

CovTech™

365 Series

Premium Disposable Coveralls



Type 5 Particle
EN 13982



Type 6 Chemical
EN 13034



Anti-static
EN1149.1



Radioactive
EN 1073-2



Anti-viral
ASTM F1671

What is CovTech™ ?

CovTech™ Premium coveralls are limited life disposable coveralls providing increased personal protection, from both hazardous particulates and potential chemical hazards.

Certification

Benchmark* ID3346 certifies CovTech™ CT365P for type 5 and type 6 protection.

* Benchmark/BSI is the largest recognized international certification body which covers ongoing certification of PPE items



What is CovTech™ ?

The fabric used in the manufacture for CovTech™ premium coveralls is 65gm/sq meter, breathable and anti-static material.



The standard design CovTech™ coverall consists of a one-piece garment with hood. Seams are bound and sewn 8+/-1 stitches per inch. Hood, wrists, waist and ankles are elasticised. Reinforced crotch pleats and heavy duty zipper cover flap with self-adhesive strip.

Fabric Design Components

CovTech™ Coverall



Self-adhesive strip provides additional particle and chemical hold-out by securely sealing the zipper beneath the cover-flap.

**Fabric – CovTech Premium,
65gm/sq meter, Breathable,
Anti-Static Fabric**

Zip – 75cm Nylon No.3

Thread – 164 DTEX/36F GB/T14460

Elastic – 1/8 x 0.35 Rubber

Self Adhesive Strip - 20mm X 75cm

Seam Technology



Serged Seam

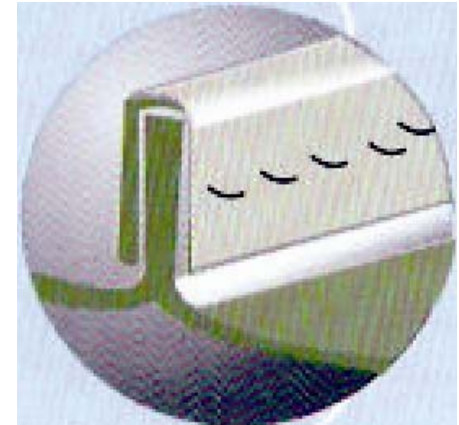
Two pieces of material are joined with a thread stitch that interlocks economically.

Applications: Basic protection for most general-purpose applications.

Sewn and Bound Seam

Two pieces of material joined with an overlay of similar material, and chain stitched through all of the layers for increased strength plus holdout of liquids and dry particulates.

Applications: Hazardous particle protection and light splash situations.



Seam Technology



Ultrasonic Welded Seam

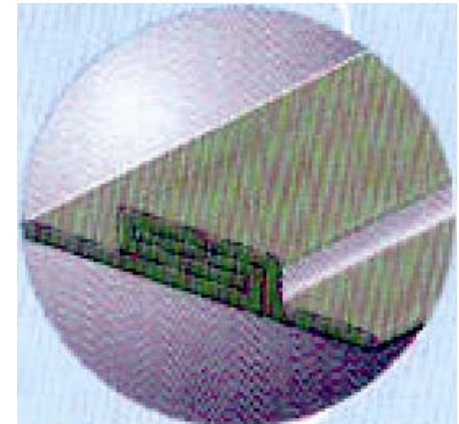
Similar to a bound seam, with additional protection due to the fusion, under heat & pressure, of the material at the seam. No thread (or needle holes) required.

Applications: heavy-duty chemical and particle protection.

Taped Seam

Two pieces of the same fabric are sewn together. The seam is then overlaid with a barrier tape that is applied under heat and pressure to form a liquid seal.

Applications: heavy-duty chemical splash protection and particle protection.



Chemical Penetration Comparison

CovTech™ vs. Other Brand Coverall



CovTech™



Other Brand

BEFORE

Next Slide – AFTER >

Chemical Penetration Comparison

CovTech™ vs. Other Brand Coverall



CovTech™



Other Brand

AFTER

CovTech™ disposable coverall material provides increased barrier protection against potential chemical hazards.

