



# CYTOMETRY CATALOGUE

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## MEDIMACHINE II Cod. 121600

It is designed to provide both gentle tissue dissociation and fine homogenization using appropriate disposable devices with different technical features according to the required procedure.

- Power consumption: 120W
- Supply voltage: 85 ~ 264 VAC, 47-63 Hz
- Fuses: 2 x 2A
- Weight: 2,50 kg.
- Dimensions: 211 mm x 164 mm x 257 mm



## MEDIMAX 2.0 Cod. 79202

GTIN barcode: 8054754470024

The Medimax 2.0 is an automated mechanical device designed to run all kind of Medicons

- CLASS A IVD
- EUDAMED REFERENCE: UDI-DI 08054754470024
- Actor ID/SRN: IT-MF- 000035729 BD/RDM: 2449073



## SURGYBLUE Cod. 00-AA

SurgyBlue is an electronic device designed to run a dedicated disposable disruptor for the medical field, called Medicons®. The Medicons® is activated through a motor in order to prepare samples for diagnostic or clinical use.

- Power supply: 4 batteries AA not rechargeable and not replaceable Lithium/Iron Disulfide (Li/FeS<sub>2</sub>)
- Motor: brushless motor, 84 rpm, max torque 400mNm
- Weight: 100 g
- Dimensions: 150 x 20 x 60 mm (H x W x L)



AVAILABLE SOON

## MEDICONS Cod. 79300N / 79300S

Disposable disaggregator with 35 $\mu$ m cut microblades stainless steel disk. HD/LD PE casing. Provided sterile and non-sterile. The stainless steel disk is made up of a fixed screen with about 100 hexagonal bore-holes, around each of which there are 6 microblades.

- 1 ml liquid solution
- All kind of fresh/frozen solid tissues can be processed



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## MEDICONS Cod. 79400N / 79400S

Disposable disaggregator with 50 $\mu$ m cut microblades stainless steel disk. HD/LD PE casing. Provided sterile and non-sterile. The stainless steel disk is made up of a fixed screen with about 100 hexagonal bore-holes, around each of which there are 6 microblades.

- 1 ml liquid solution
- All kind of fresh/frozen solid tissues can be processed



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## MEDICONS-P Cod. 79700N / 79700S

Disposable disaggregator with 70 $\mu$ m cut microblades polymer disk. HD/LD PE casing. Provided sterile and non-sterile. The polymer disk is made up of a fixed screen with about 100 squared bore-holes, around each of which there are 4 microblades.

- 1 ml liquid solution
- Delicate fresh/frozen solid tissues can be processed (example: lymph-node)



# Tissue preparation for surface antigen staining using the Medimachine system

This preparation protocol is useful for fresh or frozen material.

**Warning:** Handle all biological specimens and materials with which they come into contact as if capable of transmitting infection. Dispose of waste using proper precautions in accordance with state, and local regulations. Never pipette by mouth. Avoid specimen contact with skin and mucous membranes.

1. Dissect a small piece of tissue (10–20 mm<sup>3</sup>) into 1–2 mm<sup>3</sup> portions and moisten with buffer or medium.
2. Prerinse the Medicons twice with 1 ml of buffer or medium.
3. Place tissue and 1 mL of buffer or medium in the Medicons. Replace the lid and insert the Medicons into the Medimachine unit.
4. Disaggregate tissue. The duration of disaggregation depends on the tissue type (see Disaggregation Timing Table).
5. Remove the suspension with a syringe through the syringe port on the Medicons.
6. Rinse the Medicons three times with 1 ml of buffer or medium.
7. Filter the suspension through a Filcon with the appropriate pore size (50-µm Filcons are suitable for most tissues, for example, lymph nodes, tumors, and skin).
8. Rinse the Filcon three times with 1 ml of buffer or medium.
9. Centrifuge the suspension for 5 minutes at 250g.
10. Resuspend the pellet with the appropriate buffer or medium.
11. Repeat steps 3 through 10 if required.
12. Adjust the cell concentration to 5 x 10<sup>5</sup> to 1 x 10<sup>6</sup> cells/ml.
13. Incubate 100 mL of suspension for 15–30 minutes at 2°C–8°C with the appropriate concentration of antibody.
14. Add 2 mL of cold buffer or medium (2°C–8°C) and centrifuge for 5 minutes at 250g.
15. Resuspend the pellet in a buffer or medium.
16. Analyze the sample.

