



# Microbiology

# AEROSPRAY® GRAM

Slide Stainer / Cytocentrifuge

## Series 2

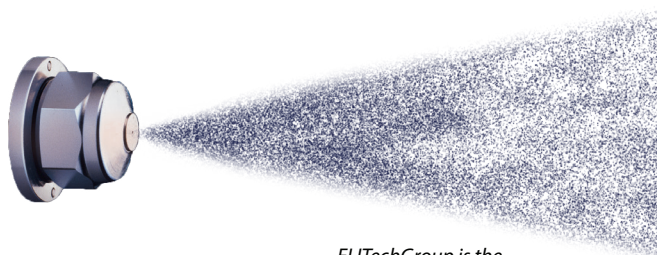


## WORLD'S BEST STAINER IN PERFORMANCE AND RELIABILITY

Automates the staining of pure strain isolate smears and human specimens with microorganisms to facilitate enhanced clarity and debris free slides using the Gram differentiation method.

# DO MORE IN LESS TIME WITH AEROSPRAY® GRAM STAINING AND CYTOCENTRIFUGE TECHNOLOGY

- Superior staining process that is easy to use and saves time
- Rapid performance cycle time, slides are dried and ready for the microscope in minutes
- Cross-contamination is eliminated with a fresh application of stain
- Automated nozzle clean after each stain cycle
- Programmable functions to accommodate different intensities, and personal preferences
- Convenient automated waste level detection (optional)
- Superb cytocentrifuge, resulting in a five-to nine-fold increase in the number of cells on a slide<sup>1</sup> (optional)
- Laboratory compliance with traceability features is ensured
- Standardized decolorization



*ELITechGroup is the  
inventor of Aerospray® Staining*

## BENEFITS TO YOUR LAB

- Consistent, reliable, and standardized staining across multiple labs
- Easily compare slides from different labs
- High-quality control ensuring no stain variability when moving from LOT to LOT
- Reduces labor costs and aids labs in lowering the cost per slide
- Low maintenance required – simple and time efficient cleaning cycles
- The perfect back-up stainer that can be easily supplemented in any workflow in case of machine maintenance or failure

## APPLICATIONS

- ▶ Tissue
- ▶ Stool
- ▶ Urine
- ▶ Sputum
- ▶ Cerebrospinal Fluid
- ▶ Blood
- ▶ Synovial
- ▶ Aspirates
- ▶ Washes



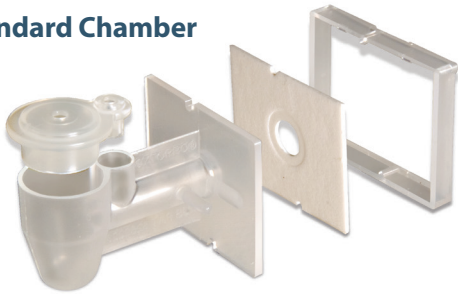
## FIVE-TO NINE-FOLD INCREASE IN THE NUMBER OF CELLS ON A SLIDE<sup>1</sup>

With the optional Cytopro® Rotor, the Aerospray Stainer becomes a superb cytocentrifuge with eight-slide capacity and programmability, at a fraction of the cost of purchasing a stand-alone cytocentrifuge.

### AVAILABLE SAMPLE CHAMBERS

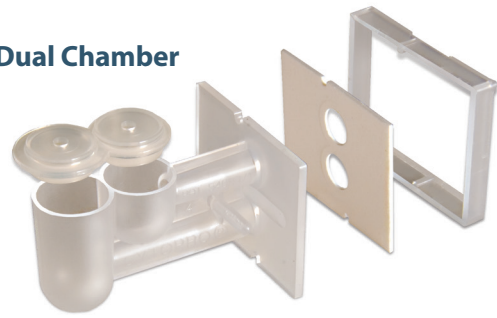
Patented flow control increases cell yield and delivers consistent results.

#### Standard Chamber



Combines ease of use with superb cell recovery.

#### Dual Chamber



Places two samples on the same slide for increased efficiency and economy.

#### Cytopro Magnum®




Accepts sample sizes up to 6 mL.

<sup>1</sup>Huppmann, A. R., Rheingold, S. R., Bailey, L. C., Helfrich, M., & Choi, J. K. (2012). Detection of Leukemic Lymphoblasts in CSF Is Instrument-Dependent. *American Journal of Clinical Pathology*, 137(5), 795-799. doi:10.1309/ajcpp4hq2fxqezil

## THE AEROSPRAY® PROCESS FOR GRAM STAINING



### THE STAINING STEPS

- 1** Specimens are heat fixed or methanol fixed according to the latest recommendations from the CDC prior to staining in the Aerospray.
  - 2** Slides are sprayed with the primary stain, crystal violet, penetrates all cell walls. Excess stain is then spun off and washed away with deionized water to prevent precipitate formation.
  - 3** Iodine is applied and combines with crystal violet to create a primary stain complex. Excess stain is then spun off and washed away with deionized water to prevent precipitate formation.
  - 4** A unique formulation of decolorizer and counterstain is added to remove the primary stain complex across the walls of the non-primary organisms and adds a unique color to the secondaries.
-  High speed, low duration spin creates dry slides, ready for the microscope in minutes!

