Automatic Kjeldahl Analyzer

Product Introduction

Kjeldahl method is to convert nitrogen-containing organic matter into inorganic ammonium nitrogen sulfate

The protein can be obtained by multiplying the measured value of nitrogen content by a certain coefficient

Quality content. This method is defined as the current method for the determination of protein content in food

National standards and internationally accepted methods for determination of nitrogen

The instrument is designed according to the principle of Kjeldahl method for nitrogen determination

The system can be used for the determination of nitrogen or protein content.

KN580 KN680

Parameters and configuration

Instrument type	Kn580 Automatic Kjeldahl nitrogen determinator	Kn680 Automatic Kjeldahl nitrogen determinator
Determination range	0.1-220mgn (mg nitrogen)	00.1-220mgn (mg nitrogen)
Measuring speed	Routine 3-5min / sample	Routine 3-5min / sample
Titration accuracy	Titration 1 μ L / step0.1-	Coarse titration 1 μ L / step fine titration 0.016 μ L / step
Sample weight	Solid ⩽ 6G liquid ⩽ 20ml	Solid ⩽ 6G liquid ⩽ 20ml
Reproducibility	0.3% relative error	0.3% relative error
Rate of recovery	Over 99.5% 1-220mgn	Over 99.5% 1-220mgn
Automaticity	Automatic water dilution, automatic alkali addition, automatic boric acid addition, distillation titration and calculation, programmable control, automatic printing results	Automatic water dilution, automatic alkali addition, automatic boric acid addition, distillation titration and calculation, programmable control, automatic printing results
Titration while distillation	Matching	yes
Interface	——	USB LAN RS232 WIFI
Compatibility	Ammonium nitrogen	Ammonium nitrogen, optional: high nitrogen, nitrate nitrogen
Nitrogen pipe emptying	Matching	automatic
Automatic titration	35KG The method of judging the end point of color according to AOAC standard	The method of judging the end point of color according to AOAC standard
Storage capacity	Data storage > 100000 solution storage > 10000	Data storage > 100000 solution storage > 10000
Power voltage	Power: 1800W working voltage AC220V 50Hz	Power: 1800W working voltage AC220V 50Hz
volume	500mm * 450mm * 750mm	500mm * 450mm * 750mm
weight	35KG	35KG

To configure

Host set

Performance characteristics

Test automation

Add acid, alkali, distillation, titration, result calculation and printout, automatic sample measurement

Sample explosion-proof boiling

The methods of sample dilution and alkali addition can be set arbitrarily according to the different samples of users, so as to prevent the sample from bursting and boiling and improve the measurement accuracy.

Alkali pump anti crystallization

The self-developed alkali pump anti crystallization technology solves the problem of alkali pump crystallization and improves the reliability of the instrument

Steam adjustable

Steam pre adding mode, steam flow rate (1-100%) can be adjusted automatically, so as to achieve better distillation effect and ensure the accuracy of the experiment

Two mode titration

Double mode titration is adopted, and the combination of coarse and fine titration will ensure the high accuracy of the results; the titration method conforms to AOAC, EPA, DIN, ISO and other certification methods,The titration shall be conducted by the officially recognized color titration method

Accurate judgment of end point

End color user fine tuning technology and end color learning technology ensure the adaptability of accurate test and show more human care

Empty the titration cup

After the sample distillation, the instrument automatically completes the emptying of the residual waste liquid in the sample tube, and the titration cup automatically discharges and cleans the waste liquid

Authority and tracking

Set up five login accounts, three-level permission settings, operation log with tracking function, and test results can be traced

Security protection

Multiple intelligent protections, such as digestive tube in place detection, safety valve, condensate detection, steam generator overheating, overpressure protection, liquid level detection, etc., ensure the instrument and operator Staff safety

Applicable standard

GBT 5511-2008 GB 5009.5-2010	Determination of nitrogen content and calculation of crude protein content in cereals and legumes by Kjeldahl method Determination of protein in food
GBT 5009.44-2003	Analysis method of hygienic standard for meat and meat products volatile base nitrogen
GBT 18868-2002	Rapid determination of water, crude protein, crude fiber, crude fat, lysine and methionine in feed by near infrared spectroscopy
GBT 6432-1994	Determination of crude protein in feed
GBT 8088-2008	Natural rubber and natural latex -- Determination of － N content
GBT5511-2008	Determination of nitrogen content and calculation of crude protein content in cereals and legumes by Kjeldahl method
GBT8572-2010	Compound fertilizers -- Determination of total nitrogen content -- Titrimetric method after distillation
GBT 22923-2008	Determination of nitrogen, phosphorus and potassium in fertilizer by automatic analyzer
GBT10511-2008	Nitrophosphate determination of total nitrogen content titrimetric method after distillation
GBT17767.1-2008	Methods for the determination of organic-inorganic compound fertilizers Part 1: total nitrogen content
NY/T295-1995	Determination of cation exchange capacity and exchangeable base in neutral soil
LY/T1243-1999	Determination of cation exchange capacity of forest soil
HJ 717-2014	Soil quality -- Determination of total nitrogen -- Kjeldahl method

Automatic Kjeldahl Analyzer

Product Brief

Kjeldahl method is to convert nitrogen-containing organic matter into inorganic ammonium nitrogen sulfate The protein can be obtained by multiplying the measured value of nitrogen content by a certain coefficient Quality content.This method is defined as the current method for the determination of protein content in food National standards and internationally accepted methods for determination of nitrogen The instrument is designed according to the principle of Kjeldahl method for nitrogen determination Thesystem can be used for the determination of nitrogen or protein content.

