



Device



Kits



Fluids



TPE Filter



Blood-gas exchanger



Accessories

Acute Blood Purification – Product Range

Device



multiFiltratePRO

multiFiltratePRO Device

The multiFiltratePRO offers a wide range of therapeutic applications mostly in intensive care:

- Continuous Kidney Replacement Therapy (CKRT) for patients with Acute Kidney Injury (AKI)
- Ci-Ca therapy option for Regional Citrate Anticoagulation (RCA)
- Therapeutic Plasma Exchange (TPE)
- Combination with adsorbers from other manufacturers to remove harmful substances from the blood
- Low-flow extracorporeal CO₂ removal with multiECCO2R in addition to CKRT

Name	Description	Article number
multiFiltratePRO	Standard version with heparin pump 30/50 ml, Ci-Ca module, two integrated fluid warmers, and PDMS connectivity functionality	M205001



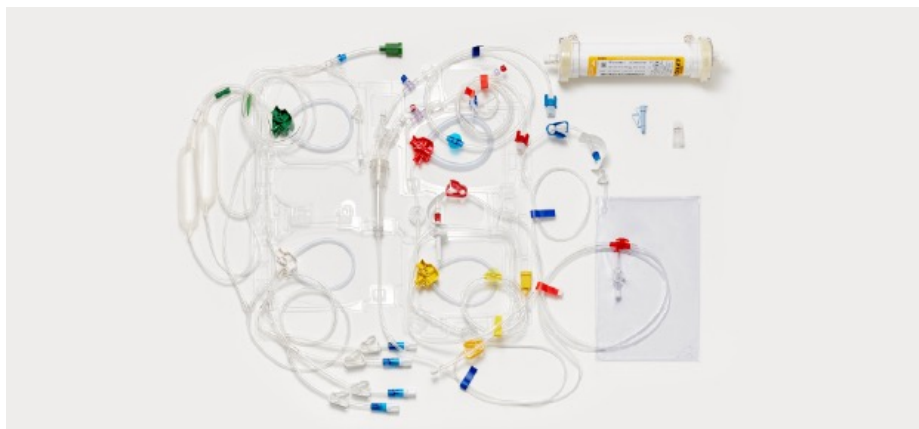
multiFiltratePRO Additional equipment

Additional equipment includes machine accessories that have a specific purpose in connection with the multiFiltratePRO and enable functional or technical add-ons.

Name	Description	Article number
multiFiltratePRO adsorber holder	Mobile holder to add an adsorber	F0007585
multiECCO2R holder	Mobile holder to add the multiECCO2R gas exchanger	F00014754
Plasma bag holder multiFiltratePRO	Mobile holder to add plasma bags (FFP) or bottles	F40003201
Power cord with safety plug 7 m multiFiltratePRO	Power cord with safety plug CEE 7/7, Length: 7 meters	F40013913
Potential equalization cable 4 mm ² 7.5 m long multiFiltratePRO	Potential equalization cable 4 mm ² , Length: 7.5 meters	F40013914
Nurse call cable with ferrite 3 m long multiFiltratePRO	Nurse call cable with ferrite, Length: 3 meters	M305101 on request
multiFiltratePRO HL7-connector	Retrofit kit of a built-in gateway to support HL7 v2.6	on request



