

# Disposable mops

For cleaning and disinfection of cleanrooms



# The Hydroflex Group

Cleanroom Hygiene Innovations



Hydroflex is a leading supplier and manufacturer of cleanroom cleaning systems. Our specialized product solutions for manual cleaning and disinfection help control and eliminate particles and germs in cleanrooms every day – in over 40 countries worldwide. Under our established product brands PurMop® and PurWipe® we develop and distribute certified mop systems and wipes for all applications in cleanrooms and controlled environments. Thanks to our ongoing innovation and product development, a clear focus on comprehensive service and our certified quality management system, renowned companies from industries such as Pharmaceutical, Medical Devices, Microelectronics, Optics and many more rely on us.

With our worldwide distribution network, established production sites and expert knowledge in cleanroom hygiene we are ready to support you.

## Our brands

Mopping Systems

**PurMop®**



Cleanroom Wipes

**PurWipe®**



Vacuum Cleaners

**PurVac®**



## Global activities

Hydroflex has recognized the dynamic development of the cleanroom market and the growing demand for specialized cleanroom cleaning systems. Today we are internationally set up to offer our global customers an optimal service.

From the first idea through to the development, testing, and certification our products are engineered in Germany and are distributed worldwide through the Hydroflex Group. At our production sites in Asia, we manufacture our wiping textiles – cleanroom mops and wipes of our PurMop® and PurWipe® series – according to international standards and certified cleanroom procedures. Our cleaning equipment (trolleys, accessories, cleanroom vacuum cleaners) are manufactured according to our specifications in Germany, and can be flexibly adapted to your individual requirements.

Wherever you operate a cleanroom, a partner of our worldwide distribution network can advise you with specialist knowledge and introduce the optimal solution to clean your cleanroom.

# The Safe-Use Concept

Disposable mops for single use in cleanrooms



## Quality

- ▶ PurMop® disposable safe-use mops are made using only Polyester raw materials and are designed to be durable and cleanroom suitable.
- ▶ Our microfiber mops utilize a special, innovative high-performance fiber made from 100 % Polyester which results in an increased cleaning performance.
- ▶ PurMop® disposable safe-use mops are designed for single use in cleanrooms, but can be washed and reused for other cleaning tasks outside of the cleanroom.

**Conclusion:** PurMop® disposable safe-use mops are made from high-quality 100 % Polyester materials, offer superior cleaning efficiency and are durable and even reusable outside of the cleanroom.



## Suitability

- ▶ The mops are processed in cleanrooms and full documentation is provided for every production batch.
- ▶ The PurMop® cleanroom mops are fully inspected and tested multiple times (100 % inspection policy) prior to batch release.
- ▶ PurMop® disposable safe-use mops are certified for their suitability for cleanrooms by the renowned Fraunhofer Institute in accordance with the applicable standards.

**Conclusion:** PurMop® disposable safe-use mops are produced to high quality standards and tested and certified for their cleanroom suitability.



## Ecology

- ▶ Each mop consists of just appr. 50g of material but can cover a area of around 15 m<sup>2</sup> (comparable to reusable mops).
- ▶ The fluid consumption per mop is less than 200ml which is up to 65 % less than traditional reusable mops.

**Conclusion:** PurMop® disposable safe-use mops are designed for maximum performance using minimal resources and are reusable for non-critical applications for added value.



## Cost

- ▶ PurMop® disposable safe-use mops are made from high quality raw materials, while still efficiently produced and competitively priced.
- ▶ Through clever construction they are able to achieve a high cleaning efficiency and area performance.
- ▶ This results in an overall convincing price/performance ratio.

**Conclusion:** PurMop® disposable safe-use mops are comparable to reusable mops with an affordable price and a great performance level!



