

# Adsorba



## Removal of drugs and toxins by charcoal hemoperfusion

Because time is so important Charcoal hemoperfusion is a method which takes advantage of the huge adsorption capacity of active carbon. It is applicable to many cases of severe drug intoxication.

During this procedure the patient's blood is continuously perfused through a small cartridge containing charcoal granules. Gambro encapsulates the charcoal granules with a biocompatible cellulose membrane which protects cellular blood components from direct contact with the charcoal. However, toxic substances can easily pass the membrane and are adsorbed from the plasma.

The Gambro hemoperfusion cartridge Adsorba C is used when the physical state of the patient requires immediate elimination of toxic substances to maintain life.

The clinical efficiency of the Adsorba C is often demonstrated by the patient regaining consciousness and other vital signs within a few hours. Thus, the risk of causing irreversible multi-organ damage is reduced considerably by starting hemoperfusion immediately.

## High efficiency

High efficiency, patient safety and easy handling are the parameters by which hemoperfusion cartridges are judged. The Adsorba meets all these requirements.

The very high efficiency and adsorption capacity of the Adsorba C is a result of the use of activated charcoal as the adsorbant and of the special Gambro production procedure giving the following advantages:

- The 300 g of hemoperfusion-grade activated charcoal shows outstanding adsorption capacity.
- As opposed to resins which mainly adsorb lipophilic compounds, the activated charcoal offers a wide adsorption spectrum covering both lipophilic and hydrophilic drugs. So even if unknown drugs or drug mixtures have been ingested, the Adsorba may show optimal results.
- The charcoal granules used in the Gambro Adsorba C give a low resistance to the blood flow and a large adsorption area.
- The 300 g of charcoal in the Adsorba cartridge provides an exterior surface area of 40 m<sup>2</sup> and 300 000 m<sup>2</sup> interior surface area.
- The design of the Gambro cartridge facilitates optimal access to the granulate and assures complete inner rheological distribution.
- The outstanding efficiency of the Gambro cartridge has been demonstrated in many years of clinical use.

## Safety

The Gambro Adsorba cartridge utilizes cellulose coated activated charcoal.

The cellulose membrane encapsulates each charcoal granule in the Adsorba and thus

- drastically reduces the undesired deposition of blood components.
- offers maximum safety against the release of fine particles.

## Easy set-up – easy handling

Hemoperfusion with the Gambro Adsorba C is easy to perform:

- The Adsorba C is delivered filled with saline solution and in a sterilized condition. After priming the blood lines and rinsing the cartridge with dextrose in water and heparinized saline, the cartridge is ready for use.
- The set-up is fast and can be easily performed in an emergency, intensive care or dialysis unit.
- The Adsorba C conforms to all existing hemoperfusion monitor systems.

Use only as directed in the package insert.

### Adsorbent

Material:	150C	300C
Amount:	Activated charcoal hemoperfusion grade	Activated charcoal hemoperfusion grade
Total surface area:	150 g	300 g
	150 000 m <sup>2</sup>	300 000 m <sup>2</sup>

### Coating

Material:	Cellulose	Cellulose
Membrane thickness:	3-5 µm	3-5 µm

### Internal resistance

at QB = 200 ml/min:	20-30 mmHg	20-30 mmHg
Priming volume	140 ml	260 ml

### Filter mesh

450 µm	450 µm
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### Materials

Housing:	Polypropylene	Polypropylene
Filler:	Polypropylene balls	-

### Dimensions

Length:	245 mm	245 mm
Max. diameter:	87 mm	87 mm
Weight:	0.9 kg	1 kg

Specifications subject to change without prior notice.

For further information and operating instructions, please refer to the operator's manual.