



**FLOWTRONIX (FT)**



# **CHEMICAL PROTECTION**



Founded in 1990, **FLOWTRONIX (FT)** is a leading Manufacturer, Stockiest, Distributor and Supplier of the complete range of high quality Personal Protective Equipment (PPE) and safety solutions. We provide a diverse product portfolio for consolidated safety purchasing to our strategic end user clients, distribute products and services through our largest integrated network of resellers, retail stores and distribution centers.



## Personal Protective Equipment (PPE)

FT offers a full range of safety solutions for your professional needs. We offer high quality personal protective equipments which guarantee protection against wide range of risks associated with high degree of comfort for our users. We supply our products to all industrial sectors that need protective equipment for their manpower against all kinds of occupational hazards. FT work towards by implementing a total "Head-to-Toe" safety concept to the HSE standards by providing authentic, environment friendly and quality Personal Protective Equipment.

## **FT** SAFETY FIRST AT EVERY WORKPLACE

Serious injury or death in the workplace changes lives forever - for the families, friends, co-workers, employer and communities. That is why it is very important to apply Safety First philosophy at every workplace. Effective health and safety in your workplace can helping keeping your employees happy and productive, at the same time reduces the human and business costs of injuries.

CHEMICAL PROTECTION



### The Importance of Chemical Workwears

Protective clothing keeps your body safe from hazardous materials and harm. There is more to knowing the right protective clothing than that, however, there are various kinds of clothing that are designed to provide even more kinds of protection. This doesn't complicate understanding the importance of wearing the right clothing. It does, however simplify the understanding that the wrong protective clothing may not only fail to protect you properly but may actually be considered a hazard in some circumstances and situations.

Chemical suits are designed to protect the entire body from exposure to harmful and possibly fatal chemicals. Without these suits, it would be impossible to contain dangerous chemical spills or explosions where hazardous chemical waste or other potentially fatal chemicals must be cleared away and disposed of properly. These suits protect the wearer so that clean up is done without risk.

Some forms of protective clothing are available in a disposable variety. The dual function of this type of clothing is that it not only provides protection but can be discarded after use. The durable materials used to make this type of clothing are breathable but non-porous, ensuring safe covering during use.



DuPont™  
**Tyvek®**

  
**SAINT-GOBAIN**  
PERFORMANCE PLASTICS

 **GLYPTEC®**

DuPont™  
**Tychem®**

  
**TST**  
SWEDEN AB

CHEMICAL PROTECTION



# CHEMICAL WORKWEARS STANDARDS

## EN 14605:2005+A1:2009: Protective clothing against liquid chemicals

EN 14605:2005+A1:2002 is a performance requirements for clothing with liquid-tight (Type 3) or spray-tight (Type 4) connections, including items providing protection to parts of the body only (Types PB [3] and PB [4]).

- Type 3 – Protection against pressurised liquid chemicals  
Liquid tight suits. Suits which can protect against strong and directional jets of a liquid chemical such as spray from a burst pipe under pressure. Requires a barrier fabric and sealed seams.
- Type 4 – Protection against liquid aerosols  
Spray tight suits. Suits which can protect against saturation of liquid chemical, where volume of the liquid builds up on the suit forming pools, resulting in rivulets. Requires a barrier fabric and sealed seams.



EN 14605



EN 14605

## EN ISO 13982-1:2004 +A1:2010: Protective clothing for use against solid particulates

EN ISO 13982-1:2004 specifies the minimum requirements for chemical protective clothing resistant to penetration by airborne solid particles (Type 5). These garments are full-body protective clothing, i.e. covering trunk, arms and legs, such as one-piece coveralls or two piece suits, with or without hood or visors, with or without foot protection.



EN ISO 13982-1:2004  
+A1:2010

## EN 13034:2005 +A1:2009: Protective clothing against liquid chemicals

This standard makes it possible to assess the minimum level of performance of protective clothing designed for protection against a possible explosion of small quantities of spray or a limited volume (sprayed by accident) of less dangerous chemical products, for which a total permeability barrier is not required.



EN 13034:2005  
+A1:2009

## EN 1149-5:2008: Protection against electrostatic charges

EN 1149-5: 2008 specifies material and design requirements for electrostatic dissipative clothing, used as part of a total earthed system, to avoid incendiary discharges. This assess if the protective clothing concerned are certified as anti-static so as to prevent sparks arising, if electrostatic charges are present, which may cause explosions and fires.



EN 1149-5: 2008



# CHEMICAL WORKWEARS STANDARDS

## EN 1073-2:2002: Protective clothing against radioactive contamination

This specifies the requirements and test methods for non-ventilated protective clothing protecting the wearer against particulate radioactive contamination. Clothing is intended to protect only the body, arms and legs of the wearer, but it may be used with accessories which provide protection to additional areas of the wearer (e.g. boots, gloves, RPE). This standard does not apply for the protection against ionizing radiation and the protection of patients against contamination with radioactive substances by diagnostic and/or therapeutic measures.



