



Model TY198S WH

Tyvek® 400

DuPont™ Tyvek® 400, model TY198S WH. Hooded coverall. Stitched external seams. Elastication at wrists, ankles and face. Elastication at waist (glued-in). Tyvek® zipper and flap. White.

Name	Description
Full Part Number	TYVCHF5SWHA0
Fabric/Materials	Tyvek®
Design	Hooded coverall with elastics
Seam	Stitched (external)
Color	White
Sizes	SM, MD, LG, XL, 2XL, 3XL
Quantity/Box	100 per box, individually packed

FEATURES & PRODUCT DETAILS

DuPont™ Tyvek® 400, model TY198S WH. Hooded coverall available in white, in sizes SM to 3XL. Stitched external seams. Robust yet lightweight (<180g per garment). 3-piece hood for optimal fit to head and face when turning. Elasticated face, wrists and ankles as well as glued-in waist elastic. Ample crotch area for freedom of movement.

Tyvek® garments are composed of flash spun high density polyethylene, providing an ideal balance of protection, durability and comfort. Tyvek® is permeable to both air and water vapour, yet repels water-based liquids and aerosols. It offers an excellent barrier against fine particles and fibres (down to 1 micron in size), is ultra-low-linting, antistatically treated. Silicon non added. Applications for Tyvek® 400 garments include pharmaceutical handling, chemical protection, oil and gas industry, general maintenance/operations, spray painting, general clean-up, amongst many others.

- Limited-Use protective clothing, Type 5 and 6 Protection
- EN 1073-2 (protection against radioactive contamination)
- Antistatic treatment (EN 1149-5) - on both sides.
- Stitched external seams for enhanced protection against penetration from the outside to the inside of the garment
- Tyvek® zipper and zipper flap for enhanced protection

ADDITIONAL EQUIPMENT NEEDED

- Please read, understand and follow the Instructions For Use
- Wear other appropriate PPE such as, but not limited to, respiratory, eye, head, hand, and foot protection based on the hazard assessment.

SIZES

Article Number	Product Size
D13674427	SM
D13674430	MD
D13674444	LG
D13674455	XL
D13674461	2X
D13674479	3X

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	EN
Abrasion Resistance ⁷	EN 530 Method 2	>100 cycles	2 of 6 ¹
Basis Weight	DIN EN ISO 536	41.5 g/m ²	N/A
Colour	N/A.	White	N/A
Exposure to high Temperature	N/A.	Melting point 135 °C	N/A
Exposure to low Temperature	N/A.	Flexibility retained down to -73°C	N/A
Puncture Resistance	EN 863	>5 N	1 of 6 ¹
Flex Cracking Resistance ⁷	EN ISO 7854 Method B	>100000 cycles	6 of 6 ¹
Surface Resistance at RH 25%, inside ⁷	EN 1149-1	≤ 2,5x10 ⁹ Ohm	N/A
Surface Resistance at RH 25%, outside ⁷	EN 1149-1	≤ 2,5x10 ⁹ Ohm	N/A
Tensile Strength (MD)	DIN EN ISO 13934-1	>30 N	1 of 6 ¹
Tensile Strength (XD)	DIN EN ISO 13934-1	>30 N	1 of 6 ¹
Thickness	DIN EN ISO 534	140 µm	N/A
Trapezoidal Tear Resistance (MD)	EN ISO 9073-4	>10 N	1 of 6 ¹
Trapezoidal Tear Resistance (XD)	EN ISO 9073-4	>10 N	1 of 6 ¹

1 According to EN 14325 2 According to EN 14126 3 According to EN 1073-2 4 According to EN ISO 14116 12 According to EN ISO 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

GARMENT PERFORMANCE



Information relating to the protective performance of a garment according to European standards where applicable. Includes important characteristics such as protection against radioactive contamination, seam strength and shelf life. Inward leakage and resistance to penetration by liquids, according to the relevant Type classification, are also detailed.

Property	Test Method	Typical Result	EN
Type 5: Particle aerosol inward leakage test	EN ISO 13982-2	Pass Ljnm 82 /90<=30% L5 8/10<=15%	N/A
Type 6: Resistance to Penetration by Liquids (Low Level Spray Test)	EN ISO 17491-4, Method A	Pass	N/A
Nominal protection factor ⁷	EN 1073-2	>50	2 of 3 3
Shelf Life ⁷	N/A.	5 years	N/A
Seam Strength	EN ISO 13935-2	>75 N	3 of 6 1

1 According to EN 14325 3 According to EN 1073-2 12 According to EN ISO 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 <=
 Smaller than or equal to N/A Not Applicable * Based on lowest single value