Features and Benefits

CovTech™ Premium Coveralls.
manufactured from premium breathable soft,
anti-static 65gm/sqm fabric

- High Structural Strength with Excellent Tensile, Tear and Abrasion Resistance
- Anti-Static (EN1149-1) Helps prevent build-up of Static Electricity, which could present as a major safety risk in certain industries (Petrochemical Industry)
- Breathable (helping prevent heat stress) and providing comfortable working conditions
- Particle Protection – holding out 99% of Fibres and Hazardous Particles greater than 1 Micron

Features and Benefits (continued)

CovTech™ Premium Coverall. Manufactured from Premium Breathable Soft, Anti-Static 65gm/sqm fabric

- Test Method EN368 offers 100% Protection against:
 - A. Pesticide
 - B. Methyl Pentane
 - C. Xylene
 - D. Acetone
- Silicone Free and Ultra Low Linting, ideal for use in Critical Painting Applications and Reducing the Risk of Contamination (Semi-Conductor Industry & Telecommunications)
- The CovTech™ overall is Lightweight, Durable with Superior Soft Comfort. Complete with Elastic Hood, Wrists, Waist, and Ankles and Zipper Cover Flap with Self Adhesive Tape, providing additional protection. Also has reinforcing crotch pleats, providing superior tear resistance and room to move.

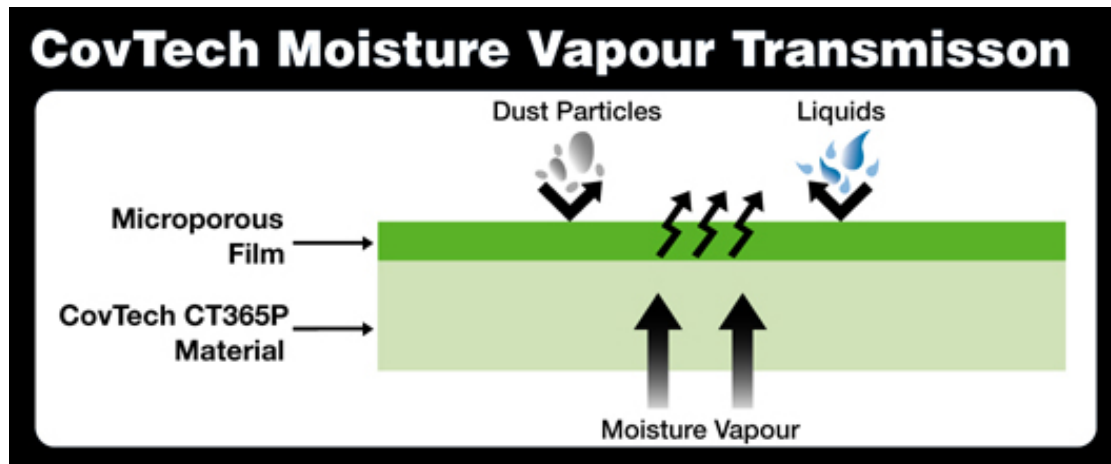
Features and Benefits (continued)

**CovTech Premium Coverall.
Manufactured from Premium Breathable Soft,
Anti-Static 65gm/sqm fabric**

Benchmark ID 3346 certifies that CovTech™ coveralls comply with chemical protective clothing Type 6 Limited Chemical Splash and Type 5 Particle Protection, as per Test Certificate Z2152/04 – 3209/04, enabling CovTech™ coveralls to be distributed globally

CovTech™ Breathability

CovTech™ premium coveralls are manufactured using premium soft microporous fabric which denies penetration of liquid & particle molecules from the outer surface & yet allows the vapour molecules to pass from the inside to outside which equates to increased wearer comfort & productivity.



Material Data

Product Material: Microporous non-woven laminate

Treatment: Antistatic

Property	Metric		Imperial	
	Unit	Result	Unit	Result
Basis Weight (Average)	g/m ²	65.2	oz/yd ²	2.2
Thickness	µm	240-280	mils	10.25
Breaking Strength Grab MD	N	107.9	lbs	24
Breaking Strength Grab CD	N	54.8	lbs	12.14
Tearing Strength Trapezoid MD	N	62.6	lbs	14.07
Tearing Strength Trapezoid CD	N	31.0	lbs	6.96
Tensile Strength at Break MD	g/25mm	4800	oz/in	172
Tensile Strength at Break CD	g/25mm	2850	oz/in	102.13
Elongation at Break MD	%	80	%	80
Elongation at Break CD	%	84	%	84
WVTR	g/m ² /24hrs	2966	oz/yd ² /24hr	87.46
Surface Resistivity EN1149	Ω	1.4x10 ¹⁰	-	-
Burst Resistance ISO2960/1974	kPa	180	-	-
Abrasion Resistance EN530	# of cycles	>100	# of cycles	>100
Flex Cracking Resistance ISO7854	# of cycles	>100,000	# of cycles	>100,000

