

TECHNICAL DATA SHEET



PRODUCT INFORMATION

DuPont™ Tyvek® IsoClean® hooded coverall IC 193 B WH DS. Clean-processed and gamma-sterilized. Bound internal seams. Integrated overboots with a slip retardant Gripper™ sole. The hood fits a medical mask and has attached ties. Tunnelled elastication at wrists. Elasticated waist at back. Tyvek® covered elasticated thumb loops. Zipper closure. Storm flap. Aseptically folded. CE-certified. White.

ATTRIBUTES

Full Part Number	IC193BWHDS
Fabric/Materials	Tyvek® IsoClean®
Design	Hooded coverall with integrated overboots
Seam	Bound
Color	White
Sizes	XS, SM, MD, LG, XL, 2X, 3X, 4X, 5X, 6X, 7X
Quantity/Box	20 per box, individually double packed. 2 polyethylene liners. Cardboard box.

FEATURES

- Certified according to Regulation (EU) 2016/425
- Clean-processed and 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 A/B (ISO Class 5) clean rooms
- Chemical protective clothing, Category III, Type 5-B and 6-B
- EN 14126 (barrier to infective agents), EN 1073-2 (protection against radioactive contamination)

PHYSICAL PROPERTIES

PROPERTY	TEST METHOD	TYPICAL RESULT	EN
Abrasion Resistance ⁷	EN 530 Method 2	>10 cycles	1/6 ¹
Basis Weight	DIN EN ISO 536	45 g/m ²	N/A
Colour	N/A	White	N/A
Exposure to high Temperature	N/A	Melting point -135 °C	N/A
Flex Cracking Resistance ⁷	EN ISO 7854 Method B	>100000 cycles	6/6 ¹
Puncture Resistance	EN 863	>5 N	1/6 ¹
Resistance to water penetration	DIN EN 20811	7 kPa	N/A
Surface Resistance at RH 25%, inside ⁷	EN 1149-1	2 ¹⁰ Ohm	N/A
Tensile Strength (MD)	DIN EN ISO 13934-1	>30 N	1/6 ¹
Tensile Strength (XD)	DIN EN ISO 13934-1	>30 N	1/6 ¹
Thickness	DIN EN ISO 534	185 µm	N/A
Trapezoidal Tear Resistance (MD)	EN ISO 9073-4	>10 N	1/6 ¹
Trapezoidal Tear Resistance (XD)	EN ISO 9073-4	>10 N	1/6 ¹

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 | N/A Not Applicable | STD DEV Standard Deviation |

GARMENT PERFORMANCE

TECHNICAL DATA SHEET

PROPERTY	TEST METHOD	TYPICAL RESULT	EN
Nominal protection factor ⁷	EN 1073-2	>50	2/3 ³
Seam Strength	EN ISO 13935-2	>30 N	1/6 ¹
Shelf Life ⁷	N/A	5 years	N/A
Type 5: Inward Leakage ¹¹	EN ISO 13982-2	3 %	N/A
Type 5: Inward Leakage of Airborne Solid Particulates	EN ISO 13982-2	Pass	N/A
Type 6: Resistance to Penetration by Liquids (Low Level Spray Test)	EN ISO 17491-4, Method A	Pass	N/A

1 According to EN 14325 | 3 According to EN 1073-2 | 12 According to EN 11612 | 13 According to EN 11611 | 5 Front Tyvek® / Back | 6 Based on test according to ASTM D-572 |

7 See Instructions for Use for further information, limitations and warnings | 11 Based on the average of 10 suits, 3 activities, 3 probes | > Larger than | < Smaller than | N/A Not Applicable |

* Based on lowest single value |

COMFORT

PROPERTY	TEST METHOD	TYPICAL RESULT	EN
Air Permeability (Gurley method)	ISO 5636-5	Yes	N/A
Air Permeability (Gurley method)	ISO 5636-5	4 s	N/A
Thermal Resistance, R _{ct}	EN 31092/ISO 11092	10*10 ⁻³ m ² *K/W	N/A
Thermal Resistance, clo value	EN 31092/ISO 11092	0.065 clo	N/A
Water Vapour Resistance, Ret	EN 31092/ISO 11092	6.8 m ² *Pa/W	N/A

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

PENETRATION AND REPELLENCY

PROPERTY	TEST METHOD	TYPICAL RESULT	EN
Repellency to Liquids, Sodium Hydroxide (10%)	EN ISO 6530	>90 %	2/3 ¹
Repellency to Liquids, Sulphuric Acid (30%)	EN ISO 6530	>95 %	3/3 ¹
Resistance to Penetration by Liquids, Sodium Hydroxide (10%)	EN ISO 6530	<5 %	2/3 ¹
Resistance to Penetration by Liquids, Sulphuric Acid (30%)	EN ISO 6530	<1 %	3/3 ¹

1 According to EN 14325 | > Larger than | < Smaller than |

BIOLOGICAL BARRIER

PROPERTY	TEST METHOD	TYPICAL RESULT	EN
Resistance to Penetration by Biologically Contaminated Aerosols	ISO/DIS 22611	Pass	1/3 ²
Resistance to Penetration by Blood and Body Fluids using Synthetic Blood	ISO 16603	1,75 kPa	2/6 ²
Resistance to Penetration by Blood-borne Pathogens using Bacteriophage Phi-X174	ISO 16604 Procedure C	No classification	No classification ²
Resistance to Penetration by Contaminated Liquids	EN ISO 22610	? 15 min	1/6 ²
Resistance to Penetration by Contaminated Solid Particles	ISO 22612	Pass	1/3 ²

1 According to EN 14325 | > Larger than | < Smaller than |

CLEANLINESS

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	


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


DuPont™ SafeSPEC™ - We're here to help



Our powerful web-based tool can assist you with finding the appropriate DuPont garments for chemical, controlled environment, thermal and mechanical hazards.



DuPont Personal Protection
dpp.dupont.com

 DuPont Personal Protection

 @DuPontPPE

Connect with us  

CREATED ON: NOVEMBER 29, 2021

© 2021 DuPont. All rights reserved. DuPont™, the DuPont Oval Logo, and all trademarks and service marks denoted with ™, SM or ® are owned by affiliates of DuPont de Nemours, Inc. unless otherwise noted.