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	EN
Air Permeability (Gurley method)	TAPPI T460	< 45 s	N/A
Air Permeability (Gurley method)	TAPPI T460	Yes	N/A
Thermal Resistance, Rct	EN 31092/ISO 11092	16.3*10 ⁻³ m ² *K/W	N/A
Thermal Resistance, clo value	EN 31092/ISO 11092	0.105 clo	N/A
Water Vapour Resistance, Ret	EN 31092/ISO 11092	11.3 m ² *Pa/W	N/A

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

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	EN
Repellency to Liquids, Sodium Hydroxide (10%)	EN ISO 6530	>95 %	3 of 3 ¹
Repellency to Liquids, Sulphuric Acid (30%)	EN ISO 6530	>95 %	3 of 3 ¹
Resistance to Penetration by Liquids, Sodium Hydroxide (10%)	EN ISO 6530	<1 %	3 of 3 ¹
Resistance to Penetration by Liquids, Sulphuric Acid (30%)	EN ISO 6530	<1 %	3 of 3 ¹

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

WARNING

- The garment does not protect against ionizing radiation.
- This garment and/or fabric are not flame resistant and should not be used around heat, open flame, sparks or in potentially flammable environments.
- 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..

SPECIAL WARNINGS

- *Serged and bound seams are degraded by some hazardous liquid chemicals, such as strong acids, and should not be worn when these chemicals are present.
- *Liquid barrier performance varies based on the amount of liquid that may get on the garment, the length of time the liquid is on the garment, applied pressure and certain physical properties of the liquid. Tyvek®400, Tyvek® 400 D, ProShield®, ProShield® 10, ProShield® 60, Tyvek® 400 FC, and ProShield® 70 garments are not appropriate if during use they are getting wet (liquid is dripping or running, or it is wet to the touch) or if spotting is observed on skin or garments worn under the protective garment. Tyvek® 500 and Tyvek® 600 offer improved liquid barrier, but may not be appropriate if spotting is observed on the skin or garments worn under the protective garment. In applications where a higher liquid barrier is needed, consider Tychem® 2000 and Tychem® 4000 garments with taped seams.
- Tyvek® 600 and Tyvek® 500 fabric have different fabric physical properties and improved chemical resistance properties than standard Tyvek® 400 garments.
- **Garments made using Tyvek® 400, Tyvek® 500, Tyvek® 600 and Tyvek® 800 fabrics will burn and possibly melt. None of these garments should be worn near heat, open flames, sparks or any other possible ignition source nor should they be worn in potentially explosive or flammable environments. If these garments do burn or melt while being worn, it may increase the severity of burn injuries even when worn over garments which are flame resistant, including, but not limited to, Nomex® IIIA or Nomex® Comfort garments.
- *CAUTION: This information is based upon technical data that DuPont believes to be reliable. It is subject to revision as additional knowledge and experience are gained. DuPont makes no guarantee of results and assumes no obligation or liability in connection with this information. It is the user's responsibility to determine the level of toxicity and the proper personal protective equipment needed. The information set forth herein reflects laboratory performance of fabrics, not complete garments, under controlled conditions. It is intended for informational use by persons having technical skill for evaluation under their specific end-use conditions, at their own discretion and risk. Anyone intending to use this information should first verify that the garment selected is suitable for the intended use. In many cases, seams and closures have shorter breakthrough times and higher permeation rates than the fabric. Please contact DuPont for specific data. If fabric becomes torn, abraded or punctured, or if seams or closures fail, or if attached gloves, visors, etc. are damaged, end user should discontinue use of garment to avoid potential exposure to chemical. Since conditions of use are outside our control, we make no warranties, express or implied, including, without limitation, no warranties of merchantability or fitness for a particular use and assume no liability in connection with any use of this information. This information is not intended as a license to operate under or a recommendation to infringe any patent or technical information of DuPont or others covering any material or its use.

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- Tyvek® friction-coated shoe covers or Tyvek® garments with attached friction-coated skid-resistant shoe covers might contain silicone in the shoe-cover. This includes styles TY122, TY121, FC450 and FC454. End users who are consuming these styles and who have concerns about silicone contamination should conduct their own testing to ensure they are suitable for their application(s).
- As of January 2023, all DuPont Personal Protection products are manufactured under specifications that exclude components containing natural rubber latex. Tyvek® 500, Tyvek® 600 and Tyvek® 800 styles made before January 2023 contain natural rubber latex, which may cause allergic reactions in some sensitized individuals. Anyone who begins to exhibit an allergic response during the use of DuPont products should immediately cease using these products and should report it to DuPont at +1 (888) 439-2988 so that an investigation can be initiated.