















## **COMPOSITIONAL ANALYSIS**

FAT CONTENT	TRIGLYCERIDE, OMEGA FATTY ACIDS, CHOLESTEROL, GLYCEROL	TYPE OF FOOD : AVOCADOS, EGGS, FISH, FRIED FOOD, CHICKEN	PAGE 3-4
CARBOHYDRATES, SUGARS	SWEETENERS, SUCROSE, GLUCOSE, STARCH	TYPE OF FOOD : PASTRY, SUGAR, HONEY, BAKERY, CONFECTIONERY (SWEET, CANDIED JELLIES), MUSTARD	PAGE 5-7
FIBRE		TYPE OF FOOD: PEAS, LENTILS, BEANS, BRAN FLAKES, BAKERY, BISCUITS	PAGE 8
PROTEIN	ALBUMIN, HYDROXYPROLINE, CATALASE, PEROXIDASE	TYPE OF FOOD : EGGS, MEAT, DAIRY, FISH, FROZEN VEGETABLES	PAGE 8-10
SALT		TYPE OF FOOD : MEAT, FISH, SEAFOOD	PAGE 11
ANTIOXIDANTS	ACIDITY, VITAMINS, ASCORBIC ACID, (VITAMINS A, C, E), CAROTENE, CITRIC ACID, LACTIC ACID, OXALIC ACID	TYPE OF FOOD: CARROTS, PEACHES, STRAWBERRIES, TOMATOES, CITRUS FRUITS, ARTICHOKES, MANGOSTEENS, DAIRY, CANNED VEGETABLES	PAGE 11
MINERALS	IRON, LEAD, MERCURY, BROMATE, IODATE	TYPE OF FOOD : FLOUR, SEAFOOD	PAGE 12
BACTERIAL ANALYSIS	COLIFORM, PUTRESCINE, MYCOTOXINS), SHELF-LIFE INVESTIGATIONS, GMO : GENETICALLY MODIFIED ORGANISMS (ALLERGENS, PATHOGENS)	TYPE OF FOOD : POTATOES, CUCUMBER, DAIRY, MEAT, CANNED PRODUCTS AND PRESERVES, FISH, GRAIN	PAGE 12-14
ADDITIVES	FLAVOURS, AROMAS, SO <sub>2</sub> , ALGINATE, BETA AGONISTS, CLENBUTEROL, RACTOPAMINE, PHENOLETHANOLAMINE, CURCUMINOIDS, PIGMENTS (CHLOROPHYLLS), DYES (SUDAN YELLOW, RED, BLUE)	TYPE OF FOOD: POTATOES, CUCUMBER, DAIRY, TOMATOES, PARMESAN CHEESE, MUSHROOMS, VANILLA, CHOCOLATE, MEAT, RASPBERRIES, BLACKBERRIES, PAPRIKA, CEREALS	PAGE 15
PESTICIDES	INSECTICIDES, HERBICIDES, FUNGICIDES, DISINFECTANT, ALDRIN, CHLORDAN, DIELDRIN, ENDOSULFAN, ENDRIN, LINDANE, METHOXYCHLORINE, DDT	TYPE OF FOOD : POTATOES, CUCUMBER, DAIRY	PAGE 16
TOXIC CHEMICALS	ALDEHYDE, ACETALDEHYDE, ACRYLAMIDE	TYPE OF FOOD : FROZEN VEGETABLES, POTATO CHIPS	PAGE 16
ANTIBIOTICS	SULFONAMIDE, TETRACYCLINES, NITROFURAN	TYPE OF FOOD : DAIRY, MEAT, PET FOOD	PAGE 16

## **ESSENTIALS**

SAMPLING : AUTOCLAVABLE BAGS, PIPETTES, BOTTLE TOP DISPENSERS

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CONSUMABLES : LOOPS, WEIGHING BOATS, PETRI DISHES, VIALS

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SAFETY : INDIVIDUAL PROTECTION

PAGE 21-23

SMALL EQUIPMENT

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#### **SOLVENT EXTRACTORS**

- Three or six position Randall extractor
- Up to five times faster than Soxhlet
- Independent overheat safety protection
- 50 to 70% solvent recovery
- Extraction time reduced by 20% to 80%
- Determination of oils, fats in water, mud, plasticisers in leather, resins in paper, detergents, soaps, sample preparation before analysis by GC and HPLC.
- · Randall method:
- 1) Sample extraction by immersing the sample cartridge in boiling solvent
- 2) Rinsing the sample in a cooled, recondensed solvent
- Solvent recovery by distillation and collection of the condensed vapours in the upper part. three or six extraction cups are raised simultaneously from the hotplate
- Duration of each phase is programmable 29 empty programs
- Simultaneous display of temperature and remaining analysis time
- Audible alarm at the end of each phase
- Integrated vacuum pump to accelerate the evaporation of heavy solvents during the recovery phase
- RS232 output for data transfer to printer

Cat No.	Position No.	Power, W	Temperature range	Dimensions, mm
10787708	3	500	from 100°C to 260°C	480 x 620 x 390
10536243	6	950	from 100°C to 260°C	700 x 620 x 390



#### **KIT SOXHLET 40ML**

- Each assembly comprises the basic components for solid-liquid extraction:flask/soxhlet extractor/condenser/associated lids and clips
- Choice of seven assemblies with extractor capacities from 20mL to 2,000mL
- Capacity: 40mL
- Material: Pyrex Borosilicate Glass
- Includes: 100mL FR100/3S Flask, EX5/43 Soxhlet extractor, associated lids and clips, CX7/04/SC condenser
- For Use With Application: Ideal for solid-liquid extraction

Cat No.	Description
11976988	Kit Soxhlet



#### **EXTRACT SOXHLET**

- Conforms to BS 2071
- For extracting soluble components or impurities from solids via repeated soaking/siphoning with solvent
- Wide choice of extractors to accommodate most sizes of sample and thimbles
- Accurately formed concentric siphon tube for reliable performance



Cat No.	Capacity (nominal), mL	Socket or flange size	Cone size	Height, overall, mm	Thimble size, mm
11351885	60	34/35	24/29	205	28 x 80
11371885	100	40/38	24/29	220	30 x 100
11381885	200	50/42	24/29	250	41 x 123
12014793	600	75mm	34/35	370	60 x 180

#### **EXTRACTION CARTRIDGE**



- For Soxhlet extractor
- Grade 8 fibreglass extraction cartridge
- No binder

#### **Fisher**brand

Cat No.	Diameter, mm	Length, mm	Pack qty
11734546	25	80	25



# COTTON CELLULOSE EXTRACTION THIMBLES

- Cotton linters, high content of very pure alphacellulose, robust with excellent retention capability
- Suitable for Soxhlet extractions
- Maximum temperature of 120°C



Cat No.	Diameter, mm	Length, mm	Pack qty
11380704	30	80	25
11310714	33	80	25



# SIX POSITION IR EXTRACTION RAMP

- Max. capacity: 1,200W
- Max. surface temperature: 700°C
- L x D x H: 697 x 305 x 122mm
- Weight: 9kg
- Six removable burners
- Independent 0 to 100% power regulators
- Extraction ramp equipped with six burners with independent power regulators. Each burner can be removed from the ramp and used as a standalone device or combined with an independent power regulator
- Optional stainless steel frame available, which can be placed under the ramp to allow fastening of threaded support rods
- Ramp supplied without glassware, stainless steel frame and rod

Cat No.	Description
10204811	Six position ramp

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#### VELP

#### SOLVENT EXTRACTOR HYDROLYSIS UNIT - HU 6

- Ensures conformity with AOAC standard
- No sample transfer no sample loss
- Crucibles go directly into SER 148
- Reduces handling to a minimum
- Automatic extraction of unwanted fraction
- No exposure to vapours
- · Epoxy painted stainless steel structure

Cat No.	Number of samples	Number of programs	Dimensions (WxHxD)	Temperature range
15329484	6	20	355 x 590 x 450mm	from room temp. to 200 °C



#### **ISO-AMYL ALCOHOL**

- Extra pure, SLR
- For determination of fat in milk
- CAS RN: 123-51-3
- Molecular formula: C5 H12 O
- Molecular weight: 88.15



Cat No.	Description	Pack qty
10409360	Iso-amyl alcohol	500mL



Thermo

# HPLC ACCLAIM™ C30 COLUMN

- · Ultrapure, porous, spherical, silica
- High reproducibility
- Compatible with LC/MS
- The Acclaim HPLC columns are based on highly pure silical phases.
- High selectivity and efficiency in both HPLC and LC/MS.
- Several phases available offering higher resolution for applications in the pharmaceutical, environmental and chemical fields and for the agri-food sector

Cat No.	Particle size, µm	I.D., mm	Length, mm
11322003	5	4.6	250

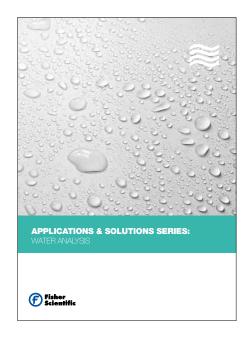


# ANALYTICAL VOLUMETRIC SOLUTION

- AOAC Official Method 941.09 cholesterol in eggs with hydrochloric acid and sodium thiosulfate
- AOAC Official Method 948.13 glycerol in eggs with sulfuric

#### Reagecon

Cat No.	Description	Pack qty
13165519	Hydrochloric acid 6.0N	1L
11573002	Sodium thiosulfate 0.01M	1L
11503032	Sulfuric acid 0.01M	1L



# Food Industry – Is water quality important to your process?

Our Water Analysis brochure features a comprehensive range of high quality and reliable products to collect, store and prepare your sample.

Discover how you can validate a large range of parameters during all steps of your processes.



