



Biomedical Systems

**MACRODUCT®
ADVANCED**
Sweat Induction and Collection

**GOLD
STANDARD**



**WORLD LEADER
IN LABORATORY CF DIAGNOSIS**

For clinical laboratory use for stimulation and collection of sweat from humans for the analysis and diagnosis of cystic fibrosis.

MACRODUCT® ADVANCED IS SWEAT TESTING AT ITS BEST

More than 5 million sweat tests have been performed using the Macroduct Sweat Collection System. Macroduct Advanced is the result of over 40 years of ongoing innovation to further standardize pilocarpine iontophoresis and sweat collection.

Device

- Easy to use touch screen interface with built-in step-by-step graphical instructions for consistent sweat collection
- Flexible data management options
- Meets protocols and traceability requirements



Sweat Collector

- Elliptical-shaped collector is a better fit for small arms
- Only 15 microliters of sweat needed in a 30-minute collection period
- Measurement marks on each collector for checking the minimum volume of sweat collected and determining the sweat rate

CE
2797

Electrodes

- Iontophoresis will not start if pilogel discs are not detected, enhancing safety



Sweat Transfer

- Easyduct™ Needle has a tapered blunt end for easy insertion into the tubing to transfer sweat

Adjustable and Disposable Straps

- Easy to fit and disinfect for reuse



ELECTRODES, COLLECTOR, AND STRAPS DESIGNED FOR GREATER CONVENIENCE WHEN WORKING WITH SMALL LIMBS



THE CHLOROCHK® CHLORIDOMETER®

THE PERFECT CF DIAGNOSTIC COMPANION

The ChloroChek Chloridometer is a coulometric titrator designed to determine chloride ion concentrations in sweat samples with just 10 microliters of sweat. It displays the concentration directly in mmol/L Cl⁻. The sweat sample is added to a buffer/stabilizer working solution.



Key Advantages

- Easy to operate with consistent results in less than 20 seconds
- Intuitive touchscreen interface with step-by-step prompts
- Maintenance for electrodes is simple – rinse daily with deionized water and clean weekly
- Electrodes are easy to install by simply pushing into place
- Results can be exported for complete traceability



THREE LEVELS OF SWEAT CONTROLS ARE AVAILABLE TO ENSURE THE HIGHEST QUALITY CONTROL FOR MEETING REGULATORY REQUIREMENTS



VQC PROGRAM

- Online, real-time quality control evaluation and comparison program
- Assists with evaluating the performance of your instrument by comparing your QC results to those of other laboratories worldwide using the same instrument and lot of controls
- Monthly reports assist with routine record-keeping
- Participation in a peer group comparison program fulfills good lab practice guidelines
- Provided at no additional charge

Macroduct® Advanced Sweat Collection System Model 3710

*Includes all needed accessories and one supply kit. Each kit contains 12 Macroduct Advanced Pilogel discs, 6 Macroduct Advanced collectors, and 6 small sealable containers.

Iontophoresis Current (nominal control)	(a) Current profile-controlled ramp-up and ramp-down (b) 1.5 mA (c) Fail-safe current limited by circuit design
Electrode Cable Assembly	Color-coded elliptically-shaped electrodes to fit elliptical Pilogel discs
USB Connection	Micro USB connector for exporting test data
Power	Rechargeable lithium ion battery
Device & Carrying Case Weight	5 lbs (2.3 kg)

ChloroChek® Chloridometer® Model 3400

Sample Volume	10 µL
Duration of Measurement	Approximately 20 Seconds
Reproducibility (*Generally limited by the sample dispensing system/ pipette accuracy)	CV of 1.02% at 100 mmol/L
Measurement Display	0 - 999 mmol/L
Clinical Measuring Range	10 - 160 mmol/L
Resolution	1 mmol/L over the entire measurement range
Integrated Stir Bar	PTFE coated magnetic cylindrical stir bar
Environmental Operating Conditions	Indoor use; no direct sunlight
Operating Temperature (ambient)	10 °C to 35 °C / 50 °F to 95 °F
Storage Temperature	-40 °C to 70 °C / -40 °F to 158 °F
Room Humidity	5 - 80% (non-condensing)
Altitude	Up to 2000 m
Electrical Voltage	100 -120 VAC / 200 - 240 VAC
Frequency	50 - 60 Hz
Power	20 VA
Electrical Connection	Detachable power supply cord
Fuses (2): HBC breaking capacity 1500 A	1.0 A for 100-120 VAC 0.5 A for 200-240 VAC
Memory Backup	Integral lithium cell (10 years typical)
Dimensions: (W x D x H)	20.5 x 22.0 x 36.0 cm (8.0 x 8.1 x 14.2 inches)
Weight	~ 5.7 kg (12.54 lbs.)
Data Output	Serial RS-232 / USB

	Catalog Number	Description
Macroduct Advanced	MODEL 3710-SYS	Macroduct Advanced 3710 Sweat Collection System
	AC-193	EasyDuct Needle/1cc Syringe, Pack of 3
	RP-537	Electrode Cable Assembly Macroduct Advanced
	SS-107	Small Sealable Containers, Pack of 6
	SS-268	Macroduct Advanced Supply Kit
	SS-268-ND	Macroduct Advanced Supply Kit, No Dye Collectors
	SS-269	Strap Set, 18 ea, Macroduct Advanced
	SS-270	Strap Set, 180 ea, Macroduct Advanced
	SS-271	Electrode Cleaning Pads, Pack of 10

	Catalog Number	Description
ChloroChek	MODEL 3400	ChloroChek Chloridometer Sweat Chloride Analyzer
	AC-071	Ampule Organizer for Sweat Controls
	SS-150	Sweat Controls, L1, L2, L3 12 ea., 36x0.75mL
	SS-248	ChloroChek Reagent Set, 37x10mL BS + 1x30mL GS
	SS-251	ChloroChek Standard Solution, 100 mmol/L, 10x1mL
	SS-288	ChloroChek Pipette Tips, 2-200mL, Qty 960



WORLDWIDE OFFICES

Please contact your sales representative for terms, conditions and product availability in your country.



Headquarters

Australia
Belgium & Luxembourg
France
Italy
New Zealand

+33 1 41 45 07 10

T: +61 1800 815 098
T: +32 9 282 05 31
T: +33 4 83 36 10 82
T: +39 02 48 40 35 42
T: +64 800 555 611

Canada
Serbia
The Netherlands
UK
United States

T: +1 888 662 4925
T: +381 11 2467119
T: +31 313 430 500
T: +44 1442 869320
T: +1 435 752 6011