QC278B YL

DuPont™ Tychem® 2000

DuPont™ Tychem® 2000 Sleeved Apron. Elastic Wrists. 52" Long. Bound yoke neck w/out Snaps & Waist Ties. Bound Seams. Yellow.

Name	Description
Full Part Number	QC278BYLxx0012yy (xx=size;yy=option code)
Fabric/Materials	TYCHEM® 2000
Design	Apron w/ Long Sleeves, Extra Long
Seam	Bound
Color	Yellow
Quantity/Box	12 per case
Sizes	00
Option Codes	00

FEATURES & PRODUCT DETAILS

A lightweight, and durable fabric, Tychem® 2000 fabric provides at least 30 minutes of protection against >40 chemical challenges. Tychem® 2000 is used for light splash protection in a variety of industrial environments, including petroleum refining, pulp and paper manufacturing, food processing, chemical processing, and pharmaceutical manufacturing.

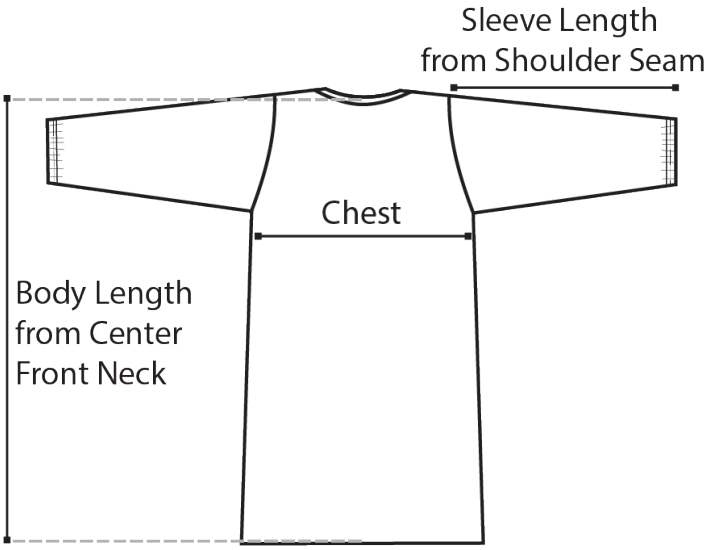
- Calf length (52") apron/gown design with attached sleeves
- Provides enhanced frontal protection
- Tightly sewn seam is covered with garment fabric to reinforce seam and reduce potential for particle penetration
- Open back for wearer comfort.
- Bound yoke neck opening without snaps
- Ties at waist
- Elastic opening for tighter fit at wrist
- Manufactured under specifications that do not contain natural rubber latex.
- One size fits most

AVAILABLE OPTIONS

Option Code	Description	Sizes	Part Number
00	Standard	UNI	QC278BYLxx001200

SPECIFICATIONS

- The garment shall be constructed of DuPont™ Tychem® 2000 -- a DuPont™ Tyvek® protective fabric coated with 1.25 mils of polyethylene.
- The garment shall be yellow in color.
- The garment shall be a sleeved apron design.
- The garment shall have bound seams.
- The garment shall have a bound yoke neck without snaps.
- The garment shall have waist ties.
- The garment shall have elastic wrists.
- The garment shall be 52™ in length.



FINISHED DIMENSIONS

Size	Sleeve Length	Chest Width	Body Length
UNI	21 1/2	28 1/2	49 3/4

ADDITIONAL EQUIPMENT NEEDED

- Please read, understand and follow the Tychem® User Manual.
- 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
Thickness (PPSH-249)	ASTM D1777	10 mils
Basis Weight	ASTM D3776	2.5 oz/yd^2
Burst Strength - Mullen.	ASTM D3786	68 psi
Tear Resistance - Trap Tear (MD)	ASTM D5587	6.4 lb_f
Tear Resistance - Trap Tear (CD)	ASTM D5587	5 lb_f
Breaking Strength - Grab (MD).	ASTM D5034	39 lb_f
Breaking Strength - Grab (CD)	ASTM D5034	43 lb_f
Wearing Apparel Flammability	16 CFR 1610	Class 1

