MEMBRANE SPECIFICATION

Product PN	M09G0500HxxxxE *	☐ PRELIMINARY ☐ R&D RELEASED ☑ RELEASED	Mod. 984d Rev. 05
Description	HYDROPHOBIC, HAEMOREPELLENT 5.0 µm FORTEX MEMBRANE		

HYDROPHOBIC AND HAEMOREPELLENT 5.0 µm PVDF FORTEX MEMBRANES

PRODUCT DESCRIPTION	PVDF hydrophobic and haemorepellent 5.0 µm membranes cast on a nonwoven polyester support. Two-sided. Provided in rolls of different widths.
APPLICATIONS	The product is ideal for venting in medical applications.
MATERIALS COMPONENTS	Polymer: PVDF homopolymer Support: Polyester non-woven Others: Haemorepellent treatment

PRODUCT CHARACTERISTICS

Appearance/Visual:

White porous ribbons

Dimensional:

Standard Product code	Width*	Thickness	Max roll diameter	Standard length	Min length roll	Max length roll	Internal core diameter
M09G0500H0254E	25.4 mm	135 – 185 µm	220 mm	125 m	90 m	180 m	76 ± 0.8 mm
M09G0500H0340E	34.0 mm						
M09G0500H0381E	38.1 mm						
M09G0500H0787E	78.7 mm						
M09G0500H1524E	152.4 mm						
M09G0500H2540E	254.0 mm						
M09G0500H3048E	304.8 mm						
M09G0500H3302E	330.2 mm						
M09G0500H4500E	450.0 mm						

For other available widths, please contact the sales representative of your country.
The following product specification is valid also for other part numbers M09G0500**xxxx**E that do not appear in the table above.

* For width ≤ 15.5 mm : Tolerance ± 0.2 mm
For width > 15.5 mm : Tolerance ± 0.8 mm

*** M09G0500HxxxxE, where xxxx is the width of the roll. For instance xxxx=3302 means 330.2 mm**

MEMBRANE SPECIFICATION

Product PN	**M09G0500HxxxxE ***	☐ **PRELIMINARY** ☐ **R&D RELEASED** ☑ **RELEASED**	**Mod. 984d** **Rev. 05**
Description	**HYDROPHOBIC, HAEMOREPELLENT 5.0 µm FORTEX MEMBRANE**		

Physical:		
Test		Result
Air Flow GVS Internal	GVS internal procedure IC303	AF ≥ 81 l/min on 1 cm^2 at 1 bar
Water Break Through	GVS internal procedure IC305	≥ 0.1 bar
Haemorepellency	GVS internal procedure IC660	Yes
Oleorepellency grade	AATCC 118-2002	≥ 3.5
Hydrorepellency grade	DuPont Teflon test	≥ 9.5

Biological:		
Test	Standards/ procedures of ref	Result
Bacteria filtration efficiency test (BFE) using *Staphylococcus aureus*	ASTM F2101	96%
Chemical toxicity and solvent detection	UNI EN ISO 1135-4 (Annex B) UNI EN ISO 8536-4 (Annex B)	Non toxic
Cytotoxicity-MEM elution in vitro	UNI EN ISO 10993-5 (Annex C)	Non cytototxic
Intracutaneous reactivity test	UNI EN ISO 10993-10	Non-irritant
Delayed hipersensitivity test (Guinea-pig maximization test - GPMT)	UNI EN ISO 10993-10	0% Sensitization
Acute systemic toxicity	UNI EN ISO 10993-11	Non-toxic/non-irritant
In vitro haemolysis test	UNI EN ISO 10993-4 according to Italian Pharmacopoeia	Non hemolytic
Haemocompatibility	UNI EN ISO 10993-4	Hemocompatible

Regulatory Documentation
Reg. 1907/2006/EC (REACH)
Directive 2011/65/EU (RoHS)
BPA, DEHP and Latex free
Directive 2003/32/EC (TSE-BSE)
UNI EN ISO 10993-1 (Biocompatibility)
Directive 67/546/EC and Reg.1272/2008/EC (Medical sector dangerous substances)