## PurMop® E-Series



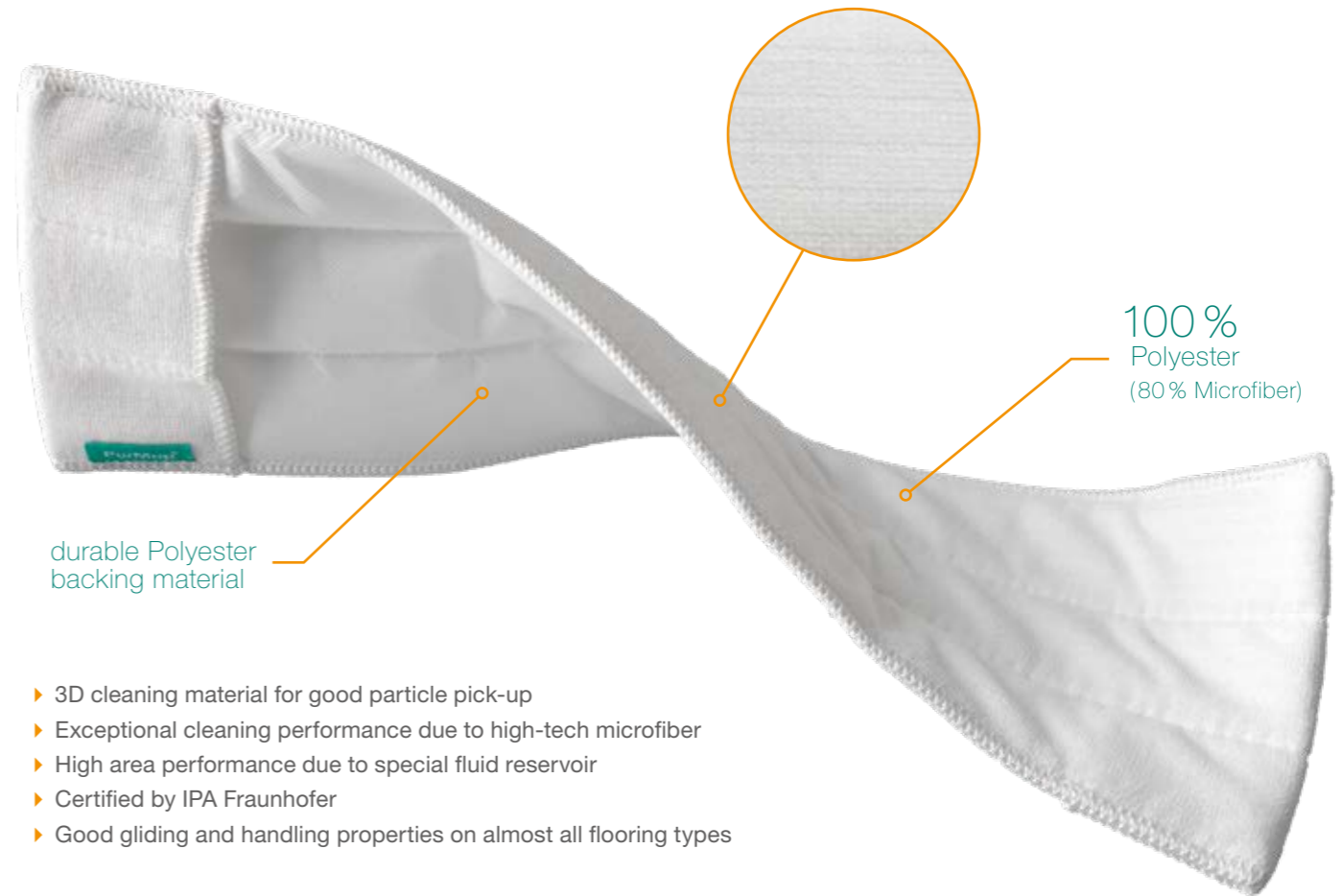
# Disposable mops

Disposable mops, perfectly meet the high demands for safety and consistent quality in cleanroom cleaning. With the innovative E-Series we offer a range of cleanroom mops which are made from high quality raw materials with an increased cleaning performance.

- ▶ Innovative high-tech material for a highest cleaning performance
- ▶ Cleanroom processed with full documentation for every batch
- ▶ PurMop® cleanroom mops are certified for cleanrooms by Fraunhofer Institute
- ▶ Designed for maximum performance using minimal resources
- ▶ All PurMop® disposable safe-use mops are reusable for non-critical applications for added value

# PurMop® EF40

Disposable Cleanroom Mop | Polyester Microfiber



- ▶ 3D cleaning material for good particle pick-up
- ▶ Exceptional cleaning performance due to high-tech microfiber
- ▶ High area performance due to special fluid reservoir
- ▶ Certified by IPA Fraunhofer
- ▶ Good gliding and handling properties on almost all flooring types

The PurMop® EF40 is a versatile and reliable cleanroom mop. It comprises a specially developed, cleaning material made of 100 % Polyester with high-performance microfiber which offers outstanding cleaning ability. Its efficient 3D material structure is able to cover uneven surfaces and effectively take up contamination of all types.