CHEMICAL RESISTANCE

Hazard / Chemical Name	Cas Number	Phase	Normalized Break Through
2-Methyl-4-isothiazolin-3-one (20%)	2682-20-4	Liquid	>480
Acetic acid (>95%)	64-19-7	Liquid	imm
Acetic acid ethyl ester	141-78-6	Liquid	imm
Acetone	67-64-1	Liquid	imm
Acetonitrile	75-05-8	Liquid	imm
Acroleic acid	79-10-7	Liquid	imm
Acrylic acid	79-10-7	Liquid	imm
Acrylonitrile	107-13-1	Liquid	imm
Amido sulfonic acid (15%)	5329-14-6	Liquid	>480
Amino benzene	62-53-3	Liquid	imm
Ammonia (gaseous)	7664-41-7	Vapor	imm
Ammonium hydroxide (28% - 30%)	1336-21-6	Liquid	imm
Aniline	62-53-3	Liquid	imm
Benzenamine	62-53-3	Liquid	imm
Benzisothiazol 1,2- (20%)	2634-33-5	Liquid	>480
Black Liquor (mix)	mix	Liquid	>480
Bromine	7726-95-6	Liquid	imm
Butadiene, 1,3- (gaseous)	106-99-0	Vapor	imm
Butanal, n-	123-72-8	Liquid	imm
Butanol, 1-	71-36-3	Liquid	imm
Butanol, n-	71-36-3	Liquid	imm
Butyl alcohol, n-	71-36-3	Liquid	imm
Butyraldehyde, n-	123-72-8	Liquid	imm
Carbon disulfide	75-15-0	Liquid	imm
Carmustine (3.3 mg/ml, 10 % Ethanol)	154-93-8	Liquid	>240
Caustic ammonia (28% - 30%)	1336-21-6	Liquid	imm
Caustic soda (50%)	1310-73-2	Liquid	>480
Chemguard S-764P14A	mix	Liquid	>480
Chlorine (20 ppm)	7782-50-5	Vapor	>480[8]
Chlorine (gaseous)	7782-50-5	Vapor	imm

Hazard / Chemical Name	Cas Number	Phase	Normalized Break Through
Chloro 2-nitrobenzene, 1-	88-73-3	Solid	15
Chloro acetic acid (80%)	79-11-8	Liquid	>480
Chloro ethanol, 2-	107-07-3	Liquid	imm
Chloro form	67-66-3	Liquid	imm
Cresol o-	95-48-7	Liquid	13
Cresols, mixed isomers	1319-77-3	Liquid	71
Cresylic acid	1319-77-3	Liquid	71
Cyanoethylene	107-13-1	Liquid	imm
Cyanomethane	75-05-8	Liquid	imm
Cyclo phosphamide (20 mg/ml)	50-18-0	Liquid	>240
Diaminoethane, 1,2-	107-15-3	Liquid	>480
Dichloro methane	75-09-2	Liquid	imm
Diesel automotive test fuel	mix	Liquid	imm
Diethyl amine	109-89-7	Liquid	imm
Dimethyl acetamide, N,N- (8%)	127-19-5	Liquid	>480
Dimethyl formamide, N,N-	68-12-2	Liquid	imm
Dimethyl ketal	67-64-1	Liquid	imm
Dimethyl ketone	67-64-1	Liquid	imm
Diphenyl methane diisocyanate, 4,4'- (50 °C, molten)	101-68-8	Liquid	>480
Disodium sulfide (60% (slurry))	1313-82-2	Liquid	>480
Doxorubicin HCl (2 mg/ml)	25136-40-9	Liquid	>240
DuPont Activator 193S (mix)	mix	Liquid	>480
DuPont Activator 4505S (mix)	mix	Liquid	>480
DuPont Activator 4507S (mix)	mix	Liquid	>480
Epoxy ethane (gaseous)	75-21-8	Vapor	imm
Ethane 1,2-diol	107-21-1	Liquid	>480
Ethane nitrile	75-05-8	Liquid	imm
Ethyl acetate	141-78-6	Liquid	imm
Ethyl ethanamine, N-	109-89-7	Liquid	imm
Ethyl nitrile	75-05-8	Liquid	imm