EN 1073-2:2002

## EN 14126:2003: Protective clothing against infective agents

EN 14126 defines performance requirements for clothing materials to protect against infective agents. The test methods specified in this standard focus on the medium containing the microorganism; such as liquid, aerosol, or solid dust particle.



EN 14126:2003

## EN 13034: Protective clothing against liquid chemicals

EN 13034 chemical protective suit (Type 6) shall cover and protect at least the trunk and the limbs. Chemical protective suit (Type 6) forms the lowest level of chemical protection and is intended to be used if risks have been assessed as low and a full liquid permeation barrier is not necessary.



EN 13034

## NFPA 701: Standard Methods of Fire Tests for Flame Propagation of Textiles and Films

NFPA 701's test methods apply to curtains, window shades, draperies, table linens, textile wall hangings, as well as to fabrics used in the assembly of awnings, tents, tarps and other similar architectural fabric structures and banners. This test measures the flammability of a fabric when it is exposed to specific sources of ignition. NFPA 701 testing measures the ignition resistance of a fabric after it is exposed to a flame for 12 seconds.



NFPA  
NFPA 701

## EN ISO 14116: Protection against limited flame spread

Protective clothing certified according to EN 342 gives the wearer protection against cold environment. Requirements are set on thermal insulation and air permeability. Resistance to water penetration is an optional requirement.



EN ISO 14116



# DuPont™ **Tyvek**® DuPont™ **Tychem**®

Every day, thousands of industrial workers put their trust in our garments, so as a normal business practice, at DuPont we make sure that Tychem® chemical suits go through rigorous testing. Tychem® fabrics have been tested by third party labs for permeation against hundreds of chemicals. The result is chemical protection available against hundreds of toxic liquids and vapors from sarin to chlorine gas.

DuPont™ Tyvek® has provided the protective barrier people need to worry less, so they can focus on accomplishing bigger things. Tyvek® has introduced new dimensions of protection, security and safety in a wide variety of applications: building envelope, protective apparel, medical packaging. Even graphics. And we continue to innovate today.



## DUPONT TYVEK® RANGE:

- Tyvek® Standard Coverall ..... 08
- Tyvek® Classic Xpert Coverall..... 09
- Tyvek® Apron ..... 10
- Tyvek® Narrow Sleeves ..... 10
- Tyvek® Hood ..... 11
- Tyvek® Shoe Covers ..... 11
- Tyvek® Boot Covers ..... 11

## DUPONT TYCHEM® RANGE:

- Tychem® C Coverall ..... 12
- Tychem® F Coverall ..... 13



**FOR GREATER GOOD™**



CHEMICAL PROTECTION

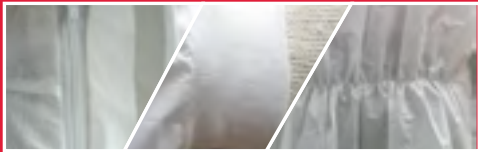


# TYVEK® STANDARD COVERALL

## **DUPONT** Style and Design:

- External stitched seams for enhanced protection against penetration from outside to inside of garment
- Ergonomic 3-piece hood allowing easy movement of head without disturbing the view of the wearer
- Tyvek® zipper with zip flap for improved safety and tighter seal
- Elasticated cuffs and ankles for good fit of garment
- Elasticated waist for optimum fit to body

## **DUPONT** Components:



Tyvek® zipper    Elasticated cuffs    Elasticated waist



## Colors



CHEMICAL PROTECTION

### Products and Article Numbers

Item	Article No.	Sizes
A. Tyvek® Standard Coverall	6376DP01	Small to 2XL





# TYVEK® CLASSIC XPRT COVERALL

## Style and Design:

- High liquid and particulate protection
- Exceptional design and comfort
- Good breathability thanks to air and moisture vapour permeability
- Overall ergonomic shape for perfect fit and protection when moving
- 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
- Large, easy-to-grasp zipper puller

## Components:



3-piece hood    Zipper and flap    No thumb loop



## Colors



### URSPEC®



Logo embroidery or printing



EN ISO 13982-1:2004 +A1:2010



EN 13034:2005 +A1:2009



EN 1149-5



EN 1073-2:2002



EN 14126:2003

Cat III



CHEMICAL PROTECTION

### Products and Article Numbers

Item	Article No.	Sizes
B. Tyvek® Classic Xpert Coverall	6376DP530	Small to 3XL



## TYVEK® APRON

### Style and Design:

- Material: Tyvek® 1431 N, 41 g/m2, antistatic treatment
- Apron with flap
- With two bonds to be tied at the back
- Length 108 cm
- Standard size

## TYVEK® NARROW SLEEVES

### Style and Design:

- Material: Tyvek® 1431 N, 41 g/m2, antistatic treatment
- Length: 50 cm
- Points of seam on the higher blue rubber band
- Adjustable
- Standard size



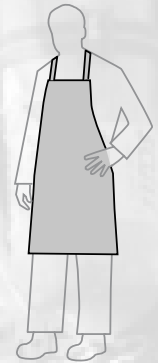
### Colors

WH

URSPEC®

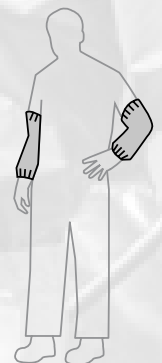


Logo embroidery or printing



### Colors

WH



### Products and Article Numbers

Item	Article No.	Sizes
C. Tyvek® Apron PA30LO	1576DP01	Standard Size
D. Tyvek® Narrow Sleeves PS32LA	5676DP01	Standard Size