KN780

Parameters and configuration

Serial number	Instrument type	Kn780 Automatic Kjeldahl nitrogen determinator
One	Determination range	0.1-220mgn (mg nitrogen)
Two	Measuring speed	Conventional 3-5min / sample, nitrate nitrogen 30min / sample
Three	Titration accuracy	Coarse titration 1 μ L / step fine titration 0.016 μ L / step
Four	Sample weight	Solid ≤ 6G liquid ≤ 20ml
Five	Reproducibility	0.3% relative error
Six	Rate of recovery	Over 99.5% 1-220mgn
Seven	Automaticity	Automatic water dilution, automatic alkali dosing, automatic boric acid dosing Distillation titration and calculation programmable control automatic printing results
Eight	Titration while distillation	yes
nine	Interface	USBLANRS232WIFI
1ten	Compatibility	Ammonium nitrogen high nitrogen nitrate nitrogen
eleven	Nitrogen pipe emptying	automatic
Twelve	Automatic titration	The method of judging the end point of color according to AOAC standard
Thirteen	Storage capacity	Data storage > 100000 solution storage > 10000
Fourteen	Power voltage	Power: 1800W working voltage AC220V 50Hz
Fifteen	volume	500mm*450mm*750mm
Sixteen	weight	35KG

To configure

1main machine

Performance characteristics

Test automation

Add acid,alkali,distillation,titration,result calculation and printout,automatic sample measurement

Sample explosion-proof boiling

The methods of sample dilution and alkali addition can be set arbitrarily according to the different samples of users,so as to prevent the sample from bursting and boiling and improve the measurement accuracy

Alkali pump anti crystallization

The self-developed alkali pump anti crystallization technology solves the problem of alkali pump crystallization and improves the reliability of the instrument

Steam adjustable

Steam pre adding mode,steam flow rate(1-100%)can be adjusted automatically,so as to achieve better distillation effect and ensure the accuracy of the experiment

Double mode titration

Double mode titration is adopted, and the combination of coarse and fine titration will ensure the high accuracy of the results; the titration method conforms to AOAC, EPA, DIN, ISO and other certification methods, The titration shall be conducted by the officially recognized color titration method.

Accurate judgment of end point

End color user fine tuning technology and end color learning technology ensure the adaptability of accurate test and show more human care

Test automation

After the sample distillation,the instrument automatically completes the emptying of the residual waste liquid in the sample tube,and the titration cup automatically discharges and cleans the waste liquid

Authority and tracking

Set up five login accounts, three-level permission settings, operation log with tracking function, and test results can be traced

Security protection

Multiple intelligent protections, such as digestive tube in place detection, safety valve, condensate detection, steam generator overheating, overpressure protection, liquid level detection, etc., ensure the instrument and operator Staff safety.

Diversity of connections

It can be linked through USB, LAN, RS232 and WiFi, and the data can be stored in the cloud, monitored remotely by mobile app and wechat.

Applicable standard

GBT 5511-2008	Determination ofnitrogen content and calulation of crude protein content in cereals and legumes by Kjeldabl metbod
GB 5009.5-2010	Determination of protein in food
GBT 5009.44-2003	Analysis metbod of bygienic standard for meat and meat products volatile base nitrogen
GBT 18868-2002	Rapid determination of water,crude protein,crude fiber,crude fat,lysine and metbionine in fed by near infrared spectrospy
GBT 6432-1994	Determination of crude protein in feed
GBT 8088-2008	Natural rubber and natural latex--Determination of -Ncontent
GBT5511-2008	Determination of nitrogen content and calculation of crude protein content in cereals and legumes by Kieldabl metbod
GBT8572-2010	Compound fertilizers--Determination of total nitrogen content--Titrimetric metbod after distilation
GBT 22923-2008	Determination of nitrogen,pbospborus and potassium in fertilicer by automatic analyzer
GBT10511-2008	Nitropbospbate determination of total nitrogen content titrimetric metbod after distillation
GBT17767.1-2008	Metbods for the determination of organic-inorganic compound fertilizers Part I:total nitrogen content
NY/T295-1995	Determination of cation excbange capacity and excbangeable base in neutralsoil
LY/T1243-1999	Determination of cation excbange capacity of forest soil
HJ 717-2014	Soil quality--Determination of total nitrogen--Kjeldabl metbod