STERILIZATION COMPATIBILITY

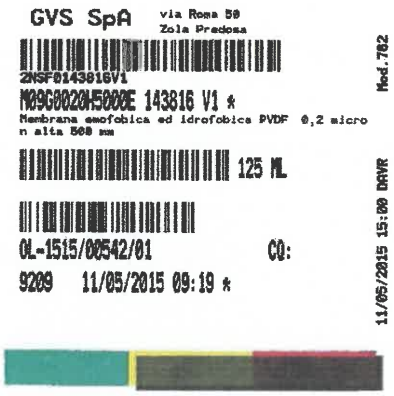
The product is NOT provided in sterile conditions (compatible sterilization method listed below)

	Method
☑	ETO
☑	Gamma (25 kGy)
☑	Autoclave (121°C)

*** M09G0500HxxxxE, where xxxx is the width of the roll. For instance xxxx=3302 means 330.2 mm**

MEMBRANE SPECIFICATION

Product PN	**M09G0500HxxxxE ***	☐ **PRELIMINARY** ☐ **R&D RELEASED** ☑ **RELEASED**	**Mod. 984d** **Rev. 05**
Description	**HYDROPHOBIC, HAEMOREPELLENT 5.0 µm FORTEX MEMBRANE**		

PRODUCT SHELF LIFE	5 years
STORAGE	Keep the product in a closed and clean environment, away from direct light and excessive temperature and humidity conditions
PACKAGING AND LABELLING	Each roll is individually packed in a thermo-welded PE bag identified with a barcode label. A second PE bag collects all rolls with the same lot in a cardboard box. Another barcode label is applied outside the box, with reference to the cumulative quantity. Each label reports the following traceability information: - Quantity - Product description - Product date and time - Lot number (OL and 6 digits batch number to trace back to raw materials used) - Operator code An image of a barcode label is provided below as an example. 
CERTIFICATE OF COMPLIANCE	Conformity declaration is printed on every invoice with a statement according to UNI EN 10204 type 2.1. The Quality management system in compliance with ISO 9001.
VISUAL REQUIREMENTS	Visual acceptance requirements apply when inspected under below conditions: Light type: unaided eye + lamp Distance: 30 – 45 cm Timings: 5 sec per unit

	Acceptance Requirement	AQL	Sampling Plan
1	Embedded contaminations	For width≤ 20mm ->Max 2/lm For 20 mm <width≤ 60mm -> Max 5/lm	First 3 linear meters of rolls sampled according ISO 2859 part. 1 1st Level
2	Loose contaminations	For 60 mm < width ≤ 130mm ->Max 10/lm For 130 mm < width≤ 450mm ->Max 20/lm	
3	Grease, stains	0 defects	
4	Splices/cross-tape for each rolls	Max 7	

*** M09G0500HxxxxE, where xxxx is the width of the roll. For instance xxxx=3302 means 330.2 mm**

MEMBRANE SPECIFICATION

Product PN	**M09G0500HxxxxE ***	☐ **PRELIMINARY** ☐ **R&D RELEASED** ☑ **RELEASED**	**Mod. 984d** **Rev. 05**
Description	**HYDROPHOBIC, HAEMOREPELLENT 5.0 µm FORTEX MEMBRANE**		

This material specification describes the properties of product above indicated.
This document contains general requirements, material description, drawing references, defect specification, biological material requirements.

REVISIONS AND APPROVALS:

Date	Rev.	Reason For Change	Issued by:	Controlled by:	Approved by:
09.02.2021	00	First emission	Marta Bojarska R&D Membrane and Chemistry Manager	Annarita Trotta AQP	Luca Querzè VP Science & Development

Customer Approval:

We accept this material specification as a part of the agreed terms of delivery

Company name _____

Approved by: _____
(Name, Function) (Signature)

Date _____ _____
(Company stamp)

Please send back this document signed for approval. If we will not receive this specification signed , we consider the first order placed as implicit approval.

*** M09G0500HxxxxE, where xxxx is the width of the roll. For instance xxxx=3302 means 330.2 mm**