## TYVEK® HOOD

### DU PONT® Style and Design:

- Material: Tyvek® 1431 N, 41 g/m2, antistatic treatment
- Hood and flange assembled with the overcasting
- Elastic around the neck and of the face
- Standard size



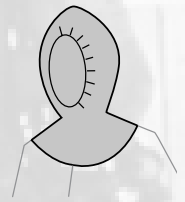
### Colors



### URSPEC®



Logo embroidery or printing



## TYVEK® SHOE COVERS

### DU PONT® Style and Design:

- Material: Tyvek® 1431 N, 41 g/m2, antistatic treatment
- Shoe covers made of Tyvek®
- With slip retardant sole
- Antistatic
- Stitched-in slip retardant sole
- Standard size



### Colors



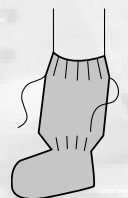
## TYVEK® BOOT COVERS

### DU PONT® Style and Design:

- Material: Tyvek® 1431 N, 41 g/m2, antistatic treatment
- Dimension: H 48 cm, L 42 cm
- Elastic on the top and ankle with additional ties
- Standard size



### Colors



CHEMICAL PROTECTION

### Products and Article Numbers

Item	Article No.	Sizes
E. Tyvek® Hood PH30LO	1676DP01	Standard Size
F. Tyvek® Shoe Covers	4376DP01	Standard Size
G. Tyvek® Boot Covers POBO	4376DP119	Standard Size



# TYCHEM® C COVERALL

## **DUPONT** Style and Design:

- Offers Type 3-B, 4, 5 and 6 barrier protection against a wide range of inorganic chemical and biological hazards, yet are lightweight and comfortable too
- Hood with elastic face opening for tight fit around respirator
- Stitched and overtaped seams
- Double selfadhesive storm flap
- Clasticated cuffs, ankles and waist
- 100% particle tight
- Resists liquid splashes of pressures up to 2 barexcellent barrier against concentrated inorganic chemicals and biological hazards
- Thumb loops
- Antistatic treatment

## **DUPONT** Components:



Thumb loops    Elasticated cuffs    Double zip flap



## Colors



URSPEC®



Logo embroidery or printing



EN 14605



EN 14605



EN ISO 13982-1:2004  
+A1:2010



EN 13034:2005  
+A1:2009



EN 1149-5



EN 1073-2:2002

Cat III



### Products and Article Numbers

Item	Article No.	Sizes
H. Tychem® C Coverall	6343DP01	Small to 5XL

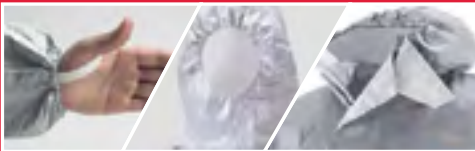


# TYCHEM® F COVERALL

## DU PONT® Style and Design:

- Offers protection of a broad chemical barrier, helping to protect personnel against numerous toxic industrial organic chemicals, highly concentrated inorganic chemicals (even pressurised), particulates, biohazards & chemical warfare agents.
- Hood with elastic face opening for tight fit around respirator
- Stitched and overtaped seams
- Double self-adhesive zipper flap
- Elastic cuffs, ankles and waist
- 100% particle tight resists liquid splashes of pressures up to 5 bar
- Excellent barrier against organic chemicals
- Highly concentrated inorganic chemicals and biological hazards
- Thumb loops
- Antistatic treatment

## DU PONT® Components:



Thumb loops    Elasticated hood    Zip with flap



## Colors



## URSPEC®



Logo embroidery or printing



EN 14605



EN 14605



EN ISO 13982-1:2004 +A1:2010



EN 13034:2005 +A1:2009



EN 1149-5



EN 1073-2:2002



EN 14126:2003

Cat III



CHEMICAL PROTECTION

## Products and Article Numbers

Item	Article No.	Sizes
I. Tychem® F Coverall	6344DP01	Small to 5XL



# GLYPTEC®

Chemical suits are designed to protect your entire body from exposure to harmful and possibly fatal chemicals. Without these suits, it would be impossible to contain dangerous chemical spills or explosions where hazardous chemical waste or other potentially fatal chemicals must be cleared away and disposed of properly. These suits protect the wearer so that clean up is done without risk.