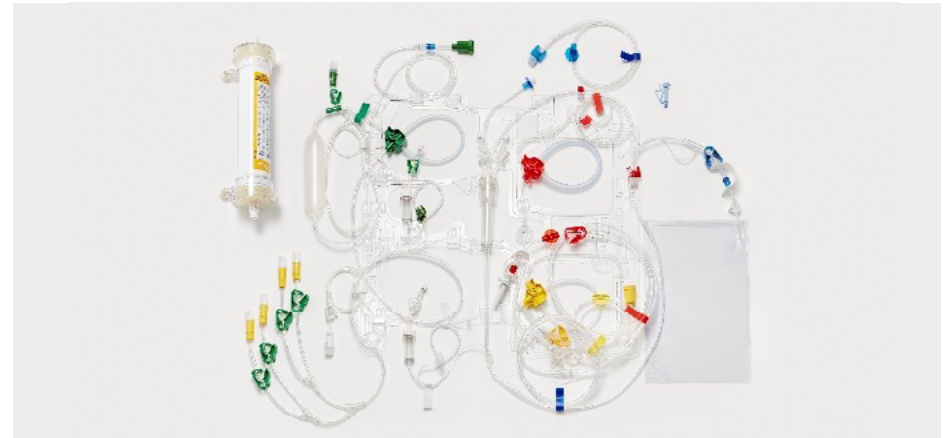
Kits



multiFiltratePRO treatment kits

multiFiltratePRO treatment kits Ci-Ca with SecuNect

These treatment kits contain tubing systems with SecuNect connectors and filters for the respective treatment with regional citrate anticoagulation.



Name	Filter	Tubing system	Total blood filling volume	Article number
multiFiltratePRO SecuKit Ci-Ca HD EMiC2	Ultraflux EMiC 2 (1.8 m ²)	multiFiltratePRO SecuCas Ci-Ca HD	264 ml	F00008265
multiFiltratePRO SecuKit Ci-Ca HD 1000	Ultraflux AV 1000 S (1.8 m ²)	multiFiltratePRO SecuCas Ci-Ca HD	264 ml	F00008264
multiFiltratePRO SecuKit Ci-Ca HDF 1000	Ultraflux AV 1000 S (1.8 m ²)	multiFiltratePRO SecuCas Ci-Ca HDF	264 ml	F00008266

multiFiltratePRO treatment kits TPE

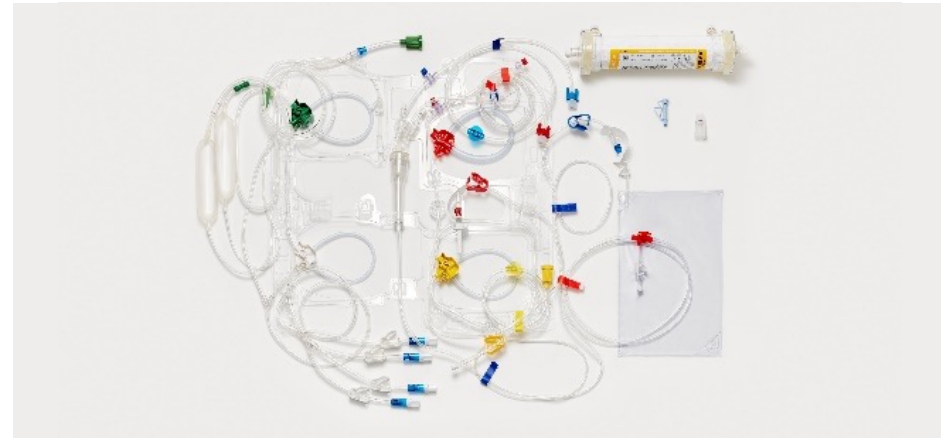
These treatment kits contain tubing systems and filters for Therapeutic Plasma Exchange (TPE).



Name	Filter	Tubing system	Total blood filling volume	Article number
multiFiltratePRO-Kit TPE P2dry	plasmaFlux P2 dry (0.6 m ²)	multiFiltratePRO TPE	183 ml	F00006443
multiFiltratePRO-Kit TPE P1dry	plasmaFlux P1 dry (0.3 m ²)	multiFiltratePRO TPE	151 ml	F00006441 on request

multiFiltratePRO treatment kits Heparin

These treatment kits contain tubing systems and filters for the respective treatment with heparin anticoagulation.