## **PATAGO**

#### **POCKET DIGITAL** REFRACTOMETER

- Accurate and no risk of reading error
- Automatic temperature compensation
- Rugged and waterproof body (IP 65), can be cleaned directly under running water
- Digital measurement display and battery charge status
- Simplified two-key operation: measurement and calibration with distilled water
- ELI Technology: External Light Interference
- Detection of interference from highly intense external light
- Supplied in convenient carry case
- Resolution: 1 digit
- Max. sample temperature: 75°C
- Sample volume: 0.3 to 0.5 mL
- Response time: 3s
- L x D x H / weight: 55 x 31 x 109mm / 100g

Cat No.	Application	Range	Resolution
11731589	confectionery	0 to 85% Brix 0 to 45° Baumé	Degree Baumé (sugar) ±1°
10325632	water content of honey	12 to 30% Brix	0.1%
10368682		0 to 93% Brix	0.1%
10767914	augar aantant	45 to 93% Brix	0.2%
10404452	sugar content -	0 to 85% Brix	0.2%
10510443		0 to 53% Brix	0.2%



#### **AUTOMATIC RFM 340+** REFRACTOMETER

- Temperature control by Peltier Thermo-Module up to +70°C
- Collector for 700 results
- · Measurement traceability
- Range, % Brix: 0 to 100% Brix
- Refractive index, nD: 1.32 to 1.58 nD
- · Sample volume: 0.5mL
- Temperature control: (ambient 10) to +70°C
- Customised scale: 100
- Temperature compensation and measurement +5 to +70°C
- Sample temperature stability: ± 0.05°C
- Accuracy: ± 0.03°C
- % Brix accuracy: ± 0.01
- Precision, nD: 0.00004
- Interface: 2 two-way RS232 outputs, 1 parallel output for
- W x D x H/weight: 230 x 520 x 290 mm/5.5kg
- Ambient cond. of use: 0 to 40°C, 80% HR max

Cat No.	Description
11731589	Automatic RFM 340+ refractometer



#### **REFRACTOMETER ABBE 5**

- Wide RI range
- Brix Scale
- High Resolution Scales
- Digital temperature display
- · Suited for use where a wide refractive index measurement range is required
- For applications where sample throughput is relatively low
- Operating Temperature: 5 to 70 °C BS
  - Temperature Resolution: 0.1°C
  - Temperature Accuracy: ±1 °C

Cat No.	Range RI	Range °Brix	Resolution RI	Resolution °Brix
11920068	1.30 to 1.70 RI	0 to 95 °Brix	0.0005	0.25 °Brix



#### **ODATAGO**

#### **BRIX HANDHELD** REFRACTOMETER

Display with improved contrast and scale

#### Standard refractometer

One point calibration using a screwdriver in distilled water for refractometers starting at zero, or in a standard solution for the other ranges

#### ATC refractometer

Automatic temperature compensation (ATC) automatically brings the measurement to 20°C. Factory calibrated.

Cat No.	Range % Brix	grad. % Brix	Application	Ø x L, mm	Weight, g
Standard ref	ractometer				
11416148	0 to 20%	0.1%	Soluble oils, fruits, fruit juices, tomato purée, milk, milk beverages, sodas, wines	33 x 204	160
10794367	0 to 33%	0.2%	Grapes, fruit nectars, canned fruits, syrups and starch pastes, yoghurts	33 x 204	160
10247607	0 to 53%	0.5%	Concentrated juice, egg yolks, sauces	33 x 168	120
10314513	28 to 62%	0.2%	Grapes, fruit nectars, canned fruits, syrups and starch pastes, yoghurts	33 x 204	160
10794557	45 to 82%	0.2%	Juice and condensed milk, molasses	33 x 168	120
ATC refracto	meter				
10166374	0 to 20%	0.1%	Soluble oils, fruits, fruit juice, tomato puree, sodas, milk, milk drinks, soft drinks, wines	33 x 204	160
10594585	0 to 33%	0.2%	Grapes, fruit nectars, canned fruits, syrups and starch pastes, yoghurts	33 x 204	160
11476138	0 to 53%	0.5%	Concentrated juice, egg yolks, sauces	33 x 168	120
10484383	28 to 62%	0.2%	Grapes, fruit nectars, canned fruits, syrups and starch pastes, yoghurts	33 x 204	160
11466138	45 to 82%	0.2%	Juice and condensed milk, molasses	33 x 168	120



BS

#### **AUTOMATIC RFM 700** REFRACTOMETER

- Accuracy ± 0.1% or 0.04 %Brix
- User defined scales
- · Agri-food quality control
- · Easy to use with 4 keys: direct reading, calibration, temperature and printing
- 2 user defined scales, automatic temperature compensation adjustable between 5 and 40°C.
- · Robust construction, prism mounted on ultra stainless steel chamber for easy cleaning.
- RS232 output for PC or printer
- Temperature compensation: 10 to 40°C
- W x D x H/weight: 22 x 33 x 15 cm/3.9kg
- Ambient conditions: 5 to 40°C

Cat No.	11914249	11924249	11934249
Model	RFM712	RFM732	RFM742
Range,% Brix	0 to 50	0 to 95	0 to 80
Precision, % Brix	±0.1	±0.1	±0.04
Resolution, % Brix	0.1	0.1	0.01
Response time, s	3.2	4.5	4.5



#### **AR SERIES AUTOMATIC** REFRACTOMETER

- · Temperature control method: external water bath circulator (not included)
- Range, nD: 1.32000 to 1.52000
- Accuracy, nD: 0.00001
- Range, Brix: 0 to 95%
- · Accuracy, Brix: 0.01%
- Sample temperature: 1 to 60°C

Cat No.	Description

11987574 AR series automatic refractometer



#### **Fisher**brand

#### **BATHS, CIRCULATORS,** REFRIGERATED/HEATED

For laboratory and industrial applications

The robust refrigeration system ensures that your samples and applications can be cooled quickly

- Stainless steel tanks for durability and ease of cleaning
- Fine tuned refrigeration metering for excellent temperature stability
- · Cooling capacities up to 250W
- Inlet/outlet connections for external circulation included
- · Work area cover included
- Bath drains are located on the front of the unit

Cat No.	Capacity, L	Temperature range, °C	Stability, °C	Heater, kW	Cooling capacity, W (at 20°C)	Dimensions [w x d x h], mm
11366641	5.4 to 6.5	-20 to +100	±0.05	1.2	250	203 x 417 x 622



## Thermo

#### HPLC HPLC COLUMN, **ACCUCORE**™ 150-AMIDE-HILIC

- Rugged and reproducible 2.6µm solid core particles
- Fast separations with superb resolution
- Low backpressures
- Amide phase bonded onto 150 Å pore diameter solid core particles
- High retention of a broad range of hydrophilic analytes in HILIC mode
- · Recommended for hydrophilic biomolecules such as glycans

#### Specification

- Diameter Outside: 4.6mm
- Surface Area: 80m²/g
- Stationary Phase: Amide Pore Size: 150 Å
- pH Values: 2 to 8
- Particle Size: 2.6µm
- Particle Shape: Spherical Solid-Core
- · Packing [Column]: Spherical, solid core ultrapure silica
- Endcapped: Yes
- Length: 100mm

Cat No.	Description
13435689	Thermo Scientific Accucore column 150-AMIDE-HILIC 2.6 µm range 100mm x



#### ADP410 AUTOMATIC **POLARIMETER**

- · Result in 15 seconds
- For quality control
- Simple operation by way of four graphically identified push buttons including scale and compensation selection, zero calibration, and the displaying of optical density and temperature
- Results may be printed via an RS232 interface.
- · Automatic temperature compensation, can be deactivated for sugar and quartz.
- Two point calibration, zero and custom choice.
- Light source: 589.3 nm LED
- Angle of rotation: -90° to +90°
  - Resolution: 0.01°
  - Precision: ± 0.02°
- Sugar ISS: -225 to +255°Z
  - Resolution: 0.01°Z - Precision:  $\pm 0.05^{\circ}Z$
- Temperature profile 5 to 40°C
- Optical density: 0.0 to 2.0
- L x D x H: 620 x 340 x 150mm

Weight: 9kg

Cat No	Description

11954229 ADP410 automatic polarimeter



### HPLC COLUMNS, SPECIALITY COLUMNS, **ACCLAIM**<sup>TM</sup>



- Hvdrolytic stability at low-pH conditions, optimum for reversed phase retention of organic acids
- Ideal selectivity for separating a wide spectrum of organic acids, including hydrophilic aliphatic acids, C1 to C7 aliphatic acids, aromatic acids, and selected amino acids
- Suitable for analysis of foods, beverages, pharmaceuticals, chemical intermediates, and environmental samples
- Ideal for quality assurance offering fast run times and minimal sample preparation
- · Each column is shipped with a certificate of analysis

#### Specification

- Volume Pore: 1mL/gFlow Rate: 0.2 to 0.5mL/min.
- · Format: Analytical Column
- Length: 150mm
- Packing [Column]: Ultrapure Silica
- Diameter Inside: 2.1mm
- Particle Size Distribution: <1.3
- Surface Area: 300m²/g
- Particle Size: 3µm
- pH Values: 2 to 8
- Pore Size: 120 Å
- Surface Coating: 2.7mmol/m<sup>2</sup>
- Temperature Range: 60°C
- Carbon Load: 17%
- Temperature Operating: <60°C
- For Use With [Equipment]: HPLC

Cat No.	Description
11331943	HPLC column Acclaim™ organic acid reversed-phase 2.1mm x 150mm particle size 3um



BRAND

#### **VOLUMETRIC FLASKS FOR SUGAR ANALYSIS**



- Borosilicate glass 3.3. For Kohlrausch sugar analysis

Cat No.	Capacity, mL	Pack qty
12943011	100	2
10622451	200	2



#### **CERTIFIED CALIBRATION SOLUTION**

- Supplied with UKAS calibration certificate (ISO 17025)
- 12 month shelf life
- Reference temperature: 20°C
- Accuracy: ± 0.00007
- Quantity: 5 vials of 5mL

The calibration oils are used when a strict temperature control is necessary, i.e. by Peltier effect or external water bath. For refractometers operating at high temperatures when the water begins to evaporate.

Typical applications: Confectionery, edible and mineral oils.

