



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
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

ADDITIONAL EQUIPMENT NEEDED

- This garment only provides partial body coverage. It may be worn in combination with other chemical resistant PPE as required based on the hazard assessment.
- Wear other appropriate PPE such as, but not limited to, respiratory, eye, head, hand, and foot protection based on the hazard assessment.

Physical Properties



Data relating to mechanical performance of the fabrics used in DuPont chemical protective clothing, listed for the selected garment according to the test methods and relevant European standard, if applicable. Such properties, including abrasion and flex-cracking resistance, tensile strength and puncture resistance can help in the assessment of protective performance.

Property	Test Method	Typical Result
N/A	N/A.	Physical Properties Data not applicable

1 According to EN 14325 2 According to EN 14126 3 According to EN 1073-2 4 According to EN 14116 12
According to EN 11612 5 Front Tyvek ® / Back 6 Based on test according to ASTM D-572 7 See Instructions for
Use for further information, limitations and warnings > Larger than < Smaller than <= Smaller than or equal to N/A
Not Applicable STD DEV Standard Deviation

CLEANLINESS



Particle Shedding (Helmke Drum) and Bacterial Filtration Efficiency Data

Property	Test Method	Typical Result	EN
Bacterial Filtration Efficiency (3 µm)	ASTM F2101	98.9 % ± 1.2 % 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			

Important Note.

COMFORT



The comfort of a protective garment during use is largely determined by its weight, its permeability to vapour and air (breathability) and insulating properties. Data on these attributes is provided according to test method and, as with other data, can be compared by garment.

Property	Test Method	Typical Result
N/A	N/A.	Comfort Data not applicable

2 According to EN 14126 5 Front Tyvek ® / Back > Larger than < Smaller than <= Smaller than or equal to N/A
Not Applicable

BIOLOGICAL BARRIER



Detailed information on the protective performance (resistance to penetration) of DuPont clothing when exposed to biologically contaminated aerosols, liquids and dusts as well as blood, body fluids and blood-borne pathogens. Sorted by relevant European standard.

Property	Test Method	Typical Result
N/A	N/A.	Biological barrier Data not applicable

2 According to EN 14126 > Larger than < Smaller than <= Smaller than or equal to

PENETRATION AND REPELLENCY



A specific test method, EN ISO 6530, is used to measure the indexes of penetration, absorption and repellency of protective clothing material exposed to liquid chemicals. Results listed here reflect the penetration resistance and repellency of DuPont fabrics to 30% sulphuric acid and 10% sodium hydroxide.

Property	Test Method	Typical Result
N/A	N/A.	Penetration and repellency Data not applicable

1 According to EN 14325 > Larger than < Smaller than <= Smaller than or equal to