Name	Filter	Tubing system	Total blood filling volume	Article number
multiFiltratePRO-Kit HDF 1000	Ultraflux AV 1000 S (1.8 m ²)	multiFiltratePRO HDF	246 ml	F00000461
multiFiltratePRO-Kit HDF 600	Ultraflux AV 600 S (1.4 m ²)	multiFiltratePRO HDF	216 ml	F00000460 on request
multiFiltratePRO-Kit HDF 400	Ultraflux AV 400 S (0.7 m ²)	multiFiltratePRO HDF	168 ml	F00008138 on request
multiFiltratePRO Kit Paed HD 400	Ultraflux AV 400 S (0.7 m ²)	multiFiltratePRO paed HD	116 ml	F00009082

Fluids



Cifoban



Calreca



multiBic



Ci-Ca Dialysate

Cifoban Solution

Cifoban 136 mmol/l solution for infusion

Ready-to-use. 1.5 l fluid bag for Ci-Ca therapies. Equipped with SecuNect connector. 8 bags per box.

136 mmol/l citrate solution for infusion to the extracorporeal blood circuit for regional anticoagulation. Citrate impedes coagulation by forming chelate complexes with ionized calcium in blood.

Shelf life: 24 months



Name	Connector type	Country	Article number
Cifoban	SecuNect	CH / EC	F00011563

Mandatory data acc. to Art. 6 AWW

Cifoban

136 mmol/l, solution for infusion

Registration number: 68996

Active substance:

Sodium citrate

Composition:

1000 ml solution contains:

Sodium citrate 40,0 g

Excipients:

Water for injection, hydrochloric acid 25 %

Therapeutic indications:

Cifoban is used in adults and children (newborns excluded) for regional citrate anticoagulation (RCA) in continuous venovenous hemodialysis (CVVHD), continuous venovenous haemodiafiltration (CVVHDF), sustained low-efficiency (daily) dialysis (SLEDD) and therapeutic plasma exchange (TPE) via membrane plasma separation.

Contraindications: Hypersensitivity to sodium citrate; severely impaired citrate metabolism resulting in citrate accumulation

Undesirable effects:

Solution and treatment-related:

Allergic reactions leading to, e.g., low blood pressure, the feeling of sickness, back and abdominal pain, local reaction (itching, rash, reddening of the skin); (severe) electrolyte imbalance, e.g., hypocalcemia, hypernatremia, hypomagnesemia; metabolic alkalosis/acidosis; headache, seizure, coma, arrhythmia, cardiac arrest, hypotension, bronchospasm, respiratory arrest, tachypnoea, vomiting, muscle cramps.

fluid overload, pulmonary edema

Marketing authorization holder:

Fresenius Medical Care (Schweiz) AG,
Aawasserstrasse 2, 6370 Oberdorf NW.

Dispensing category: B

Detailed drug information:

<https://swissmedicinfo.ch> (Stand: 03/2023)

Vigilance:

Healthcare professionals are encouraged to report potential serious or adverse reactions via the Electronic Vigilance System EIViS (www.swissmedic.ch).

Calreca Solution

Calreca 100 mmol/l, solution for infusion

Calcium chloride 100 mmol/l. Ready-to-use. 1.5 l fluid bag for Ci-Ca therapies.

Equipped with SecuNect connector. 8 bags per box.

Shelf life: 24 months



Name	Country	Article number
Calreca 100 mmol/l, solution for infusion	CH / EC	F00011211

Mandatory data acc. to Art. 6 AWW

Calrecia

100 mmol/l, solution for infusion

Registration number: 68896

Active substance:

Calcium chloride dihydrate

Composition:

1000 ml solution contains:

Calcium chloride dihydrate 14,7 g

Excipients:

Water for injection

Therapeutic indications:

Calrecia is used in adults and children for calcium substitution during continuous renal replacement therapy (CRRT), slow low-efficient daily dialysis (SLEDD), and therapeutic plasma exchange (TPE) with citrate anticoagulation.

Contraindications: Hypercalcemia, hyperchloremia

Undesirable effects:

Solution-related: Incorrect use may cause irritation at the infusion site. Extravasation may cause burning, necrosis, and irritation of tissue, cellulitis, and soft tissue calcification. Hypercalcemia.