Cat No.	nD
Liquid paraffin	
11930068	1.46737
Liquid silicone	
11910068	1.52256
11940068	1.56138



#### Reagecon

#### **15 ML SUCROSE STANDARD SOLUTION**

- Standard solution of sucrose in water
- Supplied with certificate of analysis
- Accuracy: ± 0.02%
- Brix: ± 0.00014 nD
- Reference temperature: 20°C
- Quantity: 15mL
- Standard according to the ICUMSA guidelines
- 12 week shelf life

Cat No.	%Brix	nD
12663076	0.00%	-
12673076	5.00%	1.340264
12683076	7.00%	1.343253
12693076	10.00%	1.347824
12603086	11.20%	1.349682
12613086	11.50%	1.350149
12633086	12.00%	1.35093
12643086	12.50%	1.35093
12653086	15.00%	1.355679
12663086	20.00%	1.363842
12673086	25.00%	1.372328
12613166	30.00%	1.381149
12623166	35.00%	1.390322
12633166	40.00%	1.39986
12643166	45.00%	1.409777
12643166	50.00%	1.420087
12663166	55.00%	1.4308
12673166	60.00%	1.441928



Fisher Chemical

## **LEAD(II) ACETATE BASIC,** 95+%, PURE

- For sugar analysis
- CAS RN: 1335-32-6
- Molecular formula: C4 H10 O8 Pb3
- Molecular weight: 807.72

Cat No.	Description	Pack qty
10224440	Acetate basic, 95+%, pure, for sugar analysis	500g



### **SODIUM HYDROXIDE 0,1M ANALYTICAL VOLUMETRIC** SOLUTION

#### Reagecon

- As per Official Methods of Analysis of AOAC International, 19th Edition, 2012 Volume 2. Dr George W. Latimer, Jr.
- AOAC Official Method 940.30 Starch in Prepared Mustard

Cat No.	Description	Pack qty
11562982	Sodium Hydroxide 0.1M	1L





#### **RAW FIBRE ANALYSER**

- Cold or hot extraction, reproducibility: ± 1%
- Crude fibre according to Weende NF V03-040, ADF, NDF, lignin, etc.
- Fibre according to Van Soest (Bipea XC104 and X9003 method) and Wijkstrom
- No sample transfer

Prior cold extraction for samples whose fat content is higher than 1%. Hot successive extractions to isolate fibres. Electronically controlled infrared heating mantel with reproducibility  $\pm$  1%. Powerful integrated peristaltic pump to empty the crucibles.

Simultaneous closing of crucibles with sintered glass bottom of 40 to 60-micron porosity. Up to 30 tests/day using the Weende method, 60 tests/day with Wijkstrom method.

Supplied with three or six standard crucibles with stand,

Supplied with three or six standard crucibles with stand clamp, air compressor, peristaltic pump, two-way heating magnetic stirrer.

- Sample quantity: 0.5 to 3 g
- Reproducibility: ± 1%.
- W x D x H/weight:
  - 3 position: 530 x 390 x 620 mm/35 kg
  - 6 position: 760 x 390 x 620 mm/46 kg

Cat No.	Description
11765714	Three position fibre Analyser
11775714	Six position fibre Analyser





#### **DIETARY FIBRE ANALYSER**

The system includes a mixing water bath for the delicate enzymatic digestion phase and a filtration unit for the final filtration and washing phase.

- AOAC (Official Methods of Analysis) proposes the enzymatic method 985.29
- Analysis by digesting with thermostable enzymes in foods and animal feeds

#### **High Reliability**

- Non-stop sample mixing for homogeneity
- Constant temperature, no overheating of samples
- Excellent accuracy of ±0.2 °C
- Digital timer for reproducible results

#### Complete System

- Precision, 6-position magnetic stirrer
- Immersion heating head & water bath

#### Practical Benefits

- Transparent water bath for good visibility
- Unattended operation frees lab staff
- Digital display for good precision and observation

12891683 Dietary fibre analyser	Cat No.	Description
	12891683	Dietary fibre analyser

**PROTEIN** 

ALBUMIN, HYDROXYPROLINE, CATALASE, PEROXIDASE

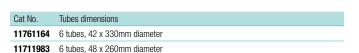
TYPE OF FOOD : EGGS, MEAT, DAIRY, FISH, FROZEN VEGETABLES



#### **DK6 DIGESTER**

- Temperature: 30 to 450°C
- Stability: +/- 0.5°C
- 120 minutes digital timer for elapsed or remaining time and continuous operation









# RECIRCULATING WATER VACUUM PUMP

- Resistant to acid fumes
- Reduce water consumption
- Saves water significantly compared to an aspirator (requires no connection to the tap)
- Suction of acid fumes generated by mineralisation (Kjeldahl, digestion with nitric acid, sulfuric acid)
- Fumes can be neutralised in a glass washbottle or Kjeldahl neutraliser inserted between the mineraliser and pump. Two washbottles are required for the 20 position mineraliser
- Ultimate vacuum: 23 mbar (at 20°C)
- Flow rate: 35 L/min
- W x D x H/weight: 250 x 370 x 400mm/10 kg
- Volume: 10L

Cat No.	Description
11751164	Recirculating water vacuum pump



#### VELP

#### **DISTILLATION UNITS, KJELDAHL, UDK**

ALBUMIN, HYDROXYPROLINE,

CATALASE, PEROXIDASE

- Patented steam generator for constant temperature control
- Unique titanium condenser (patent pending) for high performance and repeatability
- TEMS<sup>™</sup> technology, saves time, energy, money and space

The titanium condenser keeps the distillate always below 35 °C guaranteeing high performance, repeatability, low water consumption and minimal maintenance. The technopolymer splash head reduces breakage, increases efficiency and duration (life and resistance to chemicals).

#### Distillation unit - UDK 129

Automatic addition of soda, selectable distillation time, Devarda delay.

Distillation time: 100mL of distillate in 5min

#### Automatic distillation unit, with titrator connection - UDK 149

Automatic addition of soda, water and boric acid, programmable distillation time, steam generator regulation, 3.5" touch screen, LAN (Ethernet), 2 x USB, RS232 and TTL connection for printer, pen drive, PC and different titrators, Devarda delay. Distillation time: 100mL of distillate in 3min

- Dimensions [w x d x h], mm 385 x 416 x 780
- Reproducibility, % ±1
- $\bullet$  Recovery rate  ${\geq}99.5\%$  at nitrogen levels between 1mg and 200mg N
- Detection ≥0.1mg N
- Electrical supply 230V, 50/60Hz

Cat No.	Display	Methods	Regulation, %	Time	Interface
11795664	LCD	1	-	5min to collect 100mL of distillate	-
11705674	3.5inch touch screen	20	10 to 100	3min to collect 100mL of distillate	Ethernet, 2 x USB, RS232, TTL
Cat No.	Description	Diameter, mm	Length, mm	Capacity, mL	Pack qty
11715654	Test tubes	42	300	300	3
11900114	Test tubes	48	260	300	1
13477659	Test tubes	50	300	400	1
11725654	Test tubes	26	300	100	6



VELP

#### **SCRUBBER**

- Neutralisation with condenser and activated carbon filter
- To be inserted between the mineraliser and the pump to protect it from acid attack.
- Neutralisation in 3 steps:
  - condensation
  - neutralisation by flushing in a basic solution
  - absorption by activated carbon
- Condenser to be connected to the water network
- W x D x H: 330 x 190 x 530mm

Cat No.	Description
11331620	Neutraliseur Scrubber



#### **KJELDAHL CATALYST TABLET**

 The risk of contact with a chemical is significantly reduced when the operator does not have to weigh or pour an active ingredient.



Cat No.	Description	Pack qty
10335950	Sodium sulfate	1,000
10060250	Titanium	1,000
10784181	Copper	1,000



# KJELDAHL CHEMICAL REAGENT

- Chemicals for nitrogen determination
- To digest the sample to analyse



Cat No.	Description	Pack qty
10294290	Phenol, pure, for determination of nitrogen	1L
10645882	Digestion reagent, technical, mixed perchloric acid, selenium dioxide acid	2.5L
10141480	Boric acid solution, pure solution 4% alkaline with indicator	5L



# SODIUM HYDROXIDE SOLUTION 32%

- For analysis, for nitrogen determination
- HDPE plastic bottle



Cat No.	Description	Pack qty
12686767	Sodium hydroxide 32%	1L
12696767	Sodium hydroxide 32%	2.5L



## WEIGHING BOATS, DISPOSABLE, KJELDAHL

- Ideal for weighing and transferring Kjeldahl samples safely and reliably
- Dissolves residue-free in the digestion solution without influencing the analytical results in any way
- Made from very low nitrogen parchment paper without any glue or additives
- Transfer your samples completely loss free by simply dropping the entire weighing boat containing the sample into the acid solution in the Kjeldahl flask/digestion tube.

Cat No.	Thickness, mm	Weight g/m <sup>2</sup>	Pack qty
11393115	0.07	80	100



# DISTILLATION UNIT KJELDAHL COMPLETE

- Convenient assembly of Quickfit<sup>™</sup> glassware for Kjeldahl digestions and distillations
- Flask can be used alone for digestion stage and then fitted to rest of assembly for the distillation process
- Manufactured from heat resistant and chemically durable borosilicate glass

Cat No.	Description
12094607	Distillation unit Kjeldahl



# ANALYTICAL VOLUMETRIC SOLUTION

• As per Official Methods of Analysis of AOAC International, 19th Edition, 2012 Volume 2. Dr George W. Latimer, Jr

#### Reagecon

Cat No.	Description	Pack qty
11526733	Acetic acid 1.0M	1L
11522972	Sodium hydroxide 1M	1L
11464799	lodine 0.1M	1L
11562982	Sodium hydroxide 0.1M	1L



## **Workflow Solutions**

- 10 workflows that cover all applications
- One page on Personal protection offer because your safety is crucial for us
- A list of key products proposed by our main partners





#### **FOOD SALTMETER**

- For salted meat, ham, pork meat..
- Special food control
- Measures the relative salinity of foods: salted or smoked meat e.g. ham, pork, sausage etc. and fish
- Recommended for production monitoring and quality control of products
- . Relative salinity: 0 to 100%
- Resolution: ± 1%
- Accuracy: ± 1%
- W x D x H/weight: 40 x 30 x 94mm/200 g
- Power: 9 V

Cat No.	Description
11748618	Saltmeter



#### Reagecon

## SALT ANALYSIS REAGENTS

- As per Official Methods of Analysis of AOAC International, 19th Edition, 2012 Volume 2. Dr George W. Latimer, Jr.
- AOAC Official Method 937.09 salt (chlorine as sodium chloride) in seafood



Cat No.	Description	Pack qty				
Reagecon reagents						
<b>10487700</b> Silver nitrate, 0.1N standard solution 1L						
Fisher Chemical reagents						
11494779	Ammonium thiocyanate 0.1M Ph Eur reagent	1L				

**ANTIOXIDANTS** 

ACIDITY, VITAMINS, ASCORBIC ACID, (VITAMINS A, C, E), CAROTENE, CITRIC ACID, LACTIC ACID, OXALIC ACID



#### SI Analytics

#### TITROLINE™ 7000 **AUTOMATIC TITRATOR**

- High resolution pH/mV input + input for temperature.
- Polarised electrode 'dead stop' measuring input
- Stored standard methods: VFA/alkalinity, TA/TAC, total acidity in drinks, etc.
- Manual titrations and distributions are also possible.
- Bright and luminous colour display allowing you to read profiles
- Related reagent and dosing unit data is stored and secured
- Simplified use with a touch keyboard.
- Includes 3 x USB outputs and 2 x RS232 outputs to connect accessories such as a USB drive to store methods and data, agitator, laboratory balance, computer and other SI Analytics
- Accurate display of titration curves and the first derivative curve.
- The values of the equivalence points are displayed directly on the titration curve.
- Control using Titrosoft 3.0
- pH/mV input and reference electrode: 1
- Input for temperature measurement (2 x 4 mm plugs): yes
- Number of customised methods: 50
- Connection to a balance: RS232
- Resolution of the burette: 10,000
- Titration endpoint (EP), pH and mV: 2 EP
- Dynamic and linear titration with equivalence point (EQ), pH and mV: 2 EQ

Cat No. Description

TitroLine™ 7000 automatic titrator 13446979



# ACCLAIM™ RSLC AND C30

#### Reversed-phase columns:

Acclaim 120 C18: High-density, monolayer C18 reversed-phase columns for exceptional resolution in a variety of applications. Acclaim 30: Designed to provide high shape selectivity for separation of hydrophobic structurally related isomers.