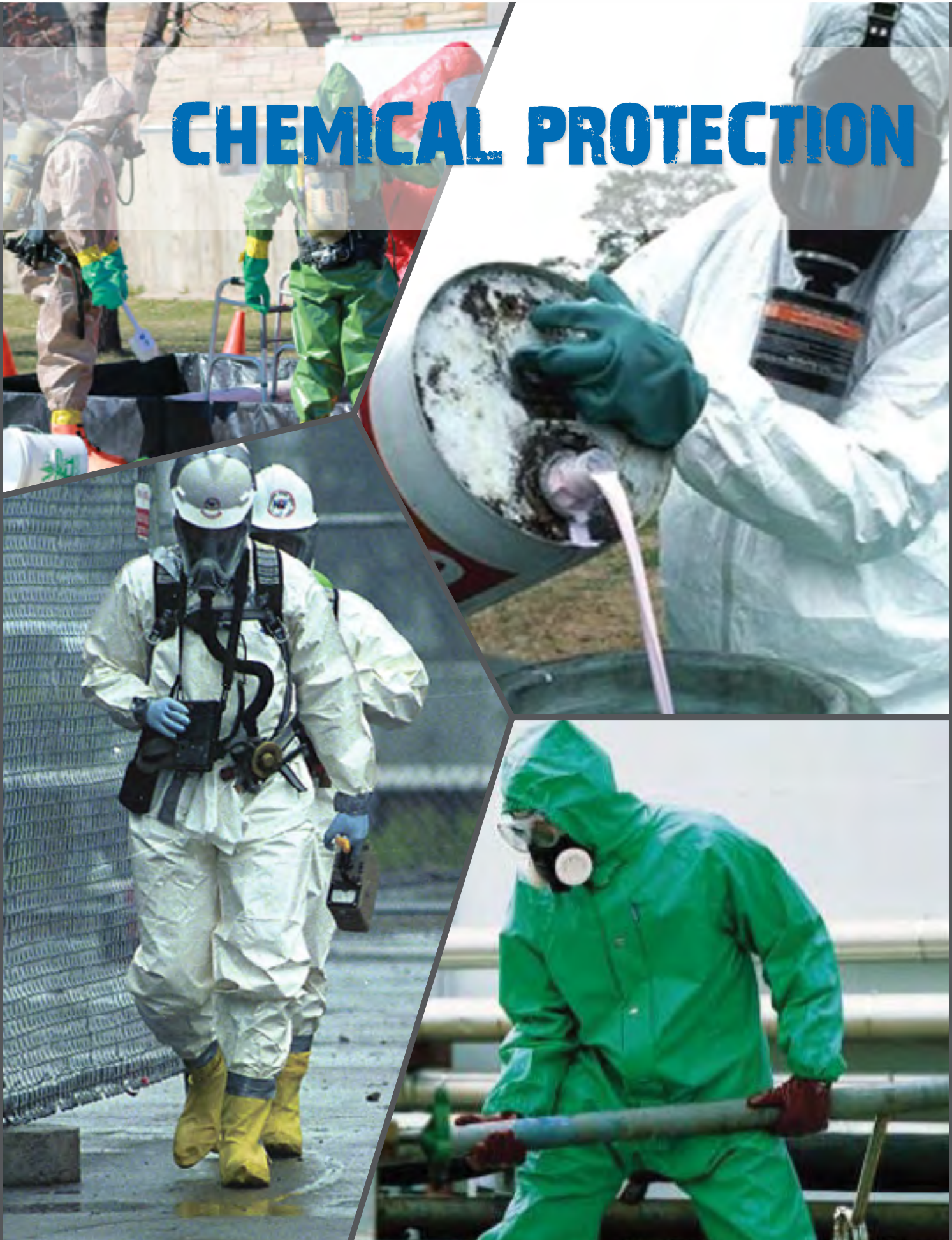
Protective clothing keeps your body safe from hazardous materials and harm. There is more to knowing the right protective clothing than that however, there are various kinds of clothing that are designed to provide even more kinds of protection.

### GLYPTEC RANGE:

- Service Master® 500 ..... 16
- Service Master® 600FR ..... 17
- Service Master® Apron ..... 18
- Service Master® Sleeves ..... 18
- Service Master® Hood ..... 19
- Service Master® Shoe Covers..... 19
- Service Master® Boot Covers..... 19
- FR Rainwear Chemsuit ..... 20
- PVC Chemical Protective Apron..... 21



# CHEMICAL PROTECTION



CHEMICAL PROTECTION

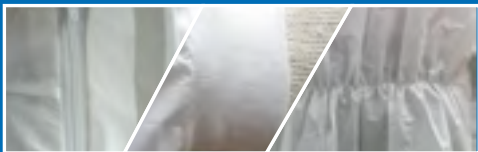


# SERVICE MASTER 500

## Style and Design:

- Made from a new revolutionary fabric which is soft, resistant to noxious dust and splash
- 5-ply fabric. There are three middle layers which act as filters and these are sandwiched between two layers of spun-bonded polypropylene. These outer layers provide strength and durability whilst the middle layers hold out chemical splash and dust.
- Silicon free components