MD = Machine Direction
CD = Cross Direction

WVTR = Water Vapour Transmission
g/m² = grams per square meter

N = Newtons
g/25mm = gram force per 25mm

oz/in = ounces per inch
Ω = ohms µm = microns

Material Data (continued)

Chemical Repellency		Penetration	Repelled
Sulphuric Acid 30%		0	98.0
Sodium Hydroxide 10%		0	98.4
Isopropanol (Alcohol)		0	96.9
Water & Detergent		0	99.5
Xylene (Undiluted)		0	91.8
Butan-1 (Undiluted)		0	93.8
Lissapol	%	0	95.5
Hydrochloric Acid 35%		0	97.8
Gasoline		0	86.0
Motor Oil		0	91.8
Trichloroethylene		0	93.1
Acetic Acid		0	98.7

Material Data (continued)

Flammability: Class 1

This particular classification (under 16CFR 1610) and our certification under EN13274-4 method 3, resistance to ignition are both recognised under ISO 6941-2003 as representing similar performance minimum requirements. CovTech™ 365PHE results "show No drop formation (fusing), is self-extinguishing and has a after-flame time of <5 seconds.

"CovTech™ is not flame resistant and should not be worn near hot surfaces, flame and spark generating processes"

Surface Resistivity – ASTM D257

This particular ASTM reference to fabric surface resistivity performance (fabric antistatic capability) now references EN1149-1 antistatic performance requirements. CovTech™ 365PHE was tested to EN1149-1.

This technical data provided within is based on laboratory test performance criteria performed under controlled conditions. It is the responsibility of the user of these garments to ascertain the level of exposure of the hazard and the selection of the correct personal protective equipment required for his or her application.

MCR and its distributors assume no obligation or liability in the improper use of CovTech™ Protective Coveralls.

Material Data (continued)

**CovTech™ 365 series coveralls
are now also certified for:**



Protection against Biological Risk
EN14126 : 2001



Protection against
Radioactive Contamination EN1073-2

Technical Claims

TEST	Standard	Testing Auth.	Benchmark Certification
Whole Suit Spray Test (Type 6)	prEN13034	STFI	ID3346
Whole Suit Particle Resistance (Type 5)	prEN ISO13982-1	STFI	ID3346
Resistance to Penetration by Liquids	EN368	STFI	ID3346
Abrasion Resistance	EN530 Mth2	STFI	ID3346
Flex Cracking Resistance	ISO7854B	STFI	ID3346
Puncture Resistance	EN863	STFI	ID3346
Tear Resistance	ISO9073- 4	STFI	ID3346
Tensile Strength	ISO13934-1	STFI	ID3346
Resistance to Ignition	EN13274- 4 Mth3	STFI	ID3346
Mass Per Unit Area gm ²	EN12127	STFI	ID3346
Mechanical Design Properties	prEN14325	STFI	ID3346
Anti-Static Behaviour	EN1149-1	AWTA Wool Testing Authority	