**Note:** The procedure was validated by CTSV but should be adapted to your laboratory and validated for each tissue type you process.

**Disaggregation Timing Table**

Tissue	Quantity (1–2-mm <sup>3</sup> pieces)	Pulses	Duration	Conditions
Breast	3–4	two (2) times	30 seconds	fresh or frozen
Bladder	4–5	two (2) times	20 seconds	fresh or frozen
Colon	3–6	two (2) times	20 seconds	fresh or frozen
Stomach	4–6	two (2) times	20 seconds	fresh or frozen
Marginal tissue of stomach tumor	3–6	two (2) times	20 seconds	fresh or frozen
Healthy tissue, stomach tumor	3–4	two (2) times	20 seconds	fresh or frozen
Lymph node	3–6	two (2) times	15 seconds	fresh or frozen
Spleen	3–6	two (2) times	15 seconds	fresh or frozen
Liver	3–6	two (2) times	15 seconds	fresh or frozen
Ovary	3–6	two (2) times	30 seconds	fresh or frozen
Prostate	2–3	two (2) times	35 seconds	fresh or frozen
Brain	3–6	one (1) time	10 seconds	fresh or frozen
Lung	2–3	two (2) times	30 seconds	fresh or frozen
Uterus	3–6	one (1) time	60 seconds	fresh or frozen
Skin	3–4	one (1) time	45 seconds	fresh or frozen

**Note:** These times were validated by CTSV but should be adapted to your laboratory and validated for each tissue type you process.

## MEDICONS MAX Cod. 79500N / 79500S

Disposable disaggregator with 50µm cut microblades stainless steel disk. HD/LD PE casing. Provided sterile and non-sterile. The stainless steel disk is made up of a fixed screen with hexagonal bore-holes, around each of which there are 6 microblades.

- 16 ml liquid solution
- All kind of fresh/frozen solid tissues can be processed
- Designed for plant biology and large volume samples



## FILCONS MAX

Filcons-Max is a disposable filter for separating cells and nuclei. It's porous membrane has an effective surface area of 660 mm<sup>2</sup>, enabling large quantities of cell suspensions to be filtered.

The microporous polyethylene funnel section is designed to pass the biological material to be retrieved while trapping waste particles under 1.5µm in size.

Filcons-Max must not be used more than once, as subsequent specimens could be contaminated.

Before use, dampen the filter membrane with the medium that is going to be used for filtration.

Filcons-Max are only available as cup-type. They fit perfectly the 50 ml tubes as indicated in the pictures All packages contain 100 units. Non sterile Filcons-max are packed in 20 units/bag, Sterile Filcons-Max are packed 1 unit/blister.



131M33N/1	Filcons Max Non Sterile - 30µm - 100 units per box
131M33S/1	Filcons Max Sterile - 30µm - 100 units per box
151M47N/1	Filcons Max Non Sterile - 50µm - 100 units per box
151M47S/1	Filcons Max Sterile - 50µm - 100 units per box
171M67N/1	Filcons Max Non Sterile - 70µm - 100 units per box
171M67S/1	Filcons Max Sterile - 70µm - 100 units per box
201M98N/1	Filcons Max Non Sterile - 100µm - 100 units per box
201M98S/1	Filcons Max Sterile - 100µm - 100 units per box

## FILCONS

Is a disposable filter for separating cells and nuclei. It's porous membrane has an effective surface area of 80 mm<sup>2</sup>, enabling large quantities of cell suspensions to be filtered. The microporous polyethylene funnel section is designed to pass the biological material to be retrieved while trapping waste particles under 1.5µm in size. Filcons filters must not be used more than once, as subsequent specimens could be contaminated.

Before use, dampen the Filcons filter membrane with the cell or nuclei suspension medium.

Filcons filters with syringe fittings can be used in either suction or compression.

Maximum pressure is 25 psi (1.8 bar). Whichever method is employed, is recommended anyway to use the syringe as a reservoir without applying pressure to the plunger, so that the specimen is allowed to percolate through. For quantities of less than 5 ml the cup-type Filcons filter should be used.