Thanks to the multi-layered construction with fluid reservoir the EF40 achieves a high area performance which makes it efficient and timesaving to use. This innovative mop holds the "Tested Device" seal by the IPA Fraunhofer test institute und is certified for use in cleanroom class ISO 5.

**HIGH-PERFORMANCE MICROFIBER**  
for superior cleaning results!



EF40	
▶ Version:	non-sterile
▶ Size:	40 cm
▶ Packaging:	5 pcs/double bag, 20 bags/carton [case = 100 pcs]
▶ Item no.:	2111108

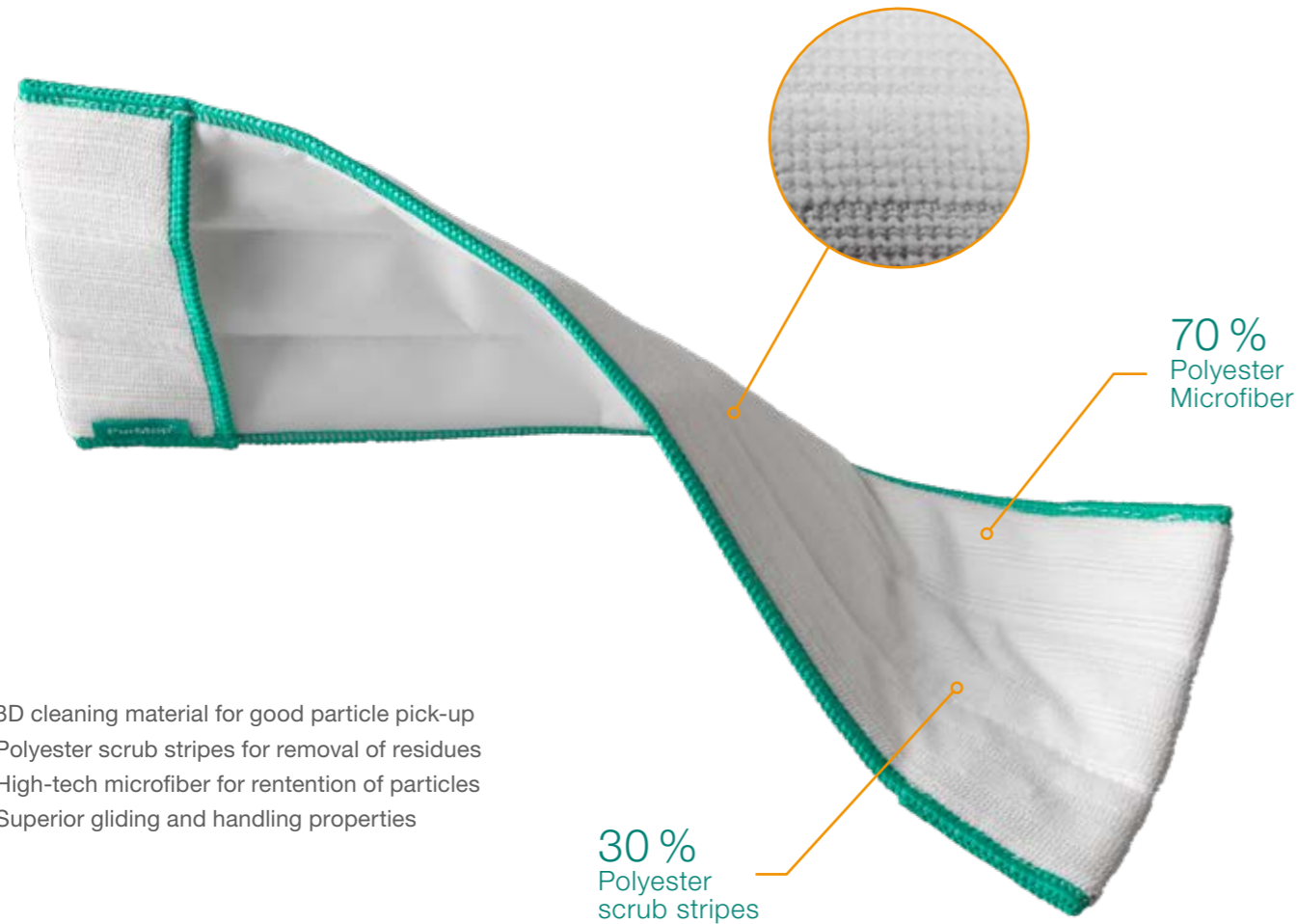
ISO	3	4	5	6	7	8
GMP			A/B	C	D	

EF40-S [STERILE]	
▶ Version:	sterile
▶ Size:	40 cm
▶ Packaging:	5 pcs/double bag, 20 bags/carton [case = 100 pcs]
▶ Item no.:	2111109

ISO	3	4	5	6	7	8
GMP			A/B	C	D	

# PurMop® EFB40

Disposable Cleanroom Mop | Polyester Microfiber + scrub stripes



- ▶ 3D cleaning material for good particle pick-up
- ▶ Polyester scrub stripes for removal of residues
- ▶ High-tech microfiber for retention of particles
- ▶ Superior gliding and handling properties

PurMop® EFB40 is the innovative problem solver in our range of cleanroom mops. This newly developed product comprises a dual-component material with alternating microfiber and scrubbing material. The resulting “dual-action” function guarantees an effective and fast removal of particulate contamination and residues from cleanroom surfaces. The reinforced backing material ensures excellent gliding properties, thus making it ergonomic to use.

Thanks to the built-in fluid reservoir and the overall good absorbency, EFB40 achieves high area performance and an even fluid distribution. PurMop® EFB40 is certified for the use in cleanroom class ISO 5 by IPA Fraunhofer test institute.

