

Gambro

# bicart

## 720G CARTRIDGE

Essential component of a system designed for ultrapure dialysis fluid to avoid treatment-related inflammation<sup>1,2,3,4,5</sup>

### THE ALL-PURPOSE BICARBONATE CARTRIDGE

Simplified clinical logistics, no requirement to order and store multiple sizes. Each single **BiCart** 720g cartridge provides sufficient bicarbonate for the majority of your in-center treatment needs.<sup>7</sup>

### THE CONVENIENCE OF BICARBONATE POWDER

Use of **BiCart** cartridge vs liquid bicarbonate minimizes the risk of microbial contamination and growth which is essential to ensure ultrapure dialysis fluid quality.<sup>1,2,3,4,5</sup> Smaller size, lighter weight, less packaging and less waste make the **BiCart** cartridge easier to handle than liquid bicarbonate concentrate, with double the shelf life. Dialysis fluid purity may be reached when the **BiCart** cartridge is combined with the Gambro **SoftPac** concentrate.

### EASY TO USE

Ergonomic design with cap closure, aiming for clean and safe disposal after treatment. Economic cartridge size with minimal waste and less environmental impact compared to liquid bicarbonate in canister.

### THE BRAND YOU CAN TRUST

Developed using Gambro's well-established manufacturing expertise and rigorous quality control. **BiCart** cartridges in powder are designed for patient safety, minimizing the risk of bacterial contamination which can induce chronic treatment-related inflammation.<sup>1,2,3,4,5</sup> **BiCart** cartridges are designed to provide a cost-effective solution for all your dialysis treatment needs.

The global leader in bicarbonate powder for dialysis for over 25 years



# Gambro BiCart 720g – specifications

## GENERAL DESCRIPTION<sup>6</sup>

The **BiCart** cartridge is a powdered sodium bicarbonate concentrate in a propylene container.

When attached to the special holder, water passes through the **BiCart** cartridge, thus producing a saturated bicarbonate solution, ready for use. This concentrate solution then is proportionated with acid concentrate and purified water in the dialysis machine to produce a bicarbonate-based dialysis fluid.

Product code	109 183 (EEA EU-pallet) 109 733 (WW one-way pallet)
Units per box	10

## QUALITY CONTROL

Quality control as well as manufacturing procedures for the **BiCart** cartridge follow the current Good Manufacturing Practice (GMP) for pharmaceuticals as well as European and US legislation for medical devices.

The inspection of components, the process control and finished product testing are rigorous. All documentation and results from tests and inspections are checked and reviewed.

## REQUIREMENTS ON ACID CONCENTRATE

The acid concentrate must be designed for use with pure bicarbonate concentrate and have a dilution ratio of 1:35 (1+34) or 1:45 (1+44). As an example, the Gambro **SoftPac** concentrate can be used. When mixed 1:45 (1+44) the result is (mmol/l):

Sodium	103.00
Potassium	2.00
Calcium	1.75
Magnesium	0.50
Chloride	109.50
Acetate	3.00

Together with the sodium bicarbonate concentrate from the **BiCart** cartridge, the final dialysis fluid will have a sodium concentration of 140 mmol/l and a bicarbonate concentration of 34 mmol/l at a normal machine setting.

1. Ward RA. *Sem Dialysis* 2004; 17:489–497
2. Ebben P. *James Trans Am Soc Artif Organs* vol. XXXIII 1987
3. Lonnemann G. *Blood Purif* 2004; 22:124–129
4. Gordon S. et al. Pyrogenic Reactions in Patients Receiving Conventional, High-Efficiency, or High-Flux Hemodialysis Treatment with Bicarbonate Dialysate Containing High Concentration of Bacteria and Endotoxin *J. Am. Soc. Nephrol.* 1992;2:1436-1444
5. Helmut Schiffli, High-Flux Dialyzers, Backfiltration, and Dialysis Fluid Quality, Department of Internal Medicine, University Hospital Munich, Campus Innenstadt, Munich Germany, 2011
6. For further information please refer to the BiCart cartridge package leaflet
7. Internally calculated using the concentrate calculator by GAMBRO
8. For best performance keep the BiCart cartridge at +20 to 25°C (+68 to +77°F) for 3-4 hours

The information herein may be subject to change without further notice.  
For more information and operating instructions, please refer to the operator's manual.

**CE 0086** The products meet the applicable provisions of Annex I (Essential Requirements) and Annex II (Full quality assurance system of the Council Directive 93/42/EEC of 14 June 1993 concerning medical devices.

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## SPECIFICATIONS

Contents	Each <b>BiCart</b> cartridge contains 720g of sodium bicarbonate powder
Capacity	Together with a suitable acid concentrate each <b>BiCart</b> cartridge will yield enough sodium bicarbonate solution to produce 200L of dialysis fluid with a bicarbonate concentration of 34 mmol/l
Duration <sup>7</sup>	Dialysis fluid flow rate: 500 ml/min      6 h 45 min 700 ml/min      4 h 50 min
Storing	Store below +40°C <sup>8</sup>
Shelf life	24 months from date of manufacture

## WATER PURITY

Water for diluting concentrated hemodialysis solutions should comply with local regulations and if no such regulations are available follow ISO 13959.

## TOP FILTER (A)

A filter, placed in the top of the **BiCart** 720g cartridge, prevents powder from going backwards up into the dialysis machine.

## PARKING LOT FOR CAP (B)

Two caps come with the **BiCart** 720g cartridge. The caps protect the connectors during transportation and by putting them back on the connectors after a treatment session, spillage and dripping can be minimized. During the treatment session the caps can be placed in the two parking lots.



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