



Model 9820 MS

# Tyvek® IsoClean®

DuPont™ Tyvek® IsoClean® hood and mask model IC 9820 WH MS. Clean-processed and gamma-sterilized. HOOD: Bound seams. Bound head opening. Ties with loops. White. MASK: Pleated Polyethylene outer. 17,5 cm Sterile. Blue.

Name	Description
Full Part Number	9820 MS
Fabric /Materials	Tyvek® IsoClean® CS
Design	Hood and mask combination
Seam	Bound
Color	Hood: white, mask: blue
Sizes	0
Quantity/Box	100 per box, individually packed (1 set per bag). Subgrouped by 20 in an outer bag. 2 polyethylene liners. Cardboard box.

## FEATURES & PRODUCT DETAILS

DuPont™ Tyvek® IsoClean® hood and mask, model IC 9820. HOOD: Available in white and in one size. Clean-processed and gamma-sterilized. Bound internal seams. Bound head opening. Ties with loops for adjustable fit. MASK: Pleated polyethylene outer. 17.5 cm wide. Sterile. Blue.

Tyvek® IsoClean® delivers an ideal balance of protection, durability and comfort. Made of high density polyethylene using a patented flash spinning process Tyvek® IsoClean® provides an inherent barrier to particles, microorganisms and non-hazardous light liquid splash.

Tyvek® IsoClean® (option codes CS, DS and MS) garments and accessories have been clean-processed to maximize cleanliness and have been gamma-irradiated. All DuPont™ Tyvek® IsoClean® clean-processed and sterile accessories (option MS) are packed in a dual barrier packaging system, consisting of an inner and outer easy tear cleanroom bag. The packaging serves as a key element for contamination risk reduction when transferring apparel into clean areas. The accessories are individually packed and grouped together in an outer bag.

Garments and accessories made of clean-processed and sterile Tyvek® IsoClean® are typically used in cleanrooms within the biotech, pharmaceutical, medical device manufacturing, food processing, cosmetics industry as well as in other critical or controlled environments.

- Sterilized by gamma-irradiation to SAL of  $10^{-6}$  (ISO 11137-1)
- Full traceability on all sterilized apparel with certificates of sterility available
- Suitable for use in GMP class C/D (ISO Class 6-9) clean rooms with or without Bioburden Control Areas
- PPE Category I



CLEANLINESS



Particle Shedding (Helmke Drum) and Bacterial Filtration Efficiency Data

Property	Test Method	Typical Result	EN
Bacterial Filtration Efficiency (3 µm)	ASTM F2101	98.4 % ± 0.9 % STD DEV	N/A
Particle Shedding (Helmke Drum)	IEST-RP-CC003.4	Category I	N/A

5 Front Tyvek ® / Back    > Larger than    < Smaller than    N/A Not Applicable    STD DEV Standard Deviation

## **WARNING**

- The information provided herein corresponds to our knowledge on the subject at the date of its publication. This information may be subject to revision as new knowledge and experience becomes available. The data provided fall within the normal range of product properties and relate only to the specific material designated; these data may not be valid for such material used in combination with any other materials or additives or in any process, unless expressly indicated otherwise. The data provided should not be used to establish specification limits or used alone as the basis of design; they are not intended to substitute for any testing you may need to conduct to determine for yourself the suitability of a specific material for your particular purposes. Since DuPont cannot anticipate all variations in actual end-use conditions DuPont makes no warranties and assumes no liability in connection with any use of this information. Nothing in this publication is to be considered as a license to operate under or a recommendation to infringe any patent rights.
- The intended use for Tyvek® IsoClean Accessories, that are not CE certified or certified as PPE Category I, does not include applications that may cause very serious consequences such as irreversible damage to health or death. The user should make the risk assessment to determine the protection required.

## PERMEATION DATA



Permeation is the process by which a solid, liquid or gaseous chemical moves through a protective clothing fabric at a molecular level. Permeation data assist in the selection of the most appropriate protective garment for a particular application and in the estimation of how long it can be safely worn. Standardised test methods are used to determine the resistance of DuPont materials to permeation, the results of which can be selected according to a specific chemical, chemical class or fabric.

Hazard / Chemical Name	Physical State	CAS	BT Act	BT 0.1	BT 1.0	EN	SSPR	MDPR	Cum 480	Time 150	ISO
Carboplatin (10 mg/ml)	Liquid	41575-94-4	>240	>240	>240	5	<0.001	0.001			
Carmustine (3.3 mg/ml, 10 % Ethanol)	Liquid	154-93-8	imm	imm	>240	5	<0.3	0.001			
Cisplatin (1 mg/ml)	Liquid	15663-27-1	>240	>240	>240	5	<0.001	0.001			
Cyclo phosphamide (20 mg/ml)	Liquid	50-18-0	imm	>10	>240	5	na	0.003			
Doxorubicin HCl (2 mg/ml)	Liquid	25136-40-9	>240	>240	>240	5	<0.001	0.001			
Etoposide (Toposar®, Teva) (20 mg/ml, 33.2 % (v/v) Ethanol)	Liquid	33419-42-0	>240	>240	>240	5	<0.01	<0.01			
Fluorouracil, 5- (50 mg/ml)	Liquid	51-21-8	imm	imm	imm		na	0.001			
Gemcitabine (38 mg/ml)	Liquid	95058-81-4	imm	>60	>240	5	<0.4	0.005			
Ifosfamide (50 mg/ml)	Liquid	3778-73-2	imm	imm	>60	3	na	0.003			
Oxaliplatin (5 mg/ml)	Liquid	63121-00-6	imm	imm	imm		na	0.001			
Paclitaxel (Hospira) (6 mg/ml, 49.7 % (v/v) Ethanol)	Liquid	33069-62-4	>240	>240	>240	5	<0.01	<0.01			
Thiotepa (10 mg/ml)	Liquid	52-24-4	imm	imm	imm		na	0.001			

BTAct (Actual) Breakthrough time at MDPR [mins] BT0.1 Normalized breakthrough time at 0.1 µg/cm<sup>2</sup>/min [mins] BT1.0 Normalized breakthrough time at 1.0 µg/cm<sup>2</sup>/min [mins] EN Classification according to EN 14325 SSPR Steady state permeation rate [µg/cm<sup>2</sup>/min] MDPR Minimum detectable permeation rate [µg/cm<sup>2</sup>/min] CUM480 Cumulative permeation mass after 480 mins [µg/cm<sup>2</sup>] Time150 Time to reach cumulative permeation mass of 150 µg/cm<sup>2</sup> [mins] ISO Classification according to ISO 16602 CAS Chemical abstracts service registry number min Minute > Larger than

< Smaller than   imm Immediate (< 10 min)   nm Not tested   sat Saturated solution   N/A Not Applicable   na Not  
 attained   GPR grade General purpose reagent grade   \* Based on lowest single value   8 Actual breakthrough time;  
 normalized breakthrough time is not available   DOT5 Degradation after 5 min   DOT30 Degradation after 30 min  
 DOT60 Degradation after 60 min   DOT240 Degradation after 240 min   BT1383 Normalized breakthrough time at 0.1 µg  
 /cm<sup>2</sup>/min [mins] acc. ASTM F1383

Important Note.