Brand and Part Number



Brand: **Cov** = Coverall

Tech = Technology

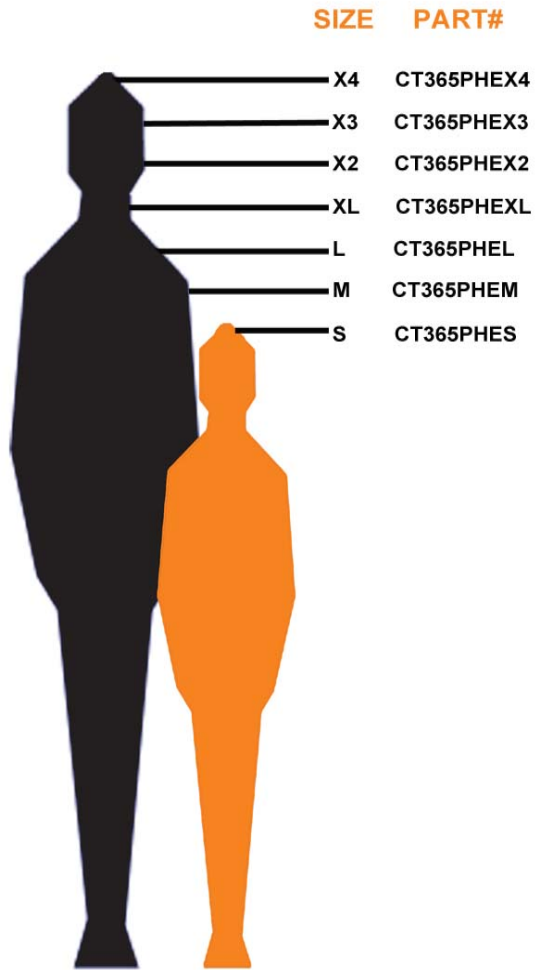
3 = Category 3, PPE of Complex Design

6 = Type 6 Limited Liquid Chemical Splash

5 = Type 5 Solid Particulate Chemical Protection

P = Premium Quality Fabric

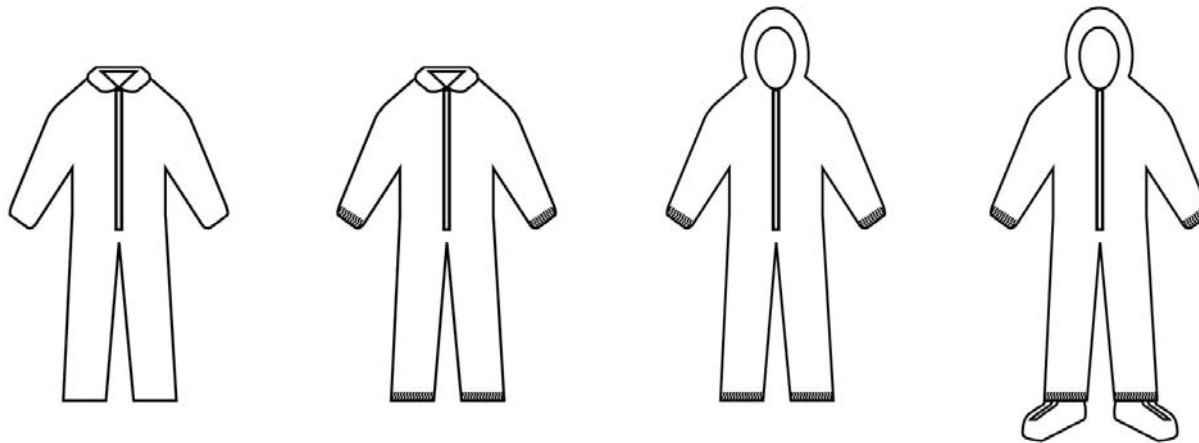
Garment Size - Fitting



Sizes	Chest		Height	
	Metric	Imperial	Metric	Imperial
Small – S	84 – 92cm	33” – 36”	162 – 170cm	63” – 66”
Medium – M	92 – 102cm	36” – 40”	168 – 176cm	66” – 69”
Large – L	100 – 108cm	39” – 42”	174 – 182cm	68” – 71”
X-Large – XL	108 – 116cm	42” – 45”	180 – 188cm	70” – 74”
X2 Large – X2	116 – 124cm	45” – 48”	186 – 194cm	73” – 76”
X3 Large – X3	124 – 132cm	48” – 51”	192 – 200cm	75” – 78”
X4 Large – X4	132 – 140cm	51” – 55”	198 – 205cm	77” – 80”

CovTech™ Styles

CovTech™ CT365 type coveralls come in four styles*







CT365NO Open sleeves and ankles, no hood/boots	CT365NE Elastic sleeves and ankles, no hood/boots	CT365PHE Elastic sleeves and ankles with hood	CT365AE Elastic sleeves and ankles with hood and boots
		CTO365PHE (orange)	

*note: Type 5 & 6 only applicable to CT365PHE and CTO365PHE and CT365AE

CovTech™ color coding**

CovTech™ coveralls have four color codes**

	White: Premium general purpose for industrial applications
	Orange: Additional viral and blood-borne pathogen protection
	Blue: Specific food industry applications
	Green: Spark resistant and some flame retardant properties

** Style and color code combinations will be determined by suitability of use
i.e. not all styles will be available in all color codes.

