

Concentrates and Solutions

Product Range



Acid Concentrates

AC-F – Liquid 1+44 Acid Concentrates in Canisters

The mixing ratio for all acid concentrates listed below is 1 + 44. All of them are designed for use with bibag or Flexicart or liquid bicarbonate concentrate 8.4%.

Within the haemodialysis machine 1 litre of acid concentrate is mixed with 1.575 litres of liquid bicarbonate concentrate 8.4% and 42.425 litres of purified water in order to obtain 45 litres of ready-to-use dialysis fluid. The mixing ratio of the haemodialysis machine must be set accordingly (1 + 44 AC-F).

The labels of acid concentrates are marked red.

Liquid Acid Concentrates in Canisters (1 + 44 AC-F)

Composition of ready-to-use dialysis fluid (after mixing with bicarbonate concentrate 8.4% and purified water)

Type	Na ⁺ mmol/L	K ⁺ mmol/L	Ca ²⁺ mmol/L	Mg ²⁺ mmol/L	Cl ⁻ mmol/L	HCO ₃ ⁻ mmol/L	Acetate mmol/L	Glucose g/L	Osmolarity mosm/L	Art. No. 4.7 L	Art. No. 7.8 L
AC-F 119/5	138.00	1.00	1.250	0.50	107.50	32.00	3.00	1.00	289	662 163 1	662 162 1
AC-F 113/1	138.00	1.00	1.500	0.50	108.00	32.00	3.00	1.00	290	262 463 1	262 462 1
AC-F 219/1	138.00	2.00	1.250	0.50	108.50	32.00	3.00	1.00	291	462 463 1	462 462 1
AC-F 213/4	138.00	2.00	1.500	0.50	109.00	32.00	3.00	1.00	292	262 863 1	262 862 1
AC-F 313/2	138.00	3.00	1.250	0.50	109.50	32.00	3.00	1.00	293	562 963 1	562 962 1
AC-F 313/1	138.00	3.00	1.500	0.50	110.00	32.00	3.00	1.00	294	562 663 1	562 662 1
canisters/pallet										90	60

Technical changes reserved. Additional variations available on request

smartbag – Liquid 1+44 Acid Concentrates in Bags

The smartbag is an environmentally-friendly flexible canister for 1 + 44 AC-F acid concentrates, combining all the advantages of a canister and a bag.

Handling convenience:

- stand-alone stability
- easy to carry
- compatible with all dialysis machines

Environmentally-friendly:

- welded from a polyolefin foil
- minimised waste



smartbag containing liquid acid concentrates (1+44 AC-F)

Compositions of ready to use dialysis fluid (after mixing with bicarbonate concentrate 8.4% and purified water)

smartbag	Na ⁺ mmol/L	K ⁺ mmol/L	Ca ²⁺ mmol/L	Mg ²⁺ mmol/L	Cl ⁻ mmol/L	HCO ₃ ⁻ mmol/L	Acetate mmol/L	Glucose g/L	Osmolarity mosm/L	Art. No. 4.7 L	Art. No. 7.8 L
smartbag 111.5	138	1.00	1.50	0.5	108.00	32.00	3.00	1.00	289.55	F000 000 64	F000 010 28
smartbag 211.25	138	2.00	1.25	0.5	108.50	32.00	3.00	1.00	290.80	F000 000 65	F000 009 48
smartbag 211.5	138	2.00	1.50	0.5	109.00	32.00	3.00	1.00	291.55	F000 000 66	F000 009 47
smartbag 211.75	138	2.00	1.75	0.5	109.50	32.00	3.00	1.00	292.30	F000 002 32	F000 010 29
smartbag 311.25	138	3.00	1.25	0.5	109.50	32.00	3.00	1.00	292.80	F000 000 67	F000 010 30
smartbag 311.5	138	3.00	1.50	0.5	110.00	32.00	3.00	1.00	293.55	F000 000 68	F000 010 31
bags/box – boxes/pallet										60 – 2	36 – 2

Code message: e. g. **smartbag 111.5** (1xx.x = K⁺ in mmol/L) (x1x.x = Glucose in g/L) (xx1.5 = Ca²⁺ in mmol/L)

Technical changes reserved

Acid Concentrates

Granudial AF – Dry Acid Concentrates

Granudial AF, the dry acid concentrate, must be dissolved with purified water with the help of a suitable mixing device according to the instructions given in the package insert in order to obtain liquid acid concentrate.

The yielded liquid acid concentrate is for use in a mixing ratio of 1+34. It is designed for use with *bibag* or Flexicart or liquid bicarbonate concentrate 8.4%.