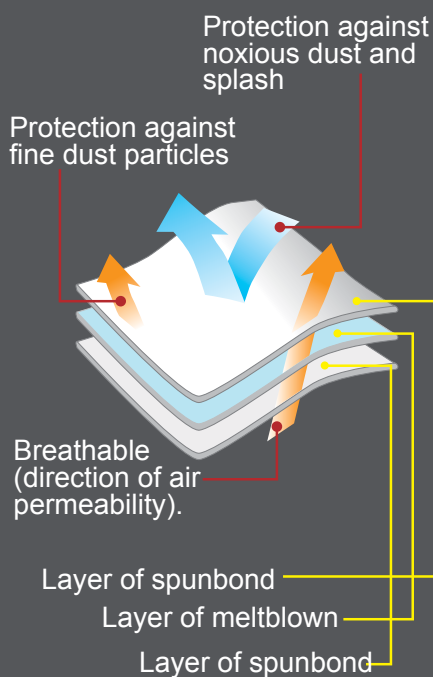
## Components:



Stormflap with adhesive tab

Knitted cuffs

Elasticated waist on back



## Colors

WH

URSPEC®



Logo embroidery or printing



EN ISO 13982-1:2004 +A1:2010



EN 13034:2005 +A1:2009



EN 1149-5



EN 1073-2:2002

Cat III



## Products and Article Numbers

Item	Article No.	Sizes	Packing
A. Service Master® 500 Coverall	63101FT01	Small to 3XL	1 pc. per vacuum pack 25 pcs. per carton



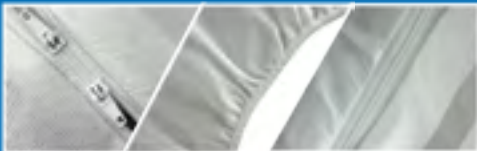


# SERVICE MASTER 600FR

## Style and Design:

- Unique tri-laminate construction
- Limited flame spread fabric
- 3-piece hood
- One way white nylon coil zipper
- Stormflap with adhesive tab for secure fastening
- Elasticated waist on back for a better fit
- Breathable fabric
- Elasticated cuffs
- Elasticated ankles
- Reinforced crotch
- Serged seams: 7-8 stitches per inch
- Sizes: Small to 3XL

## Components:



One way white nylon zipper    3-piece hood    Stormflap with adhesive tab



## Colors



## URSPEC®



Logo embroidery or printing



EN ISO 13982-1:2004 +A1:2010



EN 13034:2005 +A1:2009



EN ISO 14116:2008 INDEX 1/0/0



EN 1149-5



EN 1073-2:2002

Cat III



CHEMICAL PROTECTION

Products and Article Numbers			
Item	Article No.	Sizes	Packing
B. Service Master® 600FR Coverall	63203GT01	Small to 3XL	1 pc. per printed polybag 25 pcs. per carton



## SERVICE MASTER® APRON

### Style and Design:

- Made from new revolutionary fabric which is soft, durable, resistant to noxious dust and splash
- Breathable laminated fabric made of Polypropylene+microporous film
- Neck and waist ties
- Anti-static
- Size: 70 x 108 cm



## SERVICE MASTER® SLEEVES

### Style and Design:

- Made from new revolutionary fabric which is soft, durable, resistant to noxious dust and splash
- Breathable laminated fabric made of Polypropylene+microporous film
- Wrist to elbow protection
- Elastic wrist & elbow
- Resistant to chemicals
- Anti-static
- Size: 50 cm



### Colors



EN 13034:2005 +A1:2009



EN 14126:2003



EN 1149-5: 2008



CHEMICAL PROTECTION



CAT III CE 0302

### Products and Article Numbers

Item	Article No.	Sizes	Packing
C. Service Master® Apron	15204GT01	70 cm x 108 cm	25 pcs. per polybag 4 polybags per carton 100 pcs. per carton
D. Service Master® Sleeves	56204GT01	50 cm	20 pcs. per polybag 10 polybags per carton 200 pcs. per carton



**Colors**

WH

URSPEC®



Logo embroidery or printing



EN 13034:2005 +A1:2009



EN 14126:2003



EN 1149-5: 2008



CHEMICAL PROTECTION



CAT III CE 0302

CHEMICAL PROTECTION

## SERVICE MASTER® HOOD

### Style and Design:

- Made from new revolutionary fabric which is soft, durable, resistant to noxious dust and splash
- Breathable laminated fabric made of Polypropylene+microporous film
- Elasticized face opening & neck line
- Shoulder, front & back-length for excellent coverage
- Anti-static
- Standard size (Fits all)