CovTech™ Applications

Suitable for a variety of tasks, from working with hazardous dusts through to chemical handling and is especially well suited for critical processes in many industries, including:

Asbestos removal

Accident attendance

Synthetic mineral fibre installation and eradication

Food and pharmaceutical

Painting and spraying

Electronic assembly

Mining

Industrial manufacturing and maintenance



Care & Use Instructions

Garment Use

Use only where the risk of chemical exposure is LOW & clearly defined as such. Check the coverall before wearing – if defective do not use.

Limitations of Use

DO NOT use with highly toxic or hazardous chemicals, chemical vapors & gases. Avoid intense heat or direct naked flame, sparks or hot surfaces – CovTech™ Coveralls begin to melt at 120°C. The user shall be the sole judge for proper use of CovTech™ Coveralls.

Care and Disposal

Do not wash, iron, tumble dry or dry clean. Do not use chlorine based bleaches. After use, dispose of immediately. Method of disposal will depend on the level & type of contamination & government/local regulations. Incineration is the preferred method.

Suitability

Please ensure that CovTech™ Coveralls are suitable for the intended use & comply with regulatory requirements. MCR Safety (Memphis Glove Crews River City) & its distributors accept no responsibility for improper use of CovTech coveralls.

Terms and Definitions

Weight and Thickness: Material weights are reported in gram per square meter and thickness in increments of 0.001 inch(mils) Both material weight and thickness are indicators of garment bulk and comfort.

Anti-static treatment: Special treatment helps to prevent build-up of static. Electricity which could present a major safety risk in certain industries.

Particulate Holdout: The filtration efficiency of a material, measured by the number of particulates per 100 that can be pulled through the material. Reported for 1 micron size particles.

Penetration Resistance: Material resistance to liquid penetration is measured using ASTM F903. the outside surface of the material in question is exposed to the test chemical for one hour.

Terms and Definitions (cont'd)

Permeation Resistance: ASTM F739 is used to measure the permeation resistance of materials. Permeation is the molecular movement of chemicals through a material. If exposure to chemical vapours is a concern, this data should be analyzed.

Tensile Strength: The force required to break a material apart by pulling it from opposing directions. Measured in pounds and is reported in two directions.

Burst Strength: The force required to break through material when applied perpendicular to its surface area.

Tear Resistance: The force required to tear through a material once a tear has been initiated.

Puncture (or Snag) Resistance: The force required to puncture a material with a sharp probe, such as a nail.

Terms and Definitions (cont'd)

Abrasion Resistance: Measurement of how quickly a material will wear through when rubbed against a coarse, sandpaper (simulated asphalt) surface.

Air Permeability: The ability of a material to freely pass air, measured as the number of cubic feet that can be passed in a square foot of material. Non-breathable materials allow no air permeation. Note: Some materials may report zero air permeability, but may still have breathability.

Water Vapor Transmission: In this test the rate in which a material allows transmission of water vapor is measured. The rate is reported as ounces of water that can pass through a square yard of material in one hour. The ability of a material to allow water vapor transmission is related to wearer comfort because body cooling occurs through the evaporation of sweat.

Terms and Definitions (cont'd)



Type 5 Particle EN 13982

Protection against hazardous dust and dry particles



Type 6 Chemical EN 13034

Limited chemical splash protection against some hazardous chemicals



Anti-static EN1149.1

Anti-static protection compliant to European standards



Radioactive EN 1073-2

Protection against radioactive contamination



Anti-viral ASTM F1671

Protection against viral and blood-borne pathogens

CovTech™ Summary



Strong

Anti-Static

Breathable

Particle Protection

Chemical Splash Protection

Silicone Free

Lightweight

Durable

Benchmark Certified