Treatment-related: Hypothermia, hyper- or hypohydration, hyper- or hypocalcemia, metabolic acidosis or alkalosis, other electrolyte disturbances (e.g., hypokalemia, hypophosphatemia), hypotension.

Marketing authorization holder:

Fresenius Medical Care (Schweiz) AG,
Aawasserstrasse 2, 6370 Oberdorf NW.

Dispensing category: B

Detailed drug information: <https://swissmedicinfo.ch> (Stand: 03/2023)

Vigilance:

Healthcare professionals are encouraged to report potential serious or adverse reactions via the Electronic Vigilance System EIViS (www.swissmedic.ch).

multiBic Solutions

multiBic 0/2/3/4 mmol/l potassium, solution for haemodialysis and haemofiltration

100% bicarbonate-buffered solution for haemodialysis and haemofiltration available in 4 potassium concentrations: potassium-free, 2 mmol/l potassium, 3 mmol/l potassium, 4 mmol/l potassium. PVC-, Latex-, and DEHP-free. In-use stability 48 h. Blue HF connector for color-coded guidance.

Shelf life: 24 months



Name	Country	Packaging	Article number
multiBic potassium-free	AT / BE / CH / NL / ES / PT	2 x 5 l bags/box, 104 bags/pallet	F00007430
multiBic 2 mmol/l potassium	AT / BE / CH / NL / ES / PT	2 x 5 l bags/box, 104 bags/pallet	F00007431
multiBic 3 mmol/l potassium	AT / BE / CH / NL / ES / PT	2 x 5 l bags/box, 104 bags/pallet	F00007432 on request
multiBic 4 mmol/l potassium	AT / BE / CH / NL / ES / PT	2 x 5 l bags/box, 104 bags/pallet	F00007433

Mandatory data acc. to Art. 6 AWW

multiBic potassium-free

solution for haemodialysis/haemofiltration

multiBic 2 mmol/l potassium

solution for haemodialysis/haemofiltration

multiBic 3 mmol/l potassium

solution for haemodialysis/haemofiltration

multiBic 4 mmol/l potassium

solution for haemodialysis/haemofiltration

Active substance:

Sodium citrate

Composition:

1000 ml of the ready-to-use solution contain:

multiBic potassium-free: Potassium chloride -; sodium chloride 6.136 g; sodium hydrogen carbonate 2.940 g; calcium chloride dihydrate 0.2205 g; magnesium chloride hexahydrate 0.1017 g; glucose monohydrate 1.100 g (glucose 1.000 g).

multiBic 2 mmol/l potassium: Potassium chloride 0.1491 g; sodium chloride 6.136 g; sodium hydrogen carbonate 2.940 g; calcium chloride dihydrate 0.2205 g; magnesium chloride hexahydrate 0.1017 g; glucose monohydrate 1.100 g (glucose 1.000 g).

multiBic 3 mmol/l potassium: Potassium chloride 0.2237 g; sodium chloride 6.136 g; sodium hydrogen carbonate 2.940 g; calcium chloride dihydrate 0.220 g; magnesium chloride hexahydrate 0.1017 g; glucose monohydrate 1.100 g (glucose 1.000 g).

multiBic 4 mmol/l potassium: Potassium chloride 0.2982 g; sodium chloride 6.136 g; sodium hydrogen carbonate 2.940 g; calcium chloride dihydrate 0.2205 g; magnesium chloride hexahydrate 0.1017 g; glucose monohydrate 1.100 g (glucose 1.000 g).

pH ≈ 7.4

Excipients: Water for injections, hydrochloric acid 25%, carbon dioxide, sodium dihydrogen phosphate dihydrate.

Therapeutic indications: For use in patients with acute kidney injury requiring continuous renal replacement therapy; in patients with chronic kidney disease in whom a transient treatment is indicated and in patients with intoxication when continuous renal replacement therapy is indicated as part of the treatment.