Hazard / Chemical Name	Cas Number	Phase	Normalized Break Through
Ethylene carboxylic acid	79-10-7	Liquid	imm
Ethylene chlorohydrin	107-07-3	Liquid	imm
Ethylene diamine	107-15-3	Liquid	>480
Ethylene glycol	107-21-1	Liquid	>480
Ethylene oxide (gaseous)	75-21-8	Vapor	imm
Ethylene tetrachloride	127-18-4	Liquid	imm
Etoposide (Toposar®, Teva) (20 mg/ml, 33.2 % (v/v) Ethanol)	33419-42-0	Liquid	>240
Fluorouracil, 5- (50 mg/ml)	51-21-8	Liquid	>240
Formalin (3.7%, 1-1.5% Methanol)	50-00-0	Liquid	>480
Formalin (37% (10-15% Methanol))	50-00-0	Liquid	imm
Fuel-oil no 2	68476-30-2	Liquid	imm
Glutaral (5%)	111-30-8	Liquid	>480
Glutaraldehyde (5%)	111-30-8	Liquid	>480
Glycol alcohol	107-21-1	Liquid	>480
Glycol chlorohydrin	107-07-3	Liquid	imm
Green Liquor (mix)	mix	Liquid	>480
Hexamethylene diisocyanate	822-06-0	Liquid	>480
Hexane, n-	110-54-3	Liquid	imm
Hydrochloric acid (37%)	7647-01-0	Liquid	140
Hydrofluoric acid (48-51%)	7664-39-3	Liquid	446
Hydrogen chloride (gaseous)	7647-01-0	Vapor	imm
Hydrogen fluoride (20-27 °C, gaseous)	7664-39-3	Vapor	imm
Hydrogen peroxide (30%)	7722-84-1	Liquid	>480
Hydrogen peroxide (50%)	7722-84-1	Liquid	>480
Hydrogen peroxide (70%)	7722-84-1	Liquid	>480
Hydroxy toluene, o-	95-48-7	Liquid	13
Isopropanol	67-63-0	Liquid	imm
Isopropanol (70%)	67-63-0	Liquid	imm
Isopropyl alcohol	67-63-0	Liquid	imm
Isopropyl alcohol (70%)	67-63-0	Liquid	imm

Hazard / Chemical Name	Cas Number	Phase	Normalized Break Through
Ketone propane	67-64-1	Liquid	imm
Limonene d-	5989-27-5	Liquid	imm
Lithium chloride (20%)	7447-41-8	Liquid	>480
Lithium hydroxide (14.9%)	1310-65-2	Liquid	>480
Mercury	7439-97-6	Liquid	>480
Methanol	67-56-1	Liquid	imm
Methyl 4-isopropenyl-1-cyclohexene, 1-	5989-27-5	Liquid	imm
Methyl acetyl	67-64-1	Liquid	imm
Methyl benzol	108-88-3	Liquid	imm
Methyl chloride (gaseous)	74-87-3	Vapor	imm
Methyl cyanide	75-05-8	Liquid	imm
Methyl ketone	67-64-1	Liquid	imm
Methyl phenols	1319-77-3	Liquid	71
Methyl salicylate	119-36-8	Liquid	<15
Methylene chloride	75-09-2	Liquid	imm
Methylene diphenyl diisocyanate, 4,4'- (50 °C, molten)	101-68-8	Liquid	>480
Mineral spirit	64475-85-0	Liquid	imm
Nitric acid (70%)	7697-37-2	Liquid	>480
Nitro benzene	98-95-3	Liquid	imm
Nitro chlorobenzene, p-	100-00-5	Solid	imm
Nitro toluene, p-	99-99-0	Solid	imm
Oleum (103% (13% free SO3))	8014-95-7	Liquid	230
Oleum (20% free SO3)	8014-95-7	Liquid	60
Paclitaxel (Hospira) (6 mg/ml, 49.7 % (v/v) Ethanol)	33069-62-4	Liquid	>240
Pentanedial, 1,5- (5%)	111-30-8	Liquid	>480
Phenol (85%)	108-95-2	Liquid	11
Phenyl amine	62-53-3	Liquid	imm
Polymethylene polyphenyle isocyanate (p-MDI)	9016-87-9	Liquid	>480
Potassium cyanide (10%)	151-50-8	Liquid	>480
Potassium hydroxide (45%)	1310-58-3	Liquid	>480