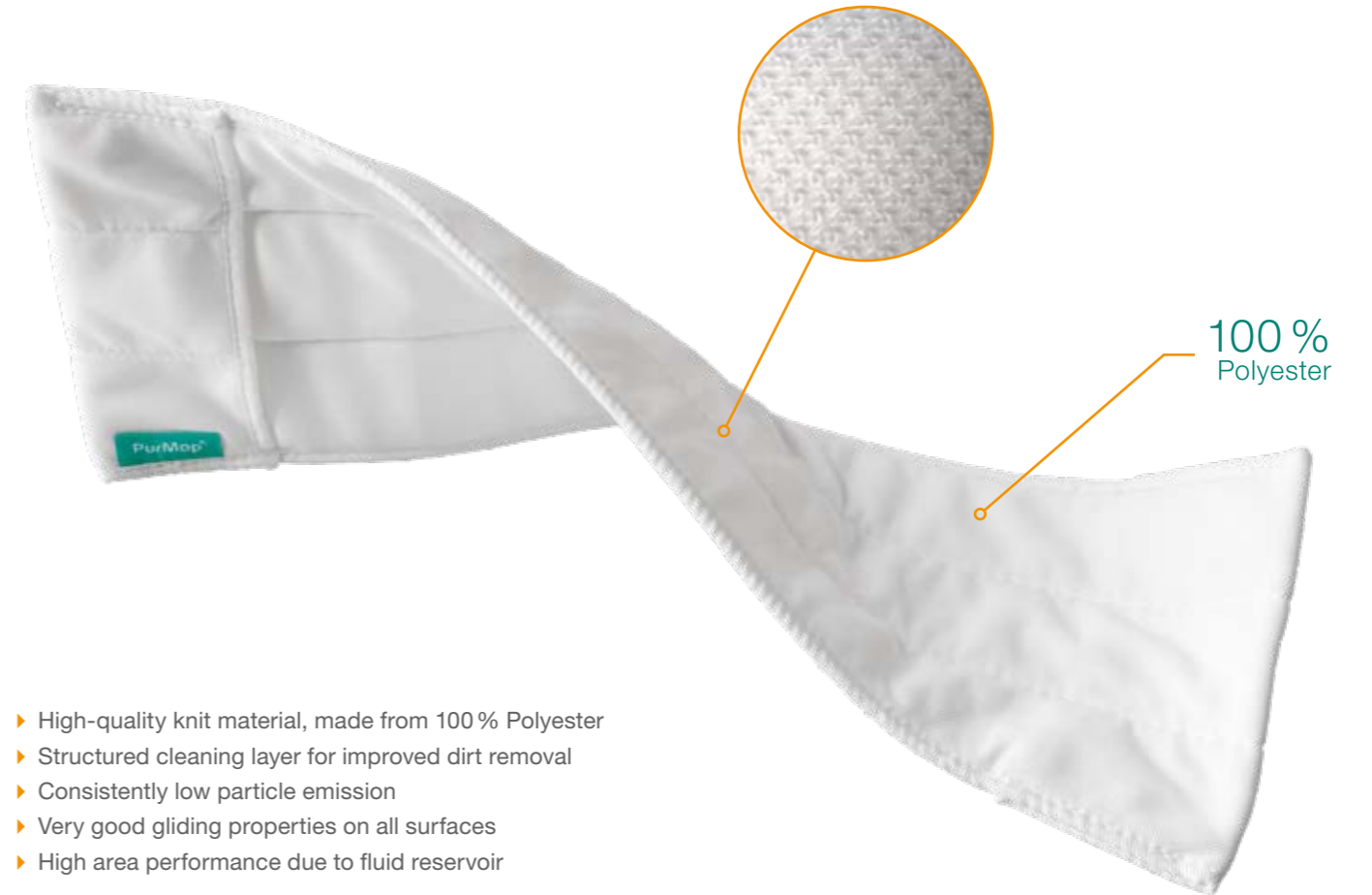


EFB40	
▶ Version: non-sterile	
▶ Size: 40 cm	
▶ Packaging: 5 pcs/double bag, 20 bags/carton [case = 100 pcs]	
▶ Item no.: 2111117	
ISO 3 4 5 6 7 8	GMP A/B C D

EFB40-S [STERILE]	
▶ Version: sterile	
▶ Size: 40 cm	
▶ Packaging: 5 pcs/double bag, 20 bags/carton [case = 100 pcs]	
▶ Item no.: 2111118	
ISO 3 4 5 6 7 8	GMP A/B C D

# PurMop® EC40

Disposable Cleanroom Mop | Polyester knit



- ▶ High-quality knit material, made from 100 % Polyester
- ▶ Structured cleaning layer for improved dirt removal
- ▶ Consistently low particle emission
- ▶ Very good gliding properties on all surfaces
- ▶ High area performance due to fluid reservoir

PurMop® EC40 is our premium cleanroom mop and made from Polyester knit with a special structure. Thanks to its robust construction from 100% Polyester fibers, it is resistant to all common chemicals and especially suitable for surface disinfection. It boasts consistently low particle emission, even in more demanding applications and on rougher surfaces. The combination of knitted front material with absorbent multilayer inserts ensures the EC40 can cover a large surface, which makes it optimal for the daily cleaning and disinfection of cleanrooms with higher classification. PurMop® EC40 is certified by the IPA Fraunhofer test institute.

PurMop® EC40 plus:

The PurMop® EC40 plus offers all the features of the EC40, but with additional inserts for higher area performance.

**BOUND EDGES**  
for low particle emission



EC40	EC40 plus
▶ Version: non-sterile	▶ Version: non-sterile, with additional inserts
▶ Size: 40 cm	▶ Size: 40 cm
▶ Packaging: 5 pcs/double bag, 20 bags/carton [case = 100 pcs]	▶ Packaging: 5 pcs/double bag, 20 bags/carton [case = 100 pcs]
▶ Item no.: 2111104	▶ Item no.: 2111115
ISO 3 4 5 6 7 8	ISO 3 4 5 6 7 8
GMP A/B C D	GMP A/B C D