## SERVICE MASTER® SHOE COVERS

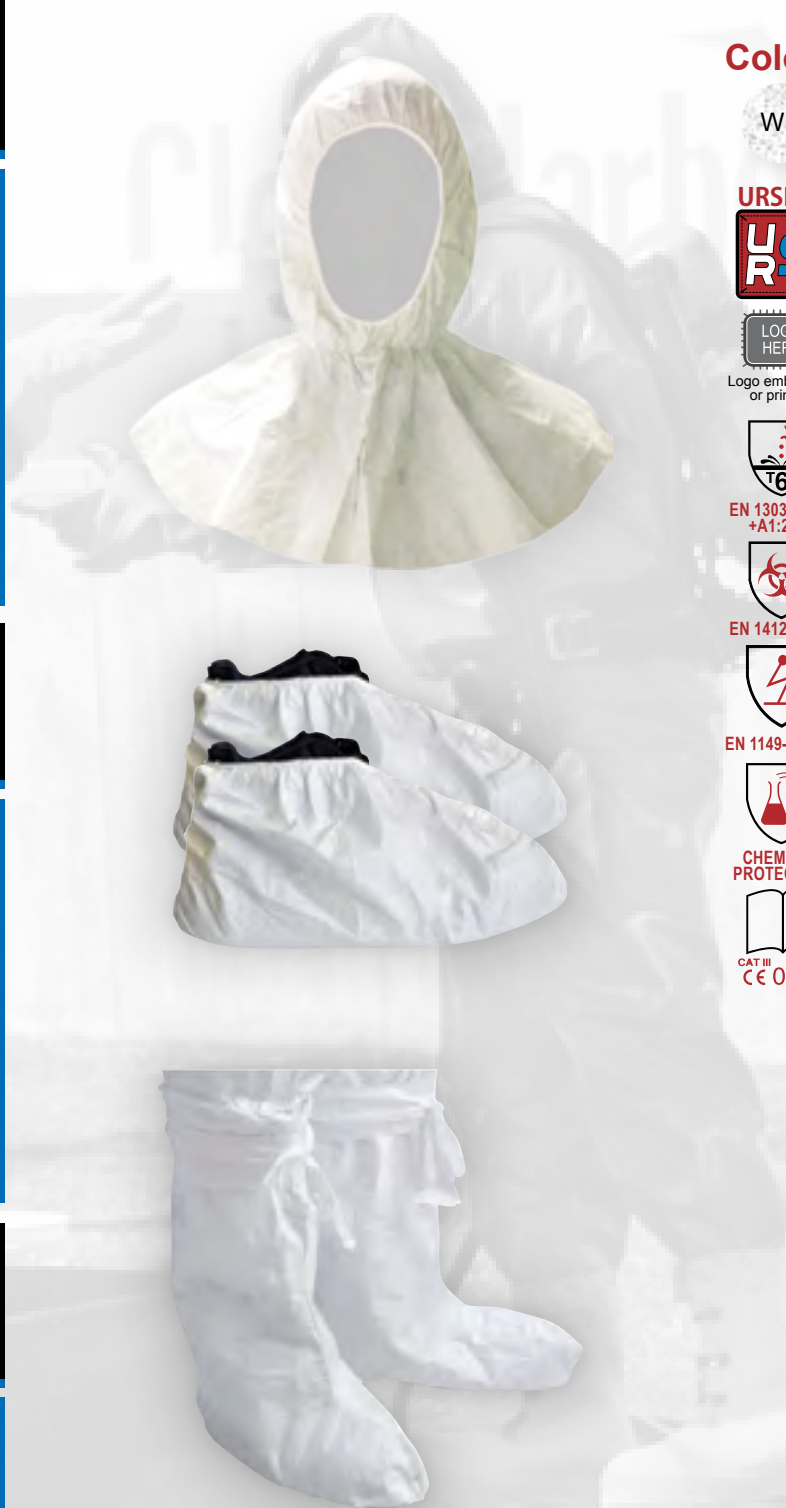
### Style and Design:

- Made from new revolutionary fabric which is soft, durable, resistant to noxious dust and splash
- Breathable laminated fabric made of Polypropylene+microporous film
- Overshoe
- Elasticized ankles, back & top to toe
- Anti-static
- Size: 40 x 13 cm

## SERVICE MASTER® BOOT COVERS

### Style and Design:

- Made from new revolutionary fabric which is soft, durable, resistant to noxious dust and splash
- Breathable laminated fabric made of Polypropylene+microporous film
- Elasticized top opening
- Knee-length overboot
- With fixation ties in the middle
- Anti-static
- Size: 42 X 48 cm



Products and Article Numbers			
Item	Article No.	Sizes	Packing
E. Service Master® Hood	16204GT01	One size fits all	50 pcs. per polybag 2 polybags per carton 100 pcs. per carton
F. Service Master® Shoe Covers	43204GT01	40cm x 13 cm	20 pcs. per polybag 20 polybags per carton 400 pcs. per carton
G. Service Master® Boot Covers	43204GT119	48 cm x 42 cm	20 pcs. per polybag 10 polybags per carton 200 pcs. per carton



# FR RAINWEAR CHEMSUIT

## Style and Design:

- 0.45mm PVC/High-tensile strength polyester/PVC
- Limited flammability
- Green plastic 30" heavy duty zipper with double storm flap front with 4 plastic snap button closure
- Black plastic take up snaps at wrists and bottom cuff
- Attached drawstring hood
- Elasticated back
- Strong Welded seams
- Tapered raglan sleeves w/ 8" Inner elastic sleeves
- Reinforced crotch
- Sizes: Small to 5XL

## Components:



8" inner elastic sleeve

Strong welded seams

Double storm flap with snap buttons



## Colors



URSPEC®



Logo embroidery or printing



NFPA®  
NFPA 701



ASTM  
INTERNATIONAL  
Standards Worldwide

# PVC CHEMICAL PROTECTIVE APRON

## Style and Design:

- 0.45 mm PVC Apron
- 2cm wide Cotton ties with shoelace ends
- 4 plastic grommets
- Rough edge (Raw edge)
- Medium to heavy duty applications
- Superior flexibility
- Conforms to BS EN 13034: 2005
- Sizes: 35" (W) x 45" (L)

