical Specifications

UNDEFINED

Brand	Master Science
Model Number	MSKJA-S1306SWISS
SKU	MSKJA-S1306SWISS
Measuring Range	**0.1-240 mg N**
Measuring Speed	3-8 min per sample
Recovery Rate	≥ 99.5%
Repeatability Error	≤ 0.5%
Sample Amount	Solid ≤ 5 g; liquid ≤ 25 mL
Endpoint Detection	16-bit RGB color sensor
Steam Flow Setting	0-100% (enhanced version)
Distillation Time	0-99 min, continuously adjustable
Distillation Delay	0-999 min
Cooling Water Consumption	≥ 1.5 L/min
Data Storage	1,000 complete test data sets
Display	Color LCD touch screen
Dosing Pump	PTFE bellows pump
Power Supply	AC 220 V ±10%, 50 Hz
Power	1800 W
Dimensions	420 × 365 × 720 mm
Net / Gross Weight	40 kg / 43 kg
Package Size	530 × 480 × 950 mm

PROBLEMS THE AUTOMATIC KJELDAHL TITRATION ANALYZER SOLVES

Subjective color endpoints	A color sensor detects the endpoint objectively.
Many manual handling steps	Dosing through cleaning is automatic.
Running out of reagents mid-test	Reagent levels are monitored.
Manual result calculation	Results are calculated and reported automatically.

Applications

Protein determination in food and feed

Soil and fertilizer nitrogen testing

- **Cation exchange capacity measurement**
- **Pharmaceutical and chemical nitrogen analysis**
- **Environmental and research laboratories**

Automation

- Automatic alkali and acid addition
- Automatic distillation and titration
- Automatic waste discharge and titration cup cleaning
- Automatic calibration, fault detection and calculation

Steam Generator and Safety

- Automatic preheating, refilling and pressure control
- Dry-burn protection; pressure, temperature and dual level sensors
- Safety door and tube position monitoring
- Cooling water flow monitoring with automatic stop

Interface and Construction

- Color touch screen with live process display
- PTFE bellows pump
- Splash-proof polymer bottle
- Transparent acrylic protective cover

Standard Accessories Included

- Automatic Kjeldahl titration analyzer main unit

Optional Accessories

- No optional accessories are listed for this model; contact our team for compatible items.