Contraindications: Solution related: multiBic potassium-free/2/3 mmol/l potassium: Hypersensitivity to the active substances or to any of the excipients; hypokalaemia; metabolic alkalosis.

multiBic 4 mmol/l potassium: Hypersensitivity to the active substances or to any of the excipients; hyperkalaemia; metabolic alkalosis.

Treatment related:

Inadequate blood flow from vascular access. If there is a high risk of haemorrhage on account of systemic anticoagulation.

Undesirable effects: Solution and treatment related:

Nausea, vomiting; hypotension, hypertension; muscle cramps.

Treatment related:

Hyper- or hypohydration, electrolyte disturbances (e.g., hypokalaemia), hypophosphataemia, hyperglycaemia and metabolic alkalosis. Possibly multiBic or not all strengths of multiBic are registered or marketed in your country.

Marketing authorization holder:

Fresenius Medical Care (Schweiz) AG,
Aawasserstrasse 2, 6370 Oberdorf NW.

Dispensing category: B

Detailed drug information:

<https://swissmedicin.ch/02/2020>)

Vigilance:

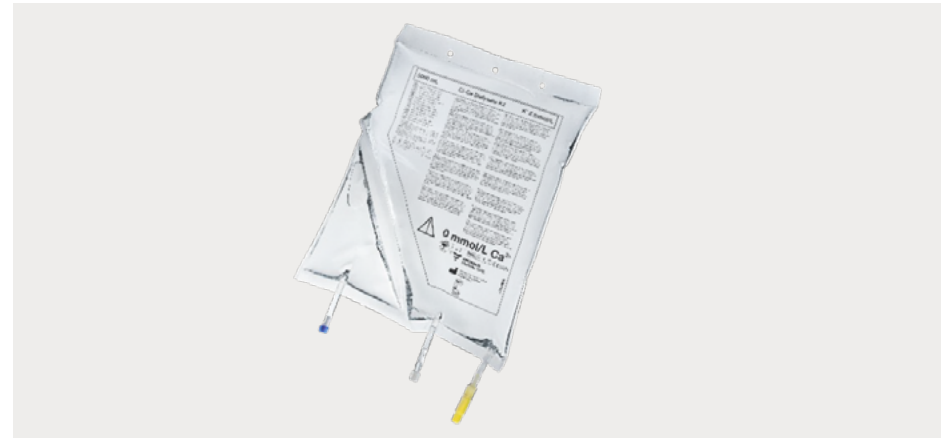
Healthcare professionals are encouraged to report potential serious or adverse reactions via the Electronic Vigilance System EIViS (www.swissmedic.ch).

Ci-Ca Dialysate K2, K4 Solutions

Ci-Ca Dialysate K2, K4 Solutions (Medical Device)

100% bicarbonate-buffered dialysis solution with 2 mmol/l potassium / 4 mmol/l potassium for citrate anticoagulation-based CKRT. PVC-, Latex- and DEHP-free. In-use stability 48 h. Yellow HF connector for color-coded guidance.

Shelf life: 24 months



Name	Na ⁺	K ⁺	Ca ²⁺	Mg ²⁺	Cl ⁻	HCO ₃ ⁻	Glucose	Country	Packaging	Article number
Ci-Ca Dialysate K2 5000 ml	133 mmol/l	2 mmol/l	0 mmol/l	0.75 mmol/l	116.5 mmol/l	20 mmol/l	1 g/l	CH	2 x 5 l bags/box, 104 bags/pallet	9689201
Ci-Ca Dialysate K4 5000 ml	133 mmol/l	4 mmol/l	0 mmol/l	0.75 mmol/l	118.5 mmol/l	20 mmol/l	1 g/l	CH	2 x 5 l bags/box, 104 bags/pallet	F00000431

Ci-Ca Dialysate K2 Plus, K4 Plus Solutions

Ci-Ca Dialysate K2 Plus, K4 Plus (Medical Device)

Ci-Ca Dialysate Plus contains a phosphate concentration of 1.25 mmol/l.