### NON STERILE FILCONS

008-10N-S/1	Syringe Fitting 10µm filter 100 pcs
020-22N-S/1	Syringe Fitting 20µm filter 100 pcs
030-33N-S/1	Syringe Fitting 30µm filter 100 pcs
050-47N-S/1	Syringe Fitting 50µm filter 100 pcs
070-67N-S/1	Syringe Fitting 70µm filter 100 pcs
100-98N-S/1	Syringe Fitting 100µm filter 100 pcs
200-20N-S/1	Syringe Fitting 200µm filter 100 pcs
500-50N-S/1	Syringe Fitting 500µm filter 100 pcs

108-10N-S/1	Cup-Type 10µm filter 100 pcs
120-22N-S/1	Cup-Type 20µm filter 100 pcs
130-33N-S/1	Cup-Type 30µm filter 100 pcs
150-47N-S/1	Cup-Type 50µm filter 100 pcs
170-67N-S/1	Cup-Type 70µm filter 100 pcs
200-98N-S/1	Cup-Type 100µm filter 100 pcs
220-20N-S/1	Cup-Type 200µm filter 100 pcs
550-50N-S/1	Cup-Type 500µm filter 100 pcs

### STERILE FILCONS

008-10S-S/1	Syringe Fitting 10µm filter 100 pcs
020-22S-S/1	Syringe Fitting 20µm filter 100 pcs
030-33S-S/1	Syringe Fitting 30µm filter 100 pcs
050-47S-S/1	Syringe Fitting 50µm filter 100 pcs
070-67S-S/1	Syringe Fitting 70µm filter 100 pcs
100-98S-S/1	Syringe Fitting 100µm filter 100 pcs
200-20S-S/1	Syringe Fitting 200µm filter 100 pcs
500-50S-S/1	Syringe Fitting 500µm filter 100 pcs

108-10S-S/1	Cup-Type 10µm filter 100 pcs
120-22S-S/1	Cup-Type 20µm filter 100 pcs
130-33S-S/1	Cup-Type 30µm filter 100 pcs
150-47S-S/1	Cup-Type 50µm filter 100 pcs
170-67S-S/1	Cup-Type 70µm filter 100 pcs
200-98S-S/1	Cup-Type 100µm filter 100 pcs
220-20S-S/1	Cup-Type 200µm filter 100 pcs
550-50S-S/1	Cup-Type 500µm filter 100 pcs

## FILCONS

### NON STERILE FILCONS

008-10N-S/3	Syringe Fitting 10µm filter 300 pcs
020-22N-S/3	Syringe Fitting 20µm filter 300 pcs
030-33N-S/3	Syringe Fitting 30µm filter 300 pcs
050-47N-S/3	Syringe Fitting 50µm filter 300 pcs
070-67N-S/3	Syringe Fitting 70µm filter 300 pcs
100-98N-S/3	Syringe Fitting 100µm filter 300 pcs
200-20N-S/3	Syringe Fitting 200µm filter 300 pcs
500-50N-S/3	Syringe Fitting 500µm filter 300 pcs

108-10N-S/3	Cup-Type 10µm filter 300 pcs
120-22N-S/3	Cup-Type 20µm filter 300 pcs
130-33N-S/3	Cup-Type 30µm filter 300 pcs
150-47N-S/3	Cup-Type 50µm filter 300 pcs
170-67N-S/3	Cup-Type 70µm filter 300 pcs
200-98N-S/3	Cup-Type 100µm filter 300 pcs
220-20N-S/3	Cup-Type 200µm filter 300 pcs
550-50N-S/3	Cup-Type 500µm filter 300 pcs

### STERILE FILCONS

008-10S-S/3	Syringe Fitting 10µm filter 300 pcs
020-22S-S/3	Syringe Fitting 20µm filter 300 pcs
030-33S-S/3	Syringe Fitting 30µm filter 300 pcs
050-47S-S/3	Syringe Fitting 50µm filter 300 pcs
070-67S-S/3	Syringe Fitting 70µm filter 300 pcs
100-98S-S/3	Syringe Fitting 100µm filter 300 pcs
200-20S-S/3	Syringe Fitting 200µm filter 300 pcs
500-50S-S/3	Syringe Fitting 500µm filter 300 pcs

108-10S-S/3	Cup-Type 10µm filter 300 pcs
120-22S-S/3	Cup-Type 20µm filter 300 pcs
130-33S-S/3	Cup-Type 30µm filter 300 pcs
150-47S-S/3	Cup-Type 50µm filter 300 pcs
170-67S-S/3	Cup-Type 70µm filter 300 pcs
200-98S-S/3	Cup-Type 100µm filter 300 pcs
220-20S-S/3	Cup-Type 200µm filter 300 pcs
550-50S-S/3	Cup-Type 500µm filter 300 pcs

Using CTSV FILCONS with different mesh sizes, you can easily remove cell clumps and large particles from your sample after tissue dissociation and ensure that you have a uniform single-cell suspension.

