

## Filter SafeStar™



**High-performance  
mechanical filter**



## Filter SafeStar™

Dräger stands for modern anesthesia and ventilation treatment of high quality and safety when it comes to the care and treatment of patients. Dräger anesthesia and ventilation systems and their Dräger consumables comprise a tested complete system, whose functionality is convincing.

The SafeStar™ mechanical high-performance airway filter shows excellent retention rates, thereby significantly contributing to infection prophylaxis in anesthesia and ventilation treatment.

- High-performance mechanical HEPA filter
- Patient-side or device-side use
- Sampling connector with tethered cap
- Sampling port in convenient 45° angle
- Transparency housing for visual control
- Standardized connectors for safe connection to other components
- Clear labeling and red color-coding for quick identification

## Recommendations by expert committees on the use of airway filters

As a preventive measure for infection prophylaxis and avoiding the risk of cross-infection in anesthesia, various expert committees recommend the use of a bacteria/virus filter, to be attached to the Y-piece and replaced after every patient.<sup>1, 4, 5, 12</sup>

In its November 2002 publication *Infection Control in Anaesthesia*<sup>1</sup>, the Association of Anaesthetists of Great Britain and Ireland recommends using a new bacteria/virus filter for each patient. There is evidence that breathing circuits are often contaminated with transmissible microorganisms and blood.<sup>2, 3</sup> Furthermore, the possibility of cross-infection of Hepatitis C<sup>3</sup> and the occurrence of multiple-resistant tuberculosis pathogens have also been cited.

The *Hygiene recommendations in anesthesia*<sup>4</sup> by the French Working Group for Hygiene in Anesthesia advise using a bacteria/virus filter on the Y-piece and replacing it after every patient to prevent the risk of cross-infection.

An update of these recommendations<sup>5</sup> in June 2002, authored by the *Comité technique national des infections nosocomiales*, stresses the need to protect the anesthesia circuit with a filter. This requirement was derived from publications on cross-infections that actually occurred or were considered possible during anesthesia.<sup>6, 7, 8, 9, 10, 11</sup>

According to the *Recommendations for prevention of nosocomial pneumonias*<sup>12</sup> published in Germany in 2000, by the Commission of Hospital Hygiene and Infection Prevention at the Robert Koch Institute, an anesthesia breathing circuit with bacterial filters shall be replaced once daily. If bacterial filters are not used, the anesthesia hoses must be replaced or disinfected for each new patient. Bacteria filters should be inserted between the tracheal tube and the Y-piece.

## Safety, quality, and economy

The new SafeStar mechanical HEPA airway filter from Dräger Medical meets high standards for infection prophylaxis in ventilation. The active medium of this mechanical filter is a filter membrane of coated glass fibers developed specifically for this purpose.

When used on the patient side, SafeStar supports protection of the patient from potentially present microorganisms in the inspired air as well as safeguarding the ventilator and the ventilator breathing system from bacteria that the patient breathes out. This also helps to reduce the risk of cross-infection. In addition, nosocomial infections considerably increase costs by extending the length of hospitalization by several days on average.<sup>13</sup>

For gas sampling, SafeStar is equipped with a Luer-Lock connector with a tethered cap for safety reasons. SafeStar's transparent housing allows for visual inspection at any time while in use. SafeStar is easily and quickly identifiable as a filter by its red color-code.

Standardized connectors provide proper and easy connection with other components of the ventilation circuit. SafeStar must be replaced every 24 hours. Unopened, SafeStar has a shelf life of five years. SafeStar is made exclusively from materials for environmentally safe disposal after use.

## Dräger anesthesia and ventilation systems and Dräger accessories comprise a tested complete system.

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10. Chant K, Kociuba K, Munro R, Crone S, Kerridge R, Quin J: Investigation of possible patient-to-patient transmission of hepatitis C in a hospital; *New South Wales Public Health Bulletin* 1994; 5:47–51
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Europe, Middle East, Africa, Latin America,  
Asia, Pacific:

**Dräger Medical AG & Co. KG**

Moislinger Allee 53-55

23542 Lübeck

GERMANY

Tel: +49-1805-3 72 34 37

+49-451-882-822

Fax: +49-451-882-37 79

E-mail: Business.Support@draeger.com

USA:

**Dräger Medical, Inc.**

3135 Quarry Road

Telford, PA 18969

USA

Tel: +1-215-721-5400

Toll-free: +1-800-437-2437

Fax: +1-215-723-5935

E-mail: info@draegermed.com

Canada:

**Dräger Medical Canada Inc.**

120 East Beaver Creek Road Suite 104

Richmond Hill Ontario L4B 4V1

CANADA

Tel: +1-905-763-3702

Toll-free: +1-866-343-2273

Fax: +1-905-763-1890

E-mail: Canada.Support@draeger.com

[www.draeger.com](http://www.draeger.com)

Manufacturer:

Dräger Medical AG & Co. KG

23542 Lübeck, Germany

The quality management system at  
Dräger Medical AG & Co. KG is  
certified according to ISO 13485, ISO 9001  
and Annex II of Directive 93/42/EEC  
(Medical devices).

## Specifications

Compressible volume (ml)	55
Recommended tidal volume (ml)	> 200
Bacterial retention* (%)	99.9999
Viral retention* (%)	99.9999
Filter membrane	Hydrophobic glass fiber membrane
Filtration method	mechanical
CEN filter classification	HEPA
Resistance at 30 l/min (mbar)	1.4
Weight (g)	39
ISO connectors	22M/15F – 22F/15M
Sampling	Luer-Lock with tethered cap
Housing	Polypropylene
Maximum duration of use	24 hours
Shelf life in undamaged packaging	5 years
Product	PVC-free Latex-free
Cleanroom manufactured according to EN ISO 14644-1:1999	

\*According to Nelson Laboratories, Inc., Salt Lake City, USA.

## Order information

Description	Filter SafeStar 55
Part no.	MP01790
Packaging unit (pcs.)	50

Not all items are available worldwide.