Yellow HF connector for color-coded guidance.

100% bicarbonate-buffered dialysis solution with 2 mmol/l potassium / 4 mmol/l potassium for citrate anticoagulation-based CKRT. PVC-, Latex- and DEHP-free.

In-use stability 48 h.

Shelf life: 24 months



Name	Na ⁺	K ⁺	Ca ²⁺	Mg ²⁺	Cl ⁻	HCO ₃ ⁻	H ₂ PO ₄ ⁻	Glucose	Country	Packaging	Art. no.
Ci-Ca Dialysate K2 Plus 5000 ml	133 mmol/l	2 mmol/l	0 mmol/l	1.00 mmol/l	115.75 mmol/l	20 mmol/l	1.25 mmol/l	1 g/l	CH	2 x 5 l bags/box, 104 bags/pallet	on request
Ci-Ca Dialysate K4 Plus 5000 ml	133 mmol/l	4 mmol/l	0 mmol/l	1.00 mmol/l	117.75 mmol/l	20 mmol/l	1.25 mmol/l	1 g/l	CH	2 x 5 l bags/box, 104 bags/pallet	F00001625 on request

TPE Filter



plasmaFlux

plasmaFlux Filter

plasmaFlux filter for Therapeutic Plasma Exchange

plasmaFlux is used for plasma filtration, i.e., separating plasma from whole blood.

Therapeutic Plasma Exchange can be applied to exchange plasma with the intention to remove harmful substances. Depending on the disease, this may be complemented by drug therapy.



Name	Surface area	Filling volume	Units per box	Article number
plasmaFlux P2 dry	0.6 m ²	67 ml	10	5008031 on request

Blood-gas exchanger



multiECCO2R

multiECCO2R Blood-gas exchanger and holder

multiECCO2R enables the delivery of low-flow ECCO₂R in combination with CKRT on a single therapy system using one vascular access.

EUROSETS S.r.l., Italy is the legal manufacturer of the multiECCO2R and Fresenius Medical Care Deutschland GmbH is a distributor in selected countries.



Name	Description	Article number
multiECCO2R	Blood-gas exchanger EU5060	F00008943
multiFiltratePRO multiECCO2R holder	Holder for multiFiltratePRO	F00014754

Accessories



Accessories

Accessories

Accessories for extracorporeal blood treatments



Name	Description	Minimal order quantity	Article number
multiEffluent Bag 10 L	Filtrate collection bag with male Luer lock and drain with stop cock	40	5029011
multiEffluent Bag 10 L single-use	Filtrate collection bag with male Luer lock	40	5029031
Pressure line for MTS	Pressure monitor line with filter for replacement, length 30 cm, blue	100	5014631
Pressure measurement line 60 cm	Pressure monitor line with filter for replacement, length 60 cm, white	200	5019151
Adapter Luer-Lock Male / Luer-Lock Male	To connect two female Luer locks	100	5014771
Adapter Luer-Lock Female / Luer-Lock Female	To connect two male Luer locks	100	5014801
Dialysat system CAVH/D – CVVH/D	Adapter to connect Luer lock to the filtrate outlet of a filter, with a clamp	100	5014911 on request
Adapter HF-Male Luer-Lock-Male	To connect solution bags with HF female to tubing systems with Luer lock male	100	5015451 on request



**FRESENIUS
MEDICAL CARE**

Head office: Fresenius Medical Care Deutschland GmbH
61346 Bad Homburg v. d. H. · Germany · Phone: +49 (0) 6172-609-0

Switzerland: Fresenius Medical Care (Schweiz) AG
Aawasserstrasse 2 · 6370 Oberdorf NW · Phone: +41 (0) 41-6195050
E-Mail: info.ch@freseniusmedicalcare.com

www.freseniusmedicalcare.com · www.freseniusmedicalcare.ch