Applications examples:

- For carotenoid profiles, antioxidants from artichoke
- · Carotenoids in tomato
- · Xanthones in mangosteen pericarp

**HPLC COLUMNS** 

Cat No.	Description		
11351863	Column LC Acclaim RSLC 120, C18, 3µm analytical, (3 x 150mm)		
11311913	Column LC Acclaim RSLC 120, C18, 2,2µm analytical, (2,1 x 100mm)		
11372003	Column LC Acclaim C30, 3µm analytical, (3,0 x 150mm)		



#### **EUR. PH. REAGENT**

- AOAC Official Method 932.05 Citric Acid in Milk
- AOAC Official Method 937.05 Lactic Acid in Milk and Milk

#### Reagecon

Cat No.	Description	Pack qty		
11484729	<b>11484729</b> Eur. Ph. Reagent potassium permanganate solution			
11444719 Eur. Ph. Reagent phosphotungstic acid solution 100		100mL		
11434819	Eur. Ph. Reagent 0.5M sulphuric acid	1L		



#### Reagecon



#### **REAGENTS**

- As per Official Methods of Analysis of AOAC International, 19th Edition, 2012 Volume 2. Dr George W. Latimer, Jr.
- AOAC Official Method 956.03 bromates and lodates in white and whole wheat flour
- AOAC Official Method 973.35 lead in evaporated milk
- AOAC Official Method 999.11 lead, cadmium, copper, iron, and zinc in foods
- AOAC Official Method 972.25 lead in food
- AOAC Official Method 972.23 lead in fish
- AOAC Official Method 990.04 mercury (methyl) in seafood

Cat No.	Description	Pack qty			
Reagecon	Reagecon reagents				
11454729	1L				
11596763	Analytical volumetric solution hydrochloric acid 1.0N, 1.0M	1L			
11576803	Analytical volumetric solution nitric acid 1.0N, 1.0M	1L			
11573002 Analytical volumetric solution sodium thiosulphate 0.01N, 0.01M		1L			
Fisher Chemical reagents					
10306190	Sodium hydroxide, standard solution for volumetric analysis, solution 0.5M, (0.5N)	1amp			
10558620	<b>D558620</b> Sulfuric acid, pure, solution 2M, (4N), bench reagent 1k				
10030350	10030350 Sodium acetate trihydrate, for analysis, crystal				

#### **BACTERIAL ANALYSIS**

COLIFORM, PUTRESCINE, MYCOTOXINS...), SHELF-LIFE INVESTIGATIONS, GMO: GENETICALLY MODIFIED ORGANISMS (ALLERGENS, PATHOGENS)

TYPE OF FOOD

POTATOES, CUCUMBER, DAIRY, MEAT, CANNING AND PRESERVES, FISH



# Discover our new Life Science minisite!

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# PRIMEQ REAL-TIME PCR\* SYSTEM

- Single white LED light source ensures consistent power output
- A PMT (photomultiplier tube) detector ensures accurate detection of photons as the raw data for analysis
- Flexible scanning mechanism allows partial plate-reads to save time
- Multiplex capability, with four paired excitation and emission filters. Universal system
- Quansoft<sup>TM</sup> software is easy-to-use and flexible, with unlimited free licences for installation on multiple PCs
- Block format: 96 x 0.2mL
- Block uniformity at 50°C: Better than ± 0,3°C
- Temperature range: 4 to 98°C
- Sample volume, µL: 15 to 50
- Fluorescence excitation range: 470-650nm (standard filters are centred at 485, 530, 580 and 640nm)
- Fluorescence detection range: 500-710nm (standard filters are centred at 520, 560, 615 and 685nm)

	Cat No.	Description
10030350 PrimeQ real-time PCR system		PrimeQ real-time PCR system

\* Polymerase Chain Reaction (PCR) is a process covered by patents owned by Hoffmann-La Roche



#### TECHNE

# THERMAL CYCLERS, qPCR PRIME PRO 48

- Trust your results with ±0.1°C uniformity typically 5x better than the competition
- 40 cycles in 40 minutes ramp rate average 5.5°C/sec heating and cooling
- Adaptive LED control never saturate the detector, never get crosstalk, always maximise the range of detection
- · Four colour multiplex

<b>15393155</b> Prime Pro 48 Real Time PCR System, includes Accessories and Software (Pro and ProControl)



#### PCR SYSTEMS†, STEPONE™ REAL-TIME

- 96 wells for higher throughput
- · Four colours for more flexibility
- VeriFlex<sup>™</sup> block technology for thermal cycling flexibility
- Ultra-compact footprint to fit any lab
- Perform fast PCR reactions in less than 40 minutes
- Remote monitoring and email notification for convenience and time-savings

Cat No.	Description
15341295	StepOnePlus Real-Time PCR system
12170012	StepOne Real-Time PCR system, desktop

<sup>†</sup>Not available in Italy, Ireland and Portugal



TECHNE

# PRIME PRO qPCR REAGENT KITS

- World's largest choice over 400 qPCR detection / speciation
   liter
- Kits are lyophilised (freeze dried)
- Ambient shipping, reduced cost and complexity
- 1 protocol covers all DNA kits
- 150 reactions per kit
- Suitable for all qPCR instruments
- Store at ambient temperature, stable for 18 months
- Each kit available with and without mastermix

Cat No.	Description
15310708	CaMV 35S promoter and NOS terminator in GM Maize (without Mastermix)
15310858	Listeria monocytogenes (with Mastermix)
15350858	Salmonella enterica (with Mastermix)
15301208	Cryptosporidium (without Mastermix)
15330808	All Legionella species (with Mastermix)



**Fisher**brand

# PIPETTOR TIPS, UNIVERSAL FIT, RACKED, STERILE

- Flush fit inserts sit flush with rack, allowing easy multichannel pipetting
- Notched clasp designed to prop lid up for autoclave venting
- Sure stack lid rim prevents racks from sliding around
- Safe lock latch allows for one-handed opening and closing ability and won't pop open when dropped
- Sure snap design securely holds insert in place, preventing it from being lifted out while pipetting
- Flip-lid can be either a hinged or lift off lid; hinged format does not prevent use of multichannel pipettor

Cat No.	Description	Volume, μL	Colour	Inner pack qty	Pack qty
11913466	Micropoint tip, graduated at 2.5µL, extended length	0.1 to 10	Clear	96	960



# PIPETTORS, VARIABLE VOLUME, FINNPIPETTE™ F1



- Silver (Ag+) ions create an antimicrobial surface that inhibits growth or bacteria, microbes and fungus
- 'Set and forget' pipetting button enables easy volume adjustment and rotates freely when not in locking position
- Finger rest can be adjusted 120° for optimal pipetting position
- Light, smooth pipetting action enables better results over longer periods
- Super blow out piston with volumes of 50µL and below ensures delivery of micro drops
- Proprietary soft touch tip ejection minimises forces needed for tip ejection
- Volume range, μL: 10 to 100
- Accuracy, %: ±2.5 to 1.0
- Precision, %: 2.0 to 0.5

Cat No.	Increments, µL	Finntip™	Colour code
11847391	0.2	Flex 200, 250 Univ. 300, 200 Ext	Yellow



## **stuart**

#### **COLONY COUNTER, SC6 PLUS**

- · Pressure sensitive counting
- Average count facility
- Bright white energy saving LED lighting
- With BioCote antimicrobial protection
- Audible confirmation
- · Choice of light or dark background
- · Connectivity to printer or computer
- Display 3 digit LED
- Count 0 to 999
- Dimensions, external [w x d x h], mm 310 x 300 x 140
- Weight: 1.5kg

Cat No.	Description
11983044	Colony counter, SC6 PLUS





#### **OXIDATION STABILITY** REACTOR OXITEST

- Prediction of the oxidative stability during shelf-life studies tests the product at defined time intervals; builds an experimental curve
- Evaluation of the adequacy of storage conditions
- Evaluation of the best packaging solution
- · Comparison of the oxidative stability of different formulas for food preparations
- Evaluation of the oxidative stability of vegetable oils of different botanical origin
- Evaluation of the effectiveness of antioxidants
- Information on product oxidation when the oxidation flex is not visible especially useful for products with a low fat content (4-5%) product oxidation can be achieved by combining the OXITEST with GC
- · Oxidative stability test of incoming raw materials and outgoing finished products

Cat No.	Description			
11743479	Oxidation stability reactor Oxitest			



#### **Fisher**brand

#### **WATER BATHS**

- Temperature range from ambient to 99.9°C
- Temperature stability ±0.1°C and temperature uniformity ±0.05°C at 37°C
- Reciprocal oscillation from 30 to 200 oscillations per minute
- Bright LCD controller with icon driven menu
- Stores three preset temperatures
- · Automatic timer with option to set time to start procedure
- Global voltage one part number works anywhere in the world
- · Audible alarms help protect your work
- · Includes stainless steel gable cover, shaking tray

Cat No.	Description
15385877	Water bath, general purpose, 10L





#### **CLIMATE CHAMBER ICH110**

- · Capacity: 108L
- Temperature Range: -10 to 60°C
- Accuracy: 0.1°K
- Controller Type: Multi-functional digital PID-microprocessor controller
- Resolution: 0.1%
- Display Type: Twindisplay
- Humidity Range: 10 to 80%
- Frame Material: Stainless Steel
- Resolution [Temperature]: 0.1°C • Sensor Types: 2 Pt100 Class A in 4-wire circuit
- Temperature Sensor: 2 Pt100 Class A in 4-wire circuit
- Internal Material: Stainless Steel
- Alarm Type: Audible and visual
- Includes: 2 Fluorescent lights with UV lamps (spectral range of 315 to 400nm), 4 fluorescent lights with cold white light (standard illuminant D65, 6.5K)
- Dimensions, interior H x W x D: 480mm x 560mm x 400mm
- Dimensions, exterior H x W x D: 1233mm x 745mm x 634mm