### Applications:

- Food handling and preparation
- Chemical processing
- Industrial maintenance

## Components:



Plastic grommets

Shoe lace ties

Raw edge



## Colors



### URSPEC®



Logo embroidery or printing



EN 13034



CHEMICAL PROTECTION

### Products and Article Numbers

Item	Article No.	Packing
H. FR Rainwear Chemsuit	8511FT01	1 pc. per polybag
I. PVC Chemical Protective Apron	1511FT01	1 pc. per polybag



# AVES®

## Cryogenic Protection in Ultra-Cold Environments

Cryo-Apron® is designed to keep you safe and comfortable. Our multi-layered construction allows for a maximum level of thermal protection, and a waterproof nylon outer shell protects you from cryogenic splashes. For added safety and function, our cryogenic aprons have quick-release buckles at the neck and waist.

**TEMPSHIELD**  
CRYO-PROTECTION™



CHEMICAL PROTECTION

# CRYO-APRON

## Style and Design:

- Multi-layer Construction
- Outer Shell: Waterproof Nylon
- Maximum Thermal Protection to torso and upper legs
- Water Proof
- Lightweight and Comfortable
- Splash Protection
- Breathable
- Adjustable neck and waist straps
- Width: 24" / 60.96cm
- Lengths: 36" / 91.4cm  
42" / 106.7cm  
48" / 121.9cm  
54" / 137.2cm

## Colors



CAT III



EN 420



EN 388



EN 511



## Colors



CAT III



EN 420



EN 388



EN 511



# CRYO INDUSTRIAL APRON

## Style and Design:

- Multi-layer Construction
- Outer Shell: Waterproof Nylon
- Maximum Thermal Protection to torso and upper legs
- Water Proof
- Lightweight and Comfortable
- Splash Protection
- Breathable
- Adjustable neck and waist straps
- Width: 24" / 60.96cm
- Lengths: 42" / 106.7cm

CHEMICAL PROTECTION

### Products and Article Numbers

Item	Article No.	Packing
A. Cryo Aprons	15156FT164	1 pc. per polybag
B. Cryo Industrial Aprons	15156FT165	1 pc. per polybag



Saint-Gobain Performance Plastics' Protective Systems group provides the best in chemical & biological protection. ONESuit® protective suits, protective gloves and other advanced polymer technology in a range of composite constructions incorporating Nomex®, Kevlar® and other reinforcements.

In addition, Saint-Gobain develop and customize product solutions to best suit various protective requirements and applications. All products are supported by extensive research and materials testing.

All of our fully encapsulated, gas tight suits are certified to NFPA 1991, the most stringent standard for protection from chemical or biological agents including liquefied gas.

ONESuit® protective suits are lightweight for maximum comfort, & include the ONEGlove® Hazmat, the first and only single piece chemical protective glove certified to NFPA 1991.