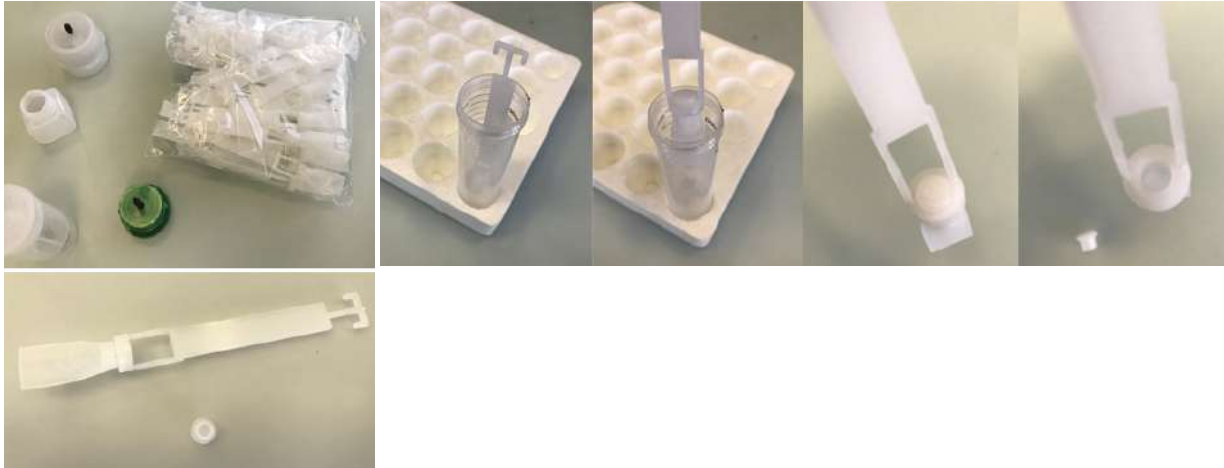
The strainers have smart features, such as:

- ✓ Compatibility with 5 (FILCONS) and 50 ml (FILCONS MAX) conical tubes
- ✓ Prevent clogging with optimized ventilation
- ✓ Compact size for sterile handling
- ✓ Syringe fitting for bigger volumes, cup type for smaller volumes



## DEPACONS

Holder bag for the rehydration of slices of paraffinised tissue, using 100 micron strainer bag.



Rehydrating paraffin-embedded tissue samples involves a series of steps to remove the paraffin and restore the tissue's hydration. Here's a basic protocol:

### **Deparaffinization:**

- a. Cut sections of paraffin-embedded tissue using a microtome.

### **Depacons preparation:**

- a. Insert the paraffin embedded tissue slice into the bag
- b. Close the lid in order to keep the sample inside the Depacons.

### **Xylene or Xylene Substitute:**

- a. Submerge the slides in xylene or a xylene substitute for several minutes to dissolve the paraffin. Repeat this step if necessary until the paraffin is completely removed.

### **Alcohol Gradation:**

- a. Transfer the slides through a series of alcohol baths with decreasing concentrations (100%, 95%, 70%, and 50%) to rehydrate the tissue. Allow the tissue to stay in each alcohol solution for a few minutes.

### **Water Rinse:**

- a. Finally, rinse the tissue sections in distilled water to remove any remaining alcohol.

### **Optional Antigen Retrieval:**

- a. If you plan to perform immunohistochemistry or other staining techniques, you may need to perform antigen retrieval at this point, following the appropriate method for your specific antibodies.

### **Continue with Desired Procedures:**

- a. After rehydration, you can insert the Depacons into a 50ml conical tube and fill with proper liquid (PBS, physiologic solution, etc.)
- b. Shake/vortex/vibrate the tube in order to obtain the cell suspension.  
Always follow lab safety guidelines and specific protocols for your tissue samples and research objectives.