Cat No.	Description
13406606	Climate chamber ICH110



#### **HYDROCHLORIC ACID** 1,0M 1,0N

- · As per Official Methods of Analysis of AOAC International, 19th Edition, 2012 Volume 2. Dr George W. Latimer, Jr.
- AOAC Official Method 996.07 Putrescine in canned tuna and cadaverine in canned tuna and dorado (mahi-mahi)

#### Reagecon

Cat No.	Description	Pack qty
11596763	Hydrochloric acid 1.0M 1.0N	1L



Thermo

Fast separations with excellent resolution and sensitivity. Lower backpressures so that UHPLC is not required. Retention and Resolution of Polar Analytes. Polar Endcapped C18 Stationary Phase for Alternative Selectivity. Ideal for Highly Aqueous Mobile Phases

- Solid core particles for fast separations with superb resolution
- Wide range of phases to meet all your separation needs

**ACCUCORE AQ UHPLC** 

- Exceptionally rugged and easy to use columns
- Particle size: 2.6µm • Length: 100mm

COLUMN

- ID : 2 1mm

Cat No.	Description
11387481	Accucore AQ UHPLC column



## Thermo scientific

#### INCUBATOR, MICROBIOLOGICAL

#### sate

- Safe view of samples through internal glass door, without impact on temperature
- Safe conditions with superior temperature uniformity
- · Safe containment with automatic overtemperature alarm
- Alarm in case of temperature deviations

#### Easy

- Easy temperature setting with intuitive user interface
- Easy to remove 'One Click' shelf system
- Easy to clean interior with rounded corners
- Easy to read large display

#### Efficient

- Efficient small footprint to optimise bench top space
- Conveniently stackable without the need for tools or stacking kits
- Efficient utilisation of interior with flexible shelf system
- Incubators are supplied with two shelves

Cat No.	10529070	10839810	10744262	10202120	10212120	10150070
Model No	IGS60	IGS100	IGS180	IMH60	IMH100	IMH180
Capacity, L	75	117	194	66	104	178
Power rating, W	300	520	710	850	1,100	1,300
Current, A	3.7	2.3	3.1	3.7	6.1	5.7
Dimensions, external [w x d x h], mm	530 x 565 x 720	640 x 565 x 820	640 x 738 x 920	530 x 565 x 720	640 x 565 x 820	640 x 738 x 920
Dimensions, internal [w x d x h], mm	354 x 414 x 508	464 x 414 x 608	464 x 589 x 708	354 x 414 x 508	464 x 414 x 608	464 x 589 x 708
Mass, kg	40	51	65	45	56	70

#### **ADDITIVES**

FLAVOURS, AROMAS, SO<sub>2</sub>, ALGINATE, BETA AGONISTS, CLENBUTEROL, RACTOPAMINE, PHENOLETHANOLAMINE, CURCUMINOIDS, PIGMENTS (CHLOROPHYLLS), DYES (SUDAN YELLOW, RED, BLUE)

TYPE OF FOOD

POTATOES, CUCUMBER, DAIRY, TOMATOES, PARMESAN CHEESE,
MUSHROOMS, VANILLA, CHOCOLATE, MEAT, RASPBERRIES, BLACKBERRIES
PAPRIKA, CEREALS

#### **ELECTRODES, ORP/REDOX**







All Thermo Scientific Orion™ ORP electrodes come with a 1m cable and BNC connector

	Cat No.	Description	Body material	Applications
	10101361	Combination redox/ ORP electrode with SureFlow <sup>™</sup> reference system	Ероху	For use in water, wastewater, metal plating, and biotech samples
	10672831	General purpose, combination redox/ ORP electrode	Glass	For use in water, wastewater, metal plating and organic solvent samples



# ANALYTICAL VOLUMETRIC SOLUTION SODIUM HYDROXIDE 0.1N 0.1M

#### Reagecon

- As per Official Methods of Analysis of AOAC International, 19th Edition, 2012 Volume 2. Dr George W. Latimer, Jr.
- AOAC Official Method 992.28 (1 3)(1 4)-Beta-D-Glucans in Oat and Barley Fractions and Ready-to-Eat Cereals

Cat No.	Description	Pack qty
11562982	Analytical volumetric solution sodium hydroxide 0.1N 0.1M	1L



## Thermo SCIENTIFIC

#### **ACCLAIM™ HPLC COLUMNS**

Acclaim 120, C30 and Polar Avantage are based on high-purity, porous silica particles (2.2µm, 3.0µm, 4.5µm), with advanced and innovative column bonding technologies.

Mixed-Mode columns provide a unique, adjustable selectivity tool, using variation in pH, ionic strength, or organic modifier to influence the separation selectivity of acids, bases, zwitterions and neutral molecules.

Cat No.	Description	Determination
11391943	Trinity P1, 3µm analytical, (2.1 x 100mm)	Sodium and glutamate in food
11381883	120, C18, 3µ m analytical, (3 x 75mm)	Vanilla extract,
11311793	120, C18, 5µm analytical, (4.6 x 150mm)	Sudan dyes in paprika
11351963	Mixed-mode WCX-1 3x10mm 5µm	Beta-agonists from pork
11361863	Polar Advantage, 3µm analytical, (3 x 150mm)	Clenbuterol, ractopamine and phenolethanolamine in meat
11372003	C30, 3µm analytical, (3.0 x 150mm)	Anthocyanins in raspberry
11322003	C30, 5µm analytical, (4.6 x 150mm)	Carotenoids and chlorophylls in vegetables



Thermo scientific

#### **COLUMN GC/MS TRACEGOLD™**

- Low polarity phase
- Low bleed
- Exceptional inertness
- Phase 5% diphenyl / 95% dimethyl polysiloxane
   Temperature, max., °C 330 to 350
- USP category G27

Cat No.	Description	Column I D mm	Film thickness, µm	Lenath mm	determination
10584685	•	0.25	0.25	30	Pesticides in cucumber



#### **COLUMN GC TRACEGOLD™**

- For acrylamide analysis in potatoes
- Equivalent to USP G14, G15, G16, G20, G39



Cat No.	Description	Column I.D., mm	Film thickness, µm	Length, mm	determination
10477714	TG-WAXMS	0.25	0.25	30	Acrylamide in potato chips

**TOXIC CHEMICALS** 

ALDEHYDE, ACETALDEHYDE, ACRYLAMIDE



Thermo scientific

#### **CAPILLARY COLUMNS,** TRACEGOLD™ TG-WAXMS,

- Polar phase, polyethylene glycol
- Low bleed
- Excellent thermal stability
- Phase polyethylene glycol (PEG)
- Temperature, max., °C 240 to 260
- USP category G14, G15, G20, G39

Cat No.	Column I.D., mm	Film thickness, µm	Length, mm
10477714	0.25	0.25	30



#### **ANALYTICAL VOLUMETRIC SOLUTION**

- As per Official Methods of Analysis of AOAC International,
- 19th Edition, 2012 Volume 2. Dr George W. Latimer, Jr.

   AOAC Official Method 956.06 Aldehydes as Acetaldehyde in Frozen Vegetables

#### Reagecon

Cat No.	Description	Pack qty
11553002	Analytical Volumetric Sodium Thiosulfate 0.05N, 0.05M	1L
11516793	Analytical Volumetric Solution Iodine 0.1N, 0.05M	1L

**ANTIBIOTICS** 

SULFONAMIDE, TETRACYCLINES, NITROFURAN

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## Thermo scientific

#### **HPLC ACCLAIM™ COLUMNS**

- Ultrapure, porous, spherical silica
- Novel and proprietary surface chemistries for diversified selectivities
- High efficiencies with symmetrical peak shapes
- Low silanol activity for good basic analyte peak shapes
- Reliable manufacturing process with thorough testing for reproducibility
- LC/MS compatible
- Other sizes available

Cat No.	Description	Column I.D., mm	Particule size, µm	Length, mm	Determination
11321793	120, C18, Analytical	4.6	5.0	250	Sulfonamide antibiotic residues in milk
11341803	Polar Advantage, Analytical	4.6	5.0	250	Tetracyclines in pork
11321913	RSLC 120, C18, Analytical	2.1	2.2	50	Nitrofuran antibiotics from pet food



#### SAMPLE DIPPERS, POLYSTYRENE, STERILE, WITH CAPS



Cat No.	Colour	Handle length, mm	Capacity, mL	Pack qty
11738938	Blue	200	30	50
11798848	Blue	385	100	100
11758938	Blue	330	250	50
11729352	Clear	200	30	50
11788848	Clear	385	100	100
11748938	Clear	330	250	50



## GOSSELIN'

#### SAMPLE DIPPERS, POLYPROPYLENE, STERILE, WITH CAPS

• 40mL, 125mL and 180mL with polyethylene screw cap

90mL is all polypropylene with hinged snap cap
Blue coloured polypropylene containers for enhanced visibility,
ideal for use in the food industry. Designed for sample collection
and dispatch for testing in the same container, eliminating cross
contamination risks. Polypropylene handle, 240mm length,
removeable, once sample has been collected and container
closed. Sterile and individually wrapped in sealed zipper bags
(shelf life printed on each bag).

Cat No.	Capacity, mL	Dimensions, mm	Pack qty
15408804	40	70 x 30	250
11773154	90	80 x 40	150
15488794	125	70 x 50	100
15498794	180	100 x 50	100



#### **SPOON**

- Traceability on each bag
- Sterile 10<sup>-3</sup>
- Material: Polystyrene
- Colour: White



Cat No.	Capacity	Length, mm	Pack qty
11847363	2mL	125	1,000
11713114	8mL	150	1,000



#### KNIFE

- Traceability on each bag
- Sterile 10<sup>-3</sup>
- Material: Polystyrene
- Colour: White



Cat No.	Length, mm	Pack qty
11718623	175	1,000



### **CUTLERY, MULTIFUNCTION**

- Traceability on each bag
- Sterile 10<sup>-3</sup>
- Material: Polystyrene
- Colour: White



Cat No.	Length, mm	Pack qty
11728623	180	1,000



**Fisher**brand

# BAG STOMACHER FOR MODEL 400

- Homogeniser bags for all types of Stomacher machines and other paddle blenders
- Sterile by irradiation with peel away sterilisation certificate
- Model 400 bags available in a range of different sleeve/pack sizes, with full or side filter, with 50mm white writing strip along one long edge
- Material: Polyethylene
- Thickness: 70µm
- Sterile: Yes
- Colour: Natural
- Width: 190mmDimensions (L x W): 300 x 190 mm

Cat No.	Capacity, mL	Pack qty
11857403	400	1,000



**Fisher**brand

#### BAG CLIP STOMACHER FOR ALL MODELS POLYETHYLENE

- Material: Polyethylene
- · Colour: Blue/white
- · Length: 300mm
- For Use With Equipment: Blender Bag

Cat No.	Description	Pack qty
11522882	Bag clip Stomacher for all models polyethylene	200



burkle

# SAMPLER, TUBUS, FOR POURABLE BULK GOODS

Sampler for pourable bulk goods of up to approx. 1cm in diameter. This makes it possible, for example, to sample nuts, coffee beans, tea, grain or similar items from large sacks.