Hazard / Chemical Name	Cas Number	Phase	Normalized Break Through
Potassium permanganate (sat)	7722-64-7	Liquid	>480
Propan -2-ol	67-63-0	Liquid	imm
Propan -2-ol (70%)	67-63-0	Liquid	imm
Propan -2-one	67-64-1	Liquid	imm
Propene acid	79-10-7	Liquid	imm
Propenenitrile, 2-	107-13-1	Liquid	imm
Propenoic acid nitrile	107-13-1	Liquid	imm
Pyroacetic ether	67-64-1	Liquid	imm
Sodium cyanide (45%)	143-33-9	Liquid	>480
Sodium hydroxide (50%)	1310-73-2	Liquid	>480
Sodium hypochlorite (15%)	7681-52-9	Liquid	>480
Sodium hypochlorite (5.25-6%)	7681-52-9	Liquid	>480
Sodium metabisulphite (38%)	7681-57-4	Liquid	imm
Sodium silicate (40-42%)	6834-92-0	Liquid	>480
Spectracide® (50% Malathion, 44% Aromatic Solvent)	mix	Liquid	imm
Sulfamic acid (15%)	5329-14-6	Liquid	>480
Sulfamidic acid (15%)	5329-14-6	Liquid	>480
Sulfur dioxide	7446-09-5	Vapor	imm
Sulfuric acid (>95%)	7664-93-9	Liquid	>480
Sulfuric acid fuming (103% (13% free SO3))	8014-95-7	Liquid	230
Sulfuric acid fuming (20% free SO3)	8014-95-7	Liquid	60
Tetrachloro ethylene, 1,1,2,2-	127-18-4	Liquid	imm
Tetrahydrofuran	109-99-9	Liquid	imm
Tetramethyl ammonium hydroxide (25%)	75-59-2	Liquid	>480
Thiotepa (10 mg/ml)	52-24-4	Liquid	>240
Toluene	108-88-3	Liquid	imm
Toluene diisocyanate, 2,4-	584-84-9	Liquid	imm
Toluene diisocyanate, 2,4- (80%)	584-84-9	Liquid	60
Trichloro benzene, 1,2,4-	120-82-1	Liquid	imm
Trichloro methane	67-66-3	Liquid	imm

Hazard / Chemical Name	Cas Number	Phase	Normalized Break Through
Trifluoro ethanol, 2,2,2-	75-89-8	Liquid	imm
Vinyl cyanide	107-13-1	Liquid	imm
Vinyl ethylene (gaseous)	106-99-0	Vapor	imm
White Liquor	mix	Liquid	>480

BT0.1 Normalized breakthrough time at 0.1 µg/cm²/min [mins] 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/cm²/min [mins] acc. ASTM F1383

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.

Important Note:

- *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® 500, Tyvek® 600, Tyvek® 800 products manufactured before January 2023 did 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. The incident should also be reported to DuPont at +1 (888) 439-2988 so that an investigation can be initiated.