EC40-S [STERILE]	EC40-S plus [STERILE]
▶ Version: sterile	▶ Version: sterile, with additional inserts
▶ Size: 40 cm	▶ Size: 40 cm
▶ Packaging: 5 pcs/double bag, 20 bags/carton [case = 100 pcs]	▶ Packaging: 5 pcs/double bag, 20 bags/carton [case = 100 pcs]
▶ Item no.: 2111105	▶ Item no.: 2111116
ISO 3 4 5 6 7 8	ISO 3 4 5 6 7 8
GMP A/B C D	GMP A/B C D



PurMop® V-Series

# Advantages of the V-Series

Ready-to-use, safe and convenient

## Ready-to-use

The PurMop® V-Series is not only immediately ready-to-use, it is also extremely comfortable. Thanks to the correct dosage with IPA 70 % / DI water 30 % (optionally WFI quality water), there is no need to do any preparation work. The mops can be used immediately and without much effort.



## Safe

The PurMop® V-Series is filled and packed in a cleanroom. Due to the ready-to-use presaturation with the optimal fluid level an incorrect dosage is avoided thus ensuring safety and reproducibility. The complete labeling shows the batch number and expiry date.



# Presaturated mops

Disposable safe-use mops perfectly meet the high demands for safety and consistent quality in cleanroom cleaning. With the innovative V-Series we offer a range of disposable cleanroom mops, which are presaturated with disinfectant and ready-to-use. This ensures an even easier and completely safe handling; no extra fluid dosage process and almost no effort.

- ▶ Innovative high-tech mops with high cleaning performance
- ▶ Delivered presaturated and ready-to-use
- ▶ Enables very quick and flexible usage
- ▶ Correct fluid level in each mop
- ▶ Particularly suitable for small cleanrooms
- ▶ Can be used without additional cleaning trolley

## Convenient

The already presaturated mops are immediately ready-to-use and particularly suitable for small cleanrooms. They can be used without additional fluid dosage and enable a very quick and flexible use.



# PurMop® EF40-SV

Presaturated Disposable Cleanroom Mop | Polyester Microfiber

EF40-SV:  
70 %  
Isopropanol  
30 %  
DI water

EF40-SV II:  
70 %  
Isopropanol  
30 %  
WFI quality water

- ▶ Presaturated with IPA 70/30, ready-to-use
- ▶ Exceptional cleaning performance due to high-tech microfiber
- ▶ High area performance due to special fluid reservoir
- ▶ Certified by IPA Fraunhofer
- ▶ Good gliding and handling properties on almost all flooring types



PurMop® EF40-SV is the presaturated, sterile version of our most versatile cleanroom mop. It comprises a specially developed pile material made of 100% Polyester microfiber which offers outstanding cleaning ability. Its efficient 3D material structure is able to reach uneven surfaces and effectively takes up contamination of all types. Thanks to the multi-layered construction with fluid reservoir the EF40-SV achieves a high area performance. The ready-to-use version has either two or five mops per bag and offers maximum safety due to a defined presaturation with the correct amount of fluid in each mop.

Optionally available presaturated with Ethanol.

EF40-SV [STERILE]	EF40-SV-2P [STERILE]	EF40-SV II [STERILE]	EF40-SV-2P II [STERILE]
<ul style="list-style-type: none"> <li>▶ Version: sterile, presaturated with IPA 70 % / DI water 30 %</li> <li>▶ Size: 40 cm</li> <li>▶ Packaging: 5 pcs / double bag, 10 bags / carton [case = 50 pcs]</li> <li>▶ Item no.: 2111129</li> </ul>	<ul style="list-style-type: none"> <li>▶ Version: sterile, presaturated with IPA 70 % / DI water 30 %</li> <li>▶ Size: 40 cm</li> <li>▶ Packaging: 2 pcs / double bag, 25 bags / carton [case = 50 pcs]</li> <li>▶ Item no.: 2111130</li> </ul>	<ul style="list-style-type: none"> <li>▶ Version: sterile, presaturated with IPA 70 % / WFI quality water 30 % - Conforms with EU BPR regulation</li> <li>▶ Size: 40 cm</li> <li>▶ Packaging: 5 pcs / double bag, 10 bags / carton [case = 50 pcs]</li> <li>▶ Item no.: 2111149</li> </ul>	<ul style="list-style-type: none"> <li>▶ Version: sterile, presaturated with IPA 70 % / WFI quality water 30 % - Conforms with EU BPR regulation</li> <li>▶ Size: 40 cm</li> <li>▶ Packaging: 2 pcs / double bag, 25 bags / carton [case = 50 pcs]</li> <li>▶ Item no.: 2111150</li> </ul>
ISO 3 GMP	ISO 3 4 5 6 7 8 GMP A/B C D	ISO 3 4 5 6 7 8 GMP A/B C D	ISO 3 4 5 6 7 8 GMP A/B C D

