

Microbiological Analysis - Colony Count, Sartorius Stedim Biotech

The membrane filtration method enables quantitative determination of micro-organisms in relatively great sample volumes. Inhibitors such as ethereal oils or preservatives can be rinsed before incubation without any problems. Nutrient Pad Sets facilitate many microbiological test procedures due to their practice-oriented handling.

① **Combisart® systems for microbiological analysis**

Combisart® stainless steel systems are made of high-quality stainless steel grade 1.4301 (B.S. 304S31/ AISI 304); to accommodate all Sartorius vacuum funnels. Stainless steel three-way valves enable individual control of the vacuum, as well as sterile venting of each filter station. Thus, secondary contamination of the filter bottom side can be excluded. The material and the design comply with the international requirements of the European Pharmacopeia and ISO 8199.

Microsart® e.jet is a new laboratory vacuum pump, which recirculates the filtrate to the drain during the vacuum filtration. It provides a trans-membrane pressure of 800 mbar and a flow rate of 3.5 l/min and is thus ideal for micro-biological analysis. Constant flows and a defined maximum vacuum guarantee gentle and reliable filtration.

Article	Order No.
Combisart® 3-branch stainless steel manifold 3 × 100 ml pre-assembled with stainless steel funnels and lids	10 16 66824
Minisart® SRP25, sterile filter for venting 0.2 µm, individually, sterile packaged, 5-times autoclavable, 50 units	10 16 67575
Rubber vacuum hose, 1 m	10 16 66623
Microsart® e.jet, fluid pump, 3.5 l/min	10 16 66603

Combisart® individual system and multi-branch manifolds, made of high-grade stainless steel
pre-assembled with stainless steel funnels and lids

Article	Order No.
Combisart® 3-branch stainless steel manifold 3 × 100 ml pre-assembled with stainless steel funnels and lids	10 16 66824
Combisart® 3-branch stainless steel manifold 3 × 500 ml	10 16 66828
Combisart® 6-branch stainless steel manifold 6 × 100 ml	10 16 66832
Combisart® 6-branch stainless steel manifold 6 × 500 ml	10 16 66831

Combisart® individual and multi-branch bases, made of high-grade stainless steel without funnels and lids, to accommodate various funnel types

Article	Order No.
Combisart® individual base, stainless steel, with frit to accommodate stainless steel funnels and Biosart® 100/250	10 16 66841
Combisart® 3- branch stainless steel manifold, without frits	10 16 66842
Combisart® 6- branch stainless steel manifold, without frits	10 16 66843
Combisart® base support with frit, stainless steel to accommodate stainless steel funnels and Biosart® 100/250	10 16 66840

② **Microsart® e.motion membrane filter dispenser**

Microsart® e.motion is a fully automatic membrane filter dispenser for individually and sterile packed cellulose nitrate filters. Single membranes are dispensed by press of a button or also touch-free by means of an optical sensor when tweezers approaching. The respective membrane filters are packed individually in a sterile manner without protective paper in a special Leporello fold. In order to guarantee traceability, the item and batch number, the sterilisation and expiration date, the pore size and a piece numbering are printed on the transparent foil of each membrane.

Article	Order No.
Microsart® e.motion membrane filter dispenser	10 16 66712

Microsart® cellulose nitrate membrane filters

For bacteriological tests, particle tests and microscopy. Autoclavable up to 121°C. Individually packed in a sterile way.

• **Type 114**

White with black grid, universally applicable.

• **Type 130**

Grey with white grid, ideal for testing yeasts and mildew.

• **Type 138**

Green with dark-green grid, offers great contrast when testing bright or clear bacteria colonies.

• **Type 139**

White with green grid, ideal for testing bacteria on nutrient media, which contain colours.

Ø mm	Pore size µm	Type	Order No.
50	0.45	114	10 16 61406
50	0.45	130	10 16 61306
50	0.45	138	10 16 61386
50	0.45	139	10 16 61396
50	0.65	130	10 16 61305



③ Nutrient Pad Sets

Microorganisms require the appropriate nutrient media for optimal growth. Nutrient Pad Sets are sterile, dehydrated culture media, already inserted in Petri dishes. Once they are moistened with 3.0 – 3.5 ml of sterile and demineralized water they are ready-to-use immediately. All types are supplied with the matching, individually and sterile packed grid membranes. The easy storage at room temperature for more than 18 and up to 24 months is a great advantage. Nutrient Pad Sets are easy to handle and economical compared to the time- and cost-intensive preparation of common nutrient media. The membrane filters meet the high requirements for micro-biological tests (e.g. ISO 7704) and are available with 47 or 50 mm diameter. 100 pieces.

Article	Membrane filter	Ø mm	Pore size µm	Filter color	Grid color	Order No.
Caso NPS	138	50	0.45	green	dark green	10 16 61463
Cetrimide NPS	139	50	0.45	white	green	10 16 61475
Endo NPS	139	50	0.45	white	green	10 16 61453
Sabouraud NPS	130	50	0.65	grey	white	10 16 61469
Schaufus Pottinger (m-Green yeast and mould) NPS	139	50	0.65	white	green	10 16 61470
Standard TTC NPS	138	50	0.45	green	dark green	10 16 61455
Tergitol TTC NPS	139	50	0.45	white	green	10 16 61456
Wort NPS	130	50	0.65	grey	white	10 16 61458

Other NPS types are available on request.