Dry Acid Concentrates: Granudial AF

Composition of the ready-to-use dialysis fluid (after mixing with basic bicarbonate concentrate 8.4% and R.O. water)

Type	Na ⁺ mmol/L	K ⁺ mmol/L	Ca ²⁺ mmol/L	Mg ²⁺ mmol/L	Cl ⁻ mmol/L	HCO ₃ ⁻ mmol/L	Acetate mmol/L	Glucose g/L	Weight kg	Litres of conc./box	Art. No.
AF80	138	2	1.50	0.50	106.00	32.00	6.00	1.00	29	100	F00000405
AF81	138	3	1.50	0.50	107.00	32.00	6.00	1.00	29	100	F00000406
AF82	138	2	1.75	0.50	106.50	32.00	6.00	1.00	29	100	F00000854
AF83	138	2	1.25	0.50	105.50	32.00	6.00	1.00	29	100	F00000855
boxes/pallet											20

Technical changes reserved. Additional variations available on request

Bicarbonate Concentrates

Dry On-Line Bicarbonate Concentrates

Advantages of dry on-line concentrates:

- microbiologically safe
- chemically stable
- small and lightweight

All bicarbonate concentrates mentioned below are designed for use with any of the acid concentrates listed in this brochure. The labels of bicarbonate concentrates are marked blue.



bibag

The on-line dry bicarbonate concentrate for Fresenius Medical Care haemodialysis machines.

bibag				
Type	Weight	Composition	Quantity	Art. No.
bibag	650 g	NaHCO ₃	16 bags/box	508 992 1
bibag	900 g	NaHCO ₃	12 bags/box	508 991 1
bibag 5008	650 g	NaHCO₃	16 bags/box	506 078 1
bibag 5008	900 g	NaHCO ₃	12 bags/box	506 080 1
boxes/pallet				56

bibag 5008 is the standard module for the 5008, 5008S and 4008 classic HD machines



Flexicart

The on-line bicarbonate cartridge for machines equipped with standard holder.

Flexicart				
Type	Weight	Composition	Quantity	Art. No.
Flexicart	700 g	NaHCO ₃	10 cartridges/box	508 990 1
boxes/pallet				54

Bicarbonate Concentrates

BC-F – Liquid Bicarbonate Concentrate 8.4% in Canisters

BC-F liquid bicarbonate concentrate 8.4% is designed for use with any of the acid concentrates listed in this brochure.



Liquid Bicarbonate Concentrate 8.4% in Canisters

Composition of the concentrate

Type	Na ⁺ mmol/L	HCO ₃ ⁻ mmol/L	Theoret. osmol. mosm/L	Art. No. 6 L	Art. No. 8 L	Art. No. 10 L
BC-F 8.4%	1000	1000	2000	249 964 1	249 962 1	249 963 1
canisters/pallet				90	60	50

Granudial BI – dry bicarbonate concentrate

Granudial BI, the bicarbonate concentrate, must be dissolved with purified water with the help of a suitable mixing device according to the instructions given in the package insert in order to obtain liquid 8.4% bicarbonate concentrate.



Dry Bicarbonate Concentrates: Granudial BI

Composition of the concentrate

Type	Na ⁺ mmol/L	HCO ₃ ⁻ mmol/L	Quantity	Weight/Box kg	Litres of conc./box	Art. No. for 1 box
BI 84	1000	1000	4 bags/box	34	400	508 861 C*
BI 840	1000	1000	2 bags/box	17.5	200	508 860 1**
boxes/pallet						*24 **48

Rinsing Solutions

Saline 0.9% in Frekaflex Bags

Solutions for rinsing and priming the tubing system as well as for washing back the residual blood from the tubing set at the end of dialysis. Frekaflex bags are made of PVC and are equipped with 2 Luer-Lock connectors. All rinsing solutions mentioned in this catalogue are CE-certified. They are specified for rinsing purposes and may not be used as infusion solutions.



Saline 0.9% in Frekaflex Bags					
Type	Na ⁺ mmol/L	Cl ⁻ mmol/L	Art. No. 30 × 250 mL	Art. No. 15 × 500 mL	Art. No. 10 × 1000 mL
Saline 0.9%	154	154	131 067 1	131 865 1	131 866 1
bags/pallet			1440	720	500

Accessory		
Type		Art. No. 150 × 1 piece
Frekaflex transfer set	Fits Frekaflex bags	288 901 1
pieces/pallet		1120



Fresenius Medical Care

Head office: Fresenius Medical Care Deutschland GmbH · 61346 Bad Homburg v. d. H. · Germany · Phone: +49 (0) 6172-609-0 · Fax: +49 (0) 6172-609-2191
www.fmc-ag.com