- · Ideal for coarse-grained bulk goods
- Made of stainless steel V4A (1.4404)
- · Special tip geometry
- Autoclavable: Yes
- Certifications/Compliance: DIN ISTA Standard
- Diameter: 40mm
- Length: 40cm
- Material: Stainless Steel V4A
- Warranty: 5Years

Cat No.	Description	Pack qty
10515423	Sampler, Tubus, for pourable bulk goods	200



#### **SAMPLER, MILK POWDER**

- Stainless steel V4A (1.4404)
- Insertion depth 385mm
- Outer diameter approx. 28mm
- Autoclavable: Yes
- Length: 480mm
- Certifications: DIN, IDF
- Developed initially for milk powder samples



Cat No.	Capacity, mL
10496693	150



burkle

# CLOSE-IT FOOD CONTROL SEAL

Close-it Food provides an effective seal preventing leakage, even after sampling.

- Accords to FDA Guidelines
- Particularly suited for the food and pharma industry
- Size 95 x 95mm
- The labels are supplied in handy rolls, 500 labels per roll
- The cross perforations allow each label to be cleanly detached from the roll
- Colour: Red

Cat No.	Description	Pack qty
12060872	Close-it food control seal	500



burkle

# HAND DRILL, QUALIROD CONICAL

A conically shaped hand-drill, with sharp cutting edges and a solid handle. Ideal for cutting out samples for quality control from soft, paste-like substances (cheese, butter, clay, soap, wax, etc.).

- Stainless steel V2A (1,4301)
- Sterilisable
- According to EN/ISO 707
- Weight: 0.2kg
- Certifications: EN/ISO 707

Cat No.	Depth, mm
10690543	120



#### **BOTTLE, WIDE MOUTH, HDPE**

- Higher temperature-use rating than LDPE up to 120°C (248°F) for short periods and 110°C (230°F) for continuous use
- Brittleness temperature at -100°C (-148°F)
- Bottles may be radiation, EtO or chemically sterilised
- Not autoclavable

#### **Fisher**brand

Cat No.	Capacity, mL	Pack qty
11785243	60	72
11795243	125	72
11795253	250	72
11775253	500	48
11745253	1,000	24



#### Thermo

#### **BAG AUTOCLAVE NON STERILE**

- Material: Polypropylene
- Autoclavable: Yes
- Disposable: Yes
- Maximum Temperature: 135°C
- Includes: Blue biohazard printing

For Use With Application: Designed for contaminated waste disposal in autoclaves or incinerators

Cat No.	Dimensions (L x W), mm
11369103	610 x 406
11329103	810 x 610



Thermo scientific

### PIPETTE, SEROLOGICAL, STERILE, GRADUATED

- Material: Polystyrene
- Accuracy: ±2%
- · Calibrated: Yes
- Packaging Type: Plastic packagingAspirator Plug: Yes

Cat No.	Capacity, mL	Graduations	Length, mm	Colour code	Pack qty
11831603	1	0.01mL	278	Yellow	1,000
11841603	2	0.01mL	279	Green	1,000
11779232	5	0.1mL	275	Blue	500
11789232	10	0.1mL	333	Orange	500



#### **Fisher**brand

#### **DISPENSER BOTTLE TOP ANALOGUE**

- · Excellent chemical compatibility
- Fully autoclavable
- Easy to calibrate
- Removable PTFE piston
- Springless precision valve mechanism
- Anti-drip cap
- Glass cylinder
- Screw type knob
- Fits on most common sizes of bottle • Traceability to an NABL accredited laboratory

Cat No.	Capacity, mL
40077040	0.51.5

**12877913** 0.5 to 5 **12887913** 1 to 10 **12897913** 2.5 to 20

#### **CONSUMABLES**

LOOPS, WEIGHING BOATS, PETRI DISHES, VIALS



#### LOOP, INOCULATING

- · Highly ergonomic
- Sterile 10<sup>-3</sup>
- Traceability on each bag
- Packaged in tamper evident zip bag
- Flexible polystyrene
- Unique mixed extremity (1/10uL) reduces inventory complexity
- Material: Polystyrene
- Volume: 10µL
- Sterile: Yes
- Colour: Blue
- Length: 195mm

Cat No.	Description
11769515	Loop, Inoculating

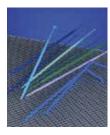


Thermo SCIENTIFIC

#### **INOCULATION LOOP RIGID IRRADIATED**

- For inoculation, dilution, streaking and spreading of fixed sample volumes
- · Eliminates the need for flaming and subsequent risk of aerosols
- Material: Polymer
- Sterile: Yes
- Colour: Dark green
- Disposable: Yes
- Format: Hard
- Includes: Needle, hexagonal shaft

Cat No.	Volume	Pack qty
11379283	1μL	800
11369283	10μL	800



## Thermo SCIENTIFIC

#### **INOCULATING LOOP** QUADLOOP IRRADIATED

Unique sphere/handle form provides up to four sterile streaking surfaces simply by turning the handle 90° after each streaking, thereby exposing a new sterile streaking surface.

- Material: Polystyrene
- Volume: 1µL
- Sterile: Yes
- Colour: Green
- Disposable: Yes
- Includes: Sphere

Cat No. Description		Pack qty
11778858	Inoculating loop quadloop irradiated 1µL	1,000



**Fisher**brand<sup>\*</sup>

#### WEIGHING BOATS, **POLYSTYRENE, DISPOSABLE**

- Available as standard or anti-static
- Diamond or square shaped
- 5mL to 280mL capacity

Description	Shape	Capacity, mL	Pack qty
Anit-static white	Diamond	5	500
Character of the	Square	85	500
Standard write		280	500
		Anit-static white Diamond	Anit-static white         Diamond         5           Standard white         Souare         85



### **HEADSPACE CRIMP VIALS 20ML** CHROMACOL™\*

• Instrument: Agilent, Dani, Dani Purge and Trap, Fisons HS 850, Perkin Elmer

## Thermo

Cat No.	Description	Capacity, mL	Cap size, mm	Pack qty
10104424	Clear glass vials	20	20	100
11543770	Amber glass vials	20	20	125



### **Fisher**brand

#### CRUCIBLE, PORCELAIN, **HIGH FORM**

- · Glazed inside and out except for outside bottom surface and
- Material: Porcelain
- Thickness: 1,75mm
- Temperature Maximum: 1150°C
- Finish: Glazed

Cat No.	Capacity, mL	Top diameter x height x wall thickness, mm	Pack qty
13409719	8	32 x 20 x 1,75	6
13419719	17	41 x 26 x 2	6
13429719	30	50 x 31 x 2	6
13439719	50	61 x 37 x 2,2	6
13449719	100	76 x 46 x 2,3	6
13459719	150	84 x 52 x 2,3	6
13469719	250	102 x 60 x 2,3	6



**Fisher**brand<sup>\*</sup>

#### **PETRI DISHES**

- Diameter/90mm
- · Aseptic or sterile
- Polystyrene petri dish

Cat No.	Heigth, mm	Vents	Quantity per pack	Quantity per box
Aseptic				
12694785	14,2	3	20	600
12644785	16,2	0	20	600
12654785	16,2	1	20	600
12664785	16,2	3	20	600
Sterile				
12684785	16,2	1	20	600
12674785	16,2	3	20	600

#### **VIALS, WIDE OPENING AND MICRO-VIALS** WITH SHORT THREAD ND9 \*



Cat. No	Description	mm	type	(mL)	(mL)	(µL)	μL)	qty
10162512	1.5mL short thread vial, 1st hydrolytic class, wide opening (silanised version available Cat. No 11585894)	32 x 11.6	Clear	1.85	1.5	200	<120	100
11575884	1.5mL short thread vial, 1st hydrolytic class, wide opening, label + filling lines (silanised version available Cat. No 15562310)	32 x 11.6	Clear	1.85	1.5	200	<120	100
10080952	1.5mL short thread vial, 1st hydrolytic class, wide opening, label + filling lines (silanised version available Cat. No 11595894)	32 x 11.6	Amber	1.85	1.5	200	<120	100
11575894	Short thread vial with integrated 0.2mL micro-insert, 1st hydrolytic class, label + filling lines, "Top Bonded"	32 x 11.6	Clear	0.34	0.2	25	<1	100
10145714	Short thread vial with integrated 0.2mL micro-insert, 1st hydrolytic class, label + filling lines, "Top Bonded"	32 x 11.6	Amber	0.34	0.2	25	<1	100
12951011	Short thread vial with integrated micro-insert, 1st hydrolytic class "Base Bonded"	32 x 11.6	Clear	0.4	0.3	30	<3	100
15592310	Short thread vial with integrated micro-insert, 1st hydrol.class "Base bonded"	32 x 11.6	Amber	0.4	0.3	30	<3	100
11515894	1.1mL microliter short thread vial ND9, 1st hydrolytic class (silanised version available Cat. No 10670341)	32 x 11.6	Clear	1.6	1.5	30	<3	100
11535914	0.9mL total microliter short thread vial ND9, 1st hydrolytic class	32 x 11.6	Clear	1.4	1.1	25	<1	100
11575914	TopSert TPX short thread vial, with integrated 0.2mL glass micro-insert (silanised version available Cat. No 11595914)	32 x 11.6	Clear	0.36	0.2	25	<1	100
11515924	TopSert TPX short thread vial, with integrated 0.2mL glass micro-insert (silanised version available Cat. No 11535924)	32 x 11.6	Amber	0.36	0.2	25	<1	100

<sup>\*</sup>To complete with cap



#### **Fisher**brand

#### **DISPOSABLE** POLYPROPYLENE BOUFFANT CAPS

- Single-use cap provides basic protection
- Disposable
- 14gsm polypropylene
- Diameter: 53.3cm or 60.9cm
- Latex-free
- · Choice of blue or white