# PurMop® EFB40-SV

Presaturated Disposable Cleanroom Mop | Polyester Microfiber + scrub stripes

EFB40-SV:  
70 %  
Isopropanol  
30 %  
DI water

EFB40-SV II:  
70 %  
Isopropanol  
30 %  
WFI quality water

- ▶ Presaturated with IPA 70/30, ready-to-use
- ▶ 3D cleaning material for good particle pick-up
- ▶ Polyester scrub stripes for removal of residues
- ▶ High-tech microfiber for retention of particles
- ▶ Superior gliding and handling properties



PurMop® EFB40-SV is the presaturated, sterile version of our innovative EFB40. This newly developed product comprises a dual-component material with alternating microfiber and scrubbing material. The resulting “dual-action” function guarantees an effective and fast removal of particulate contamination and residues from cleanroom surfaces. The reinforced backing material ensures excellent gliding properties, thus making it ergonomic to use. Thanks to the built-in fluid reservoir and the overall good absorbency, EFB40 achieves high area performance and an even fluid distribution.

The ready-to-use version has five mops per double bag and offers maximum safety due to a defined presaturation with the correct amount of fluid in each mop.

Optionally available presaturated with Ethanol.

EFB40-SV [STERILE]	EFB40-SV II [STERILE]
<ul style="list-style-type: none"> <li>▶ Version: sterile, presaturated with IPA 70 % / DI water 30 %</li> <li>▶ Size: 40 cm</li> <li>▶ Packaging: 5 pcs / double bag, 10 bags / carton [case = 50 pcs]</li> <li>▶ Item no.: 2111134</li> </ul>	<ul style="list-style-type: none"> <li>▶ Version: sterile, presaturated with IPA 70 % / WFI quality water 30 % - Conforms with EU BPR regulation</li> <li>▶ Size: 40 cm</li> <li>▶ Packaging: 5 pcs / double bag, 10 bags / carton [case = 50 pcs]</li> <li>▶ Item no.: 2111147</li> </ul>
ISO 3 4 5 6 7 8 GMP A/B C D	ISO 3 4 5 6 7 8 GMP A/B C D

# ICT

Isolator cleaning tool



## Isolator cleaning

PurMop® ICT is a special compact cleaning tool for isolators, workbenches and hard to access areas in GMP- and sterile cleanrooms. It is comprised of the three parts: handle, mop frame and disposable mop pad of the EC20 series. The EC20-S sterile, disposable mop pad is made from 100% knit Polyester and is ideal for the effective disinfection of critical surfaces. It is also optionally available presaturated with Isopropanol 70/30.

- ▶ Ergonomic, manoeuvrable stainless-steel tool – long-term autoclavable, abrasion-resistant
- ▶ Guarantees maximum user safety for the disinfection of health-hazardous areas such as safety workbenches
- ▶ For improved ergonomics and easy accessibility of hard-to-reach areas
- ▶ High-quality, single-use Polyester mop pads

## PurMop® EC20-S

Disposable Cleanroom Mop for ICT | Polyester



- ▶ Durable 2-ply Polyester knit material for high efficiency
- ▶ Suitable for glass and stainless steel surfaces
- ▶ Low particle emission, for use in GMP A/B environments
- ▶ Dry or presaturated with Isopropanol 70/30

PurMop® EC20-S is the sterile disposable mop pad for our ICT cleaning tool. It is made from a 2-ply Polyester knit with an embossed structure for high cleaning efficiency. The multilayer structure ensures good fluid absorption and even wetting. The special pocket design ensures safe attachment to the mop frame, while the rectangular shape facilitates easy cleaning of corners.

EC20 is the safe and ergonomic alternative to using wipes in an isolator, enabling the user to easily clean from the outside, thus providing optimum user protection.