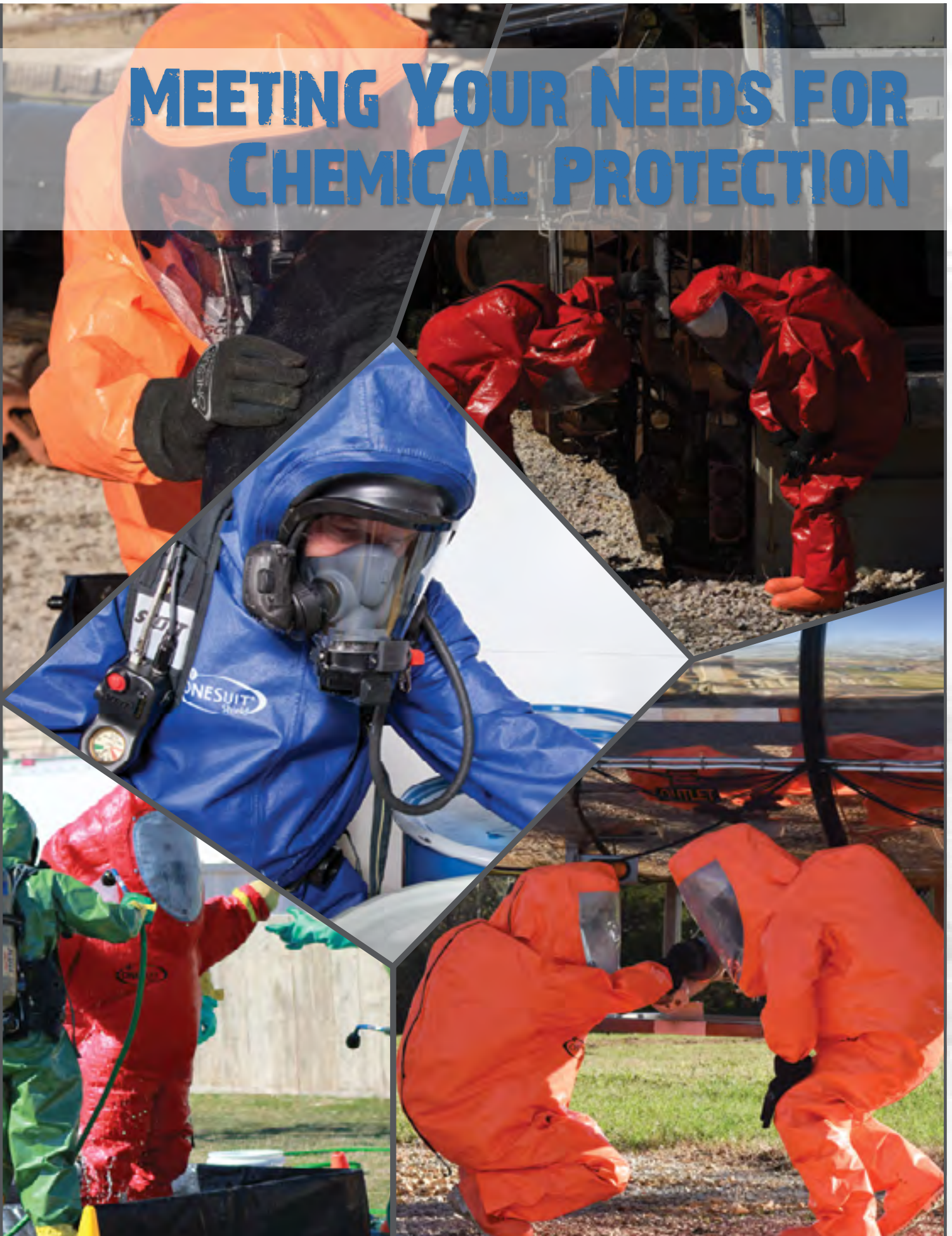
**SAINT GOBAIN RANGE:**

- OneSuit® Flash Hazmat 2 Protective Suit..... 26
- OneSuit® Pro 2 Hazmat Protective Suit..... 27
- OneSuit® Shield Hazmat Protective Suit..... 28
- OneSuit® HazGlove-91 ..... 29
- Pressure Test Kit ..... 29
- HazProof® ..... 29





# MEETING YOUR NEEDS FOR CHEMICAL PROTECTION



CHEMICAL PROTECTION



# FLASH 2 HAZMAT PROTECTIVE SUIT



## Features:

- Certified to NFPA 1991 (2016 Ed.)
  - Flash fire and Liquefied gas
- First single-skin suit certified to flash fire
- Maximum protection against chemical and biological agents
- Streamlined design maximizing mobility and vision
- Twice the lifecycle of other suits
- Permanent anti-fog resistance
- 15-year minimum shelf life
- No over cover
- Reusable and decontaminable
- Internal belting system
- Knee reinforcements and integral booties
- Includes new ONESUIT® Hazglove-91
- Size: Small to 3XL



## Components:



ONESUIT® Hazglove-91

Detachable secondary visor

Reinforced knees



Colors



### Products and Article Numbers

Item	Article No.	Sizes
A. ONESuit® Flash Hazmat Protective Suit	51159SG335	Small to 3XL

CHEMICAL PROTECTION

# PRO 2 HAZMAT PROTECTIVE SUIT

## Features:

- Certified to NFPA 1991 (2016 Ed.)
- Streamlined design maximizing mobility and vision
- Single-skin lightweight ensemble (less than 10 lbs or 5 kg)
- Superior flame and abrasion resistance
- Reusable limited exposure design
- Permanent anti-fog resistance
- Ultra-compact for convenient, space-saving storage
- Minimum 10-year shelf life (lower life cycle cost)
- Includes new ONESUIT® Hazglove-91
- Size: Small to 3XL

## Components:



ONESUIT®  
Hazglove-91

Face visor

Sealing band



Colors



CHEMICAL PROTECTION

Products and Article Numbers		
Item	Article No.	Sizes
C. ONESuit® Pro Hazmat Protective Suit	51159SG337	Small to 3XL



# SHIELD HAZMAT PROTECTIVE SUIT



## Features:

- Maximum protection against chemical or biological agents
- Dual Certified
  - NFPA 1994 Class 2
  - NFPA 1992
- Unique face mask interface provides vapor tight configuration
- Lightweight design for user comfort
- Saint-Gobain Coretech® barrier material technology offers exceptional durability and flexibility
- Twice the lifecycle of other suits
- 10-year shelf life
- Includes ONEGlove® Hazmat
- Ultra-compact for convenient, space-saving storage



## Components:



ONESUIT® Hazglove-91

Unique face mask interface

Sealing band



Colors



### Products and Article Numbers

Item	Article No.	Sizes
D. ONESuit® Shield Hazmat Protective Suit	51159SG338	Small to 3XL
E. ONESuit® HazGlove-91	51159SG339	Small to 2XL
F. Pressure Test Kit	51159SG340	
G. HazProof®	51159SG341	US 6-13

## ONESUIT® HAZGLOVE-91

### Features:

- Certified to both NFPA 1991-2016
- Outstanding dexterity compared to multi-