Cat No.	Colour	Size,mm	Pack qty
15491932	Blue	53.3	1,000
15401942	White	53.3	1,000
15411942	Blue	60.9	1,000
15421942	White	60.9	1,000



#### **DISPOSABLE SHOE COVERS**

- · Spunbond polypropylene shoe covers protect against dirt, grime and certain dry particulates
- Single-use
- Polypropylene
- Latex-free
- With or without anti-skid sole

#### **Fisher**brand

Cat No.	Description	Colour	Size,mm	Pack qty
15481942	Shoe cover with anti-skid	Blue	X-Large	300
15491942	Shoe cover with anti-skid	Blue	Universal	300
15401952	Shoe cover without anti-skid	Blue	X-Large	300
15411952	Shoe cover without anti-skid	Blue	Universal	300



Fisherbrand<sup>\*</sup>

#### **DISPOSABLE ANTI-STATIC SHOE COVERS**

- Conductive carbon strip helps eliminate static buildup
- Single-use
- 42gms polypropylene
- With carbon dissipative strip sewn in

Cat No.	Description	Colour	Size,mm	Pack qty
15441952	Shoe cover, with conductive carbon strip	Blue	Universal	300



#### **Fisher**brand

## Polypropylene facial hair cover for basic protection

**DISPOSABLE BEARD COVER** 

- Disposable
- 10gsm spunbonded polypropylene
- Single-use
- Latex-free

#### Colour Cat No. Size,mm Pack qty 15471952 White Universal 500



**Fisher**brand

#### **DISPOSABLE HIGH-TACK SHOE COVERS**

- High-Tack, disposable shoe covers provide superior protection
- Single-use
- Polyurethane
- Latex-free
- High-Tack sole

Cat No.	Description	Colour	Size,mm	Pack qty
15421952	Shoe cover, High-Tack	Blue	Universal	300
15431952	Shoe cover, High-Tack	Blue	X-Large	300



#### **DISPOSABLE POLYETHYLENE SHOE COVERS**

- Single use, disposable covers provide convenient protection
- Polyethylene
- Latex-free

#### **Fisher**brand

Cat No.	Description	Colour	Size,mm	Pack qty
15451952	Shoe cover, polyethylene	Blue	X-Large	300
15461952	Shoe cover, polyethylene	Blue	Universal	300



#### **Fisher**brand

#### **DISPOSABLE POLYPROPYLENE LAB** COATS

· Latex-free spunbond polypropylene construction lab wear

**DISPOSABLE POLYETHYLENE** 

- · Elastic cuffs hold sleeves in place
- . Five snaps for a secure closure
- · Standard collar
- No pockets
- Fabric weight: 50g/m²

Cat No.	Colour	Size	Pack qty
15431922	White	S	25
15441922	White	M	25
15451922	White	L	25
15461922	White	XL	25
15471922	White	2XL	25
15481922	White	3XL	25



**Fisher**brand

• Disposable general purpose sleeves

**SLEEVE COVERS** 

- Polyethylene
- Length: 45.7cm
- Latex-free
- Thickness: 6mil
- Elastic cuffs

Cat No.	Colour	Length, cm	Size,mm	Pack qty
15481952	Blue	45.7	Universal	200

**SAFETY** 

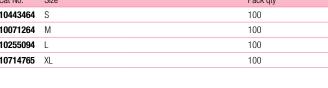


#### **GLOVES NITRILE**

- Beaded cuff
- Ambidextrous
- Powder free
- · Class 1 medical device



Cat No.	Size	Pack qty
10443464	S	100
10071264	M	100
10255094	L	100
10714765	XL	100





#### SPECTACLES, SAFETY, **BANDIDO**



• Light weight, wrap around safety spectacles with polycarbonate clear anti mist and anti scratch coatings

Cat No.	Description	Pack qty
11895834	Safety spectacles, Bandido	1



#### RESPIRATORS, 9300+ SERIES AURATM







- Unique three panel design for greater comfort and easy communication
- Soft cover web on inner panel ensures greater comfort
- Centrally positioned cool flow valve reduces heat build up and
- makes breathing easier and cooler • Evenly tensioned headbands to relieve strap pressure
- · Lightweight and foldable
- Individually packed to avoid contamination during storage

Cat No.	Description	Pack qty
12662545	9310+ premium dust respirator, provides protection against fine dusts. Individually packed, EN 149:2001 FFP1. Particulates Assigned Protection Factor 4 (NPF 4)	20
12672545	9312+ premium valved dust respirator, provides protection against fine dusts. Individually packed, EN 149:2001 FFP1. Particulates Assigned Protection Factor: 4 (NPF 4)	10
10583051	9320 premium dust/mist respirator, provides protection against fine dusts and water based mists. Individually packed, EN 149:2001 FFP2. Particulates Assigned Protection Factor: 10 (NPF 12)	20
10116544	9322+ premium valved dust/mist respirator, provides protection against fine dusts and water based mists. Individually packed, EN 149:2001 FFP2. Particulates Assigned Protection Factor: 10 (NPF 12)	10
10718615	9332+ premium valved dust/mist/metal fumes respirator, provides protection against fine dusts, water based mists and metal fumes. Individually packed, EN 149:2001 FFP3 Particulates Assigned Protection Factor: 20 (NPF 50)	10



INDIVIDUAL PROTECTION

#### FREQUENT USE HAND **CLEANSER**

- Combined with easy to use dispensers deliver the ideal hand hygiene solution for your workplace.
- Sealed cartridges protect the cleanser prior to use
- Preventing contamination and providing superior hygiene
- Easy to load and reduce janitorial servicing, helping you save time and money

Cat No.	Description	Pack qty
12190920	Frequent use hand cleanser	1L
15256500	Stainless steel hand cleanser dispenser	1



#### **RESPIRATORS, 8000 SERIES** (CLASSIC)

The 3M™ Respirators 8000 Series provide lightweight, comfortable and effective respiratory protection against dust and mist. The convex shape, twin strap design, nose foam and nose clip ensure comfortable wear over a range of face sizes. The collapse resistant shell and proprietary 3M™ respirators offer durable, comfortable protection particularly in hot and humid

Cat No.	Description	Pack qty
11703363	3M <sup>™</sup> 8710 cup-shaped unvalved dust/mist respirator - small pack FFP1	1
11713363	3M <sup>™</sup> 8810 Cup-Shaped Unvalved Dust/Mist Respirator - small pack FFP2	1

## Focus on Fisherbrand & Fisher Chemical for all your **Chromatography** needs

Delivering convenience, quality and choice to your lab



- Vials & caps
- HPLC solvents
- LCMS solvents
- GC solvents







#### **POLYMIX HAMMER CUTTING MILL**

#### • Cutting mill

Equipped with a 3-blade rotor for fibrous materials: wood, leaf, paper, glass fibre, textile, leather, plastic, etc.

#### • Hammer mill

Equipped with a 3-hammer rotor for brittle materials: minerals, cereal, coffee, tablets.

#### • Interchangeable rotor

Increased flexibility at low cost.

#### Safety

LCD screen with display of messages and the rotation speed. Automatic motor shutdown when opening the grinding chamber. Auto standby.

Aluminium frame with carry handle.

Stainless steel lining and grinding chamber with rounded CN29 output for sample recovery in a tube or laboratory glassware. Manual adjustment of the feed rate of the grinding chamber. Delivered with 1mm sieve, 12 collecting tubes on stand, cleaning kit and rotor change.

- Admission: 20mm x 20mm
- Speed: 50 to 6000 r/min
- W x D x H: 250 x 330 x 480mm
- Power: 230 V 50 Hz
- Absorbed power: 1000 W . Max. sound level: 70 dB

Cat No.	Description
11900359	Polymix cutting mill
11910359	Polymix hammer mill



#### CUTTING MILL MICROTRON™

For mixing, dispersing, homogenising, emulsifying and size reduction of cuttable materials

- Starts only when safety hut or lid are well attached
- 550W or 800W motor with speed regulation from 500rpm up to 17,000rpm
- Blades made with stainless cutlery steel
- Glass attachments with volumes of 125mL, 250mL, 0.5L and 1L
- Stainless steel attachments with volumes of 2L and 4L

Cat No.	Description
11940049	Microtron® MB550 cutting mill
11979058	Microtron® MB800 cutting mill



## WARING

Description

11994928 Waring® Blender with 2L stainless steel bowl

#### **WARING® 2L BLENDER**

- Two switchable speeds
- Chrome-plated casing
- Fixed speeds 19,000 and 23,000 r/min. Power 670 W.
- Suitable for 1L Waring bowls and mini-containers with adapter (11944898). Delivered with stainless steel bowl or polycarbonate bowl with handle, autoclavable stainless steel knife block



#### PH METERS, AB SERIES

#### **Fisher**brand<sup>®</sup>

- Multiple views
- Backlight display
- · Date/time for GLP requirements
- · Customer buffer calibration options
- Three position electrode holder
- Stirring capability
- Upgradeable software
- Wall mounting available

Cat No.	Size
12870633	AB150 Kit - Includes meter, Tris-compatible pH/ATC electrode, electrode arm, RS232 and USB cables, 100/240V power supply, and manual
12880633	AB150 BioBasic Kit - Includes meter, Tris-compatible accuTupH pH electrode (Cat. No 11550174), ATC probe (Cat. No 10236064), electrode arm, 110/220V power supply, and manual





#### PH METER KIT STAR™ A321

The Thermo Scientific Orion Star A321 pH Portable Meter is the top choice for advanced measurements on location. Get the information you need quickly and easily from the large, backlit graphic LCD display. Informative display shows pH/mV/ RmV and temperature along with electrode status, time, date, sample ID, user ID and calibration points. Advanced features such as stability and averaging options provide additional options allowing for laboratory accuracy everywhere you need it.