EC20-SV is the presaturated version of the EC20-S and is delivered ready-to-use with Isopropanol 70/30 – optionally with DI water or WFI quality water. This eliminates spraying and a high aerosol concentration of Isopropanol in the environment, ensuring maximum safety.

EC20-S	[STERILE]
<ul style="list-style-type: none"> <li>▶ Version: sterile</li> <li>▶ Size: 20 cm</li> <li>▶ Packaging: 2 pcs/double bag, 50 bags/carton [case = 100 pcs]</li> <li>▶ Item no.: 2111111</li> </ul>	
ISO	3 4 5 6 7 8
GMP	A/B C D

EC20-SV	[STERILE]
<ul style="list-style-type: none"> <li>▶ Version: sterile, presaturated with IPA 70% / DI water 30%</li> <li>▶ Size: 20 cm</li> <li>▶ Packaging: 2 pcs/double bag, 20 bags/carton [case = 40 pcs]</li> <li>▶ Item no.: 2111132</li> </ul>	
ISO	3 4 5 6 7 8
GMP	A/B C D

EC20-SV II	[STERILE]
<ul style="list-style-type: none"> <li>▶ Version: sterile, presaturated with IPA 70% / WFI quality water 30% - Conforms with EU BPR regulation</li> <li>▶ Size: 20 cm</li> <li>▶ Packaging: 2 pcs/double bag, 20 bags/carton [case = 40 pcs]</li> <li>▶ Item no.: 2111148</li> </ul>	
ISO	3 4 5 6 7 8
GMP	A/B C D

# Accessories

For a perfectly matched cleaning system

## Mop frames



Stainless steel | KEK40

Stainless steel | KEU40

Plastic | KKV40

## Mop handles



Stainless steel | SET2100/2070 | telescopic

Stainless steel | SEP140 | fixed

Aluminium | SAT2100/2150 | telescopic

Aluminium/plastic | SAK170 | telescopic

## ICT accessories



Stainless steel | SET2040

Aluminium | SAT2040

Stainless steel | MEP20

Stainless steel | ICT2050

## Trolleys

Choose from our extensive portfolio of cleanroom cleaning trolleys, from the traditional wringer system to our touch-free ERGO system.

For more information about our range of products, visit [HYDROFLEX-GROUP.COM](http://HYDROFLEX-GROUP.COM)



# Processing and packing



100% inspection policy



Packing in cleanroom ISO 5

PurMop® cleanroom mop heads are manufactured in our special production facility with class ISO 5–7 cleanrooms. Thanks to years of experience manufacturing professional cleaning products, a dedicated team of workers and our 100% inspection policy, we produce cleanroom mops with consistent quality and full batch documentation.

## Sterilisation

All PurMop® cleanroom mops are also available in sterile version, which is necessary for application of the mops in sterile cleanrooms. A sterility assurance level (SAL) of  $10^{-6}$  is achieved by gamma irradiation. The sterilisation process is fully validated according to DIN EN ISO 11137 and extensively documented. A sterilisation certificate is issued for each batch of sterile mops.

- ▶ Fully validated gamma sterilisation according to ISO 11137
- ▶ Sterility assurance level (SAL)  $10^{-6}$
- ▶ Sterilisation certificate for every batch



Gamma irradiation

STERILE R

## The PurMop® packaging concept

A detailed packaging concept along with cleanroom-suitable packaging materials are standard for all our PurMop® cleanroom mops. The triple packaging allows contamination-free entry into any cleanroom area, while the batch-specific labelling on the inner packaging level provides maximum safety and traceability.

- Outer packaging: [carton]**
  - ▶ Printed carton
  - ▶ Label with all relevant details (batch number, expiry date, product details)
- 1 Outer packaging: [carton liner]**
  - ▶ PE carton liner
- 2 Secondary packaging: [pack]**
  - ▶ Sealed HDPE bag
  - ▶ With easy-tear function for easy opening
- 3 Primary packaging: [bag]**
  - ▶ Sealed cleanroom HDPE bag
  - ▶ With easy-tear function for easy opening
  - ▶ Label with all relevant details (batch number, expiry date, product details)



Mops





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