### DECOLORIZING AND COUNTERSTAIN

- Decolorizer is applied to remove the crystal violet-iodine complex until only the Gram-negative organisms are decolorized
- Safranin or fuchsin (contained in the decolorizer) simultaneously counterstains the Gram-negative cells pink-to-red
- Decolorization is the critical step in proper Gram differentiation
- Choice of decolorizer cycles ranges from 1 to 9, allowing you to compensate for thick specimens or other possible variables
- You can reproducibly differentiate sensitive organisms in normal smears

# Aerospray® Gram Model 7322

Slide Carousel Capacity	1 to 12 or 1 to 30 Slides, depending on carousel (carousel choice optional)
Cytocentrifuge Rotor Speed	100-2000 rpm (± 5%), user programmable
Dimensions (W x H x D)	57 cm x 25 cm x 54 cm (22" x 10" x 21")
Clearance Height (lid open)	58 cm (23")
Weight	17.4 kg (38.4 lb)
Electrical Requirements	100 to 240 VAC (±10%) @ 50-60 Hz, 200 watts maximum
Drain Connection	Outlet on rear panel
Safety	Lid interlock: lid must be closed for operation, and is locked down during carousel rotation
Reagent Level Detect	Level detection on all reagent lines
Waste Level Detect	Level detection in waste bottle (optional)

## Stain Consumption Specifications

Reagents	Description	Theoretical Maximum Number Of Slides Per Bottle	
		Full 12 Slide Carousel	Full 30 Slide Carousel
Decolorizer 500 mL	Isopropanol / Methanol with Safranin	1032	1710
	Isopropanol / Methanol with Fuchsin		
	Isopropanol / Acetone with Safranin		
	Isopropanol / Acetone with Fuchsin		
Mordant 500 mL	Iodine	996	1650
Primary Stain 500 mL	Crystal Violet	1032	1710

*Medium Decolorizer Setting: #3 (no clean cycles)*

## Cytopro® Cytocentrifuge Rotor Model AC-160

Capacity	8 chambers and slides
Weight	1.1 kg (2.5 lb)
Dimensions (Dia. x H)	22.6 cm x 6.2 cm (8.9" x 2.4")

Catalog #	Description
MODEL 7322	Aerospray® Gram Slide Stainer/Cytocentrifuge
AC-160	Cytopro® Rotor
SS-029	Aerospray® Nozzle Cleaning Solution, 355mL
SS-029C	Aerospray® Nozzle Cleaning Solution Concentrate, 250mL
SS-041A	Gram Reagent A, Decolorizer with Safranin, 500mL
SS-041AA	Gram Reagent A, Decolorizer with Acetone and Safranin, 500mL
SS-041AAF	Gram Reagent A, Decolorizer with Acetone and Fuchsin, 500mL
SS-041AF	Gram Reagent A, Decolorizer with Fuchsin, 500mL
SS-041B	Gram Reagent B, Iodine, 500mL
SS-041C	Gram Reagent C, Crystal Violet, 500mL
SS-141A	Gram Reagent A, Safranin Concentrate, 210mL
SS-141AF	Gram Reagent A, Fuchsin Concentrate, 135mL
SS-141B	Gram Reagent B, Iodine Concentrate, 500mL
SS-141C	Gram Reagent C, Crystal Violet Concentrate, 135mL
SS-230	Aerospray® Stain Residue Solvent, 500mL
SS-250	Gram Stain Control Slides, Pack of 50
SS-MeOH	Aerospray® Reagent Grade Methanol, 500mL
AC-187	Barcode Scanner and Waste Level Detect Bundle
AC-188	12-Slide Carousel, Aerospray® Stainers
AC-189	30-Slide Carousel, Aerospray® Stainers

*\*Please check additions to catalog numbers made in your country*

# WORLD LEADER IN AEROSPRAY® STAINING TECHNOLOGY AND CYTOCENTRIFUGATION

# 50 YEARS

## “Proven Performance, Time After Time.”

ELITechGroup has been in operation for nearly 50 years and distributes to over 100 countries. Proud to be the World Leader in Aerospray staining technology and Cytocentrifugation, offering the world's most reliable solutions in performance and reliability. ELITechGroup is confident that this automated technology will elevate the performance of any laboratory and facilitate superior results.

Join the thousands of laboratories utilizing the world's best staining technology and take your laboratory to a new level of efficiency and performance.



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