- Humidity Range: 5 to 85 %, non-condensing
- IP Rating: IP-67
- Outputs: USB, RS232
- Detection Range: -2 to +20pH
- Resolution [mV]: 0.1mV
- Calibration Points [pH]: 1 to 5
- Resolution [pH]: 0.1; 0.01; 0.001pH
- Resolution [Temperature]: 0.1°C • Temperature Operating: 5 to 45°C
- Temperature Range: -5° to +105°C
- Range [mV]: ±2,000,0mV
- Accuracy [mV]: ±0.2 mV or ±0.05% of reading whichever is greater
- Data Points: 5,000
- Accuracy [pH]: ±0.002pH
- Accuracy [Temperature]: ±0.1°C

Cat No.	Description
11601479	pH meter kit Star™ A321

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pH

## Thermo SCIENTIFIC

#### PH/ISE METERS, BENCH TOP, ORION™, STAR™ A214

- Range, pH

• Temperature- Range, °C

General

- Resolution, °C

	<ul> <li>Resolution, pH</li> </ul>	0.1; 0.01; 0.001
	<ul> <li>Accuracy, pH</li> </ul>	±0.002
	- pH calibration Points:	Up to 5 points
		Editing: yes
mV	- Range, mV	±2,000.0
	- Resolution,	mV 0.1
	- Accuracy, Rel.	mV ±0.2mV or ±0.05% of
		reading, whichever is greater
	- ORP	EH ORP Mode
ISE	- Range	ISE 0 to 19.999
	- Resolution	ISE Up to 3 significant digits
	- Accuracy	ISE ±0.2mV or ±0.05% of
		reading whichever is greater

- Units ppm, M, mg/L, %, ppb, none
- Calibration, ISE Features: timed end point, linear point to point, non-linear selectable auto blank, low concentration range stability (ISF)

Editing: yes
Points: up to 5
-5.0 to 105.0
0.1
±0.1

-2.000 to 20.000

- Accuracy, °C ±0.1

- Calibration, temperature 1 point (offset)

- Memory 2.000 with time and date

stamp
- Data storage method functions: manual, ready (includes AUT0-READ™) and

- Data logging timed
- Data logging Editing: delete individual points, group of points or all
- Inputs pH electrode: BNC, reference

ATC probe: 8 pin mini DIN

- Output RS232, USB

Cat No.	Description
11661459	pH electrode, high performance Ammonia ISE, ATC probe, stainless steel, stirrer probe, ammonia 1,000ppm standard, 475mL, low level ammonia ISA, ammonia ISE storage solution, electrode arm with redesigned holder and universal power adapter



#### CARBOLITE

# FURNACES, ASHING AND BURN OFF

- Precise, push button temperature setting, with single ramp and timer (301) or option of 8 (3216P1) or 20 (3508P1) step programmer
- Safety features include positive break door-open switch, double skinned body for safe outer surface temperature and vertical parallel lift door design which partially protects user from heat radiation when loading and unloading
- Temperature, max., °C: 1,100
- Temperature sensor: Type K
- Electrical supply: 230V, 50/60Hz single phase
- Dimensions, external [w x d x h], mm: 430 x 740 x 650
- Dimensions, internal [w x d x h], mm: 170 x 455 x 90
- Power requirement [max.], W: 4,000

Cat No.	Capacity	Phase
10292062	7L	Single (option of 2 or 3 phase supply available)



#### **MUFFLE FURNACE**

Thermo Scientific™ Thermolyne™ muffle furnaces offer heating solutions for a number of application needs. From general laboratory use to industrial applications, Thermolyne furnaces are ideal for fast heat up and temperature control up to 1,100°C.



Cat No.	Capacity, L	Temperature range, °C	Temp. stability/Uniformity at 100°C
10215522	1.3	100 to 1,100	±0.3°C/±7.8°C
10453152	2.1	100 to 1,100	±0.5°C/±5.0°C



## Thermo

#### KIT, TURBIDITY METER, AQUAFAST™

- Results are easy to read and record from the large, bright LCD display in a variety of work environments.
- Ergonomic IP67 turbidity meter for lab or field use
- Uses Nephelometric principle with 90° detection
  In many locations a separate light cap or shield is not needed
- Meets ISO 7027 and offers consistent light source for greater accuracy
- No mixing or diluting with EPA-approved polymer bead primary standards for faster calibration
- Display Type: LCD
- $\bullet$  Temperature Operating: 0° to 50°C
- Response Time: <6 sec.
- Lighting Type: IR LED
- IP Rating: IP67
- Certifications: CE, TUV 3-in-1 for CSA-US, FCC part 15

Cat No.	Description	Pack qty
12003273	Kit, Turbidity meter, AQUAfast™	1
12023273	Vial for AQUAfast™ - 25mm	3
12013273	Etalons STD 0.2/20/100/800 NTU	1



Mecmesin

## \_\_\_\_

**FIRM FRUITS** 

- Display of the maximum value with reset by a simple press of a button
- Measurement range of 10 to 100% of the capacity

PENETROMETER FOR

- Full scale accuracy of ± 2%, 1/100th resolution of the measurement range
- Delivered in plastic case with compression plate and extension rod

Cat No.	Cat No. Description	
11984068	11984068 Penetrometer for firm fruits, 1 to 10 kg	
<b>11914078</b> Ø 8mm penetration tip		
<b>11904078</b> Ø 11mm penetration tip		



#### **Fisher**brand

# **ISOTEMP III CHILLER PD-1**

- · Intuitive digital controller, colour LED to indicate current cooling set point and set point limits
- · Programmable high and low temperature alarm set points
- Pressure gauge on the front for pressure sensitive applications
- 1/2" input/output connectors (12.7 mm)
- Stability: ± 0.5°C
- Pump pressure: 4.2 bar
- Temperature: -10 to +30°C
- Power: 230 V 50 Hz
- Dimensions, D x W, mm: 711 x 432

Cat No.	Tank volume	Pressure pump, L/min	Cooling capacity, W at +20°C
11346641	18.9L	9.5	1,900



#### BATHS, REFRIGERATED, **ARCTIC SERIES**

- Temperature range, °C: -10 to 100
  Cooling capacity, W (at 20°C): 250
- Capacity, L: 30
- Area: 200 x 297 x 365
- Dimensions [I x w x h], mm: 913 x 428.5 x 470.7



Description

10597485 Refrigerated baths standard series (SC)



#### Fisherbrand<sup>®</sup>

#### BATHS, CIRCULATORS, **HEAT-REFRIGERATED, CLOSED SYSTEM**

- Full range heating and cooling from -10°C to 80°C
- Small reservoir ensures fast temperature response time
- · Small footprint
- Quiet operation
- Intuitive user interface allows user to choose between five temperature set-points
- Pump pressure, mbar: 300
- Pump flow, max., L/ min: 17
- Cooling capacity, W [at 20°C]: 250
- Capacity, L: 2.8
- Stability, °C: ±0.1
- Heater capacity, W: 2000
- Dimensions [w x d x h], mm: 227 x 436 x 619

Cat No.	Description
---------	-------------

12019907 Closed system circulator and USB port



## Thermo scientific

#### SPECTROPHOTOMETER. GENESYSTM 10S

The Thermo Scientific GENESYS 10S UV-Visible spectrophotometer is a robust and reliable UV/Vis instrument which is designed to be easy to programme and easy to use. This compact instrument offers locally controlled functionality together with USB outputs for data export and single and multisampling capability as standard.

- · Lamp: Xenon flash lamp
- Optical design: dual beam internal reference detector
- Photometric linearity: 3.5 Abs
- Spectral bandwidth: 1.8nm
- Stray light: <0.08% offT at 220, 340nm (NaI, NaNO2) <1<1.0% offT 198nm (KCI)
- Voltage: 100/240V
- Wavelength range: 190 to 1,100nm
- Wavelength scan speed: 3,600nm/min

Cat No. Description

12104972 Spectrophotometer Genesys 10S, UV-VIS

## Focus on Fisherbrand for all your **Glassware** needs

**Essential great savings for your lab** 



- Beakers
- Bottles
- Cylinders
- Funnels
- Sample vials
- Test tubes
- Volumetric flasks

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**Fisher**brand

#### WATERPROOF LONGSTEM THERMOMETER

- Special robust stainless steel probe for frozen and semi-hard products
- 90mm handle and 10mm display height
- Temperature profile: -50 to +150°C
  Resolution: 0.1°C
- Accuracy: ± 1°C
- Stainless steel probe: 5mm dia. x 125mm length
- Auto-off: 10 minutes
- · Warranty: 6 months

Cat No.	Description
11899120	Waternroof

of long-stem thermometer



#### **TEMPERATURE DATA LOGGER EBI 310**

- Tamper proof
- Easy use through automatic PDF report generation, direct USB readout and configuration
- Minimise training costs and user errors through simple, easy to use design
- Eliminate costly and time consuming IQ/OQ procedures through standard reporting process
- Reduce IT costs due to the standardised software
- GMP, pharmaceutical law compliant; EN 12830, ATP, VO (EG) 37/205 compliant 21 CFR Part 11 conform (Winlog.basic)

Cat No. Description

12641825 Temperature Data Logger EBI 310 USB



#### **Fisher**brand

#### **INFRARED THERMOMETER** -50 TO +350°C

- Folding probe
- Dual laser
- Probe suitable for frozen products
- Folding penetration probe, dimensions 3mm dia. x 120mm lenath
- Min/Max. function and auto-off after 4 min
- For measurements from the centre of food items
- IR measurement:

Dual laser for measurement of 2 points.

Acoustic and optical alarm

Supplied with calibration certificate for 4 points: -18, 0, 60 and +120°C

- External probe: 5 to +350°C
- IR accuracy: ±2°C or ±2% measurement
   Accuracy: -18 to 120°C, ± 0,8
- External probe resolution: 0,1°C
- IR resolution: 0,1°C
- Emissivity: 0,1 to 1,0
- Optical resolution: 5:1
- W x D x H/weight: 172 x 48 x 24 mm/140 g

Cat No.

10621436 Agro IR thermometer -50 to 350°C



#### **BALANCES, PRECISION**



#### **Fisher**brand

- · Weighing modes include weighing, parts counting and percentage weighing
- Draft shield with three sliding doors (on 1mg models only)
- a.c. adapter (included), balance power input 8 to 14.5V a.c., 50/60Hz 4VA or 8 to 20V d.c., 4W
- · Two year warranty
- GLP with optional printer

Cat No.	Capacity	Readability	Calibration
15325113	210g	0.001g	External
15335113	410g	0.001g	External
15345113	410g	0.001g	Internal
15355113	2100g	0.01g	External
15365113	4100g	0.01g	External



#### **Fisher**brand

#### **BALANCES, ANALYTICAL**

- Weighing modes include weighing, parts counting and percentage weighing
- Large draft shield with sliding top and side doors
- Dimensions (w x d x h): 196mm x 320mm x 287mm
- Readability: 0.1mg
- Linearity: 0.2mg Repeatability: 0.1mg
- Two year warranty
- Communication: RS232

Cat No.	Capacity	Readability	Calibration
15395103	210g	0.1mg	Internal
15315113	65g	0.1mg	Internal
15305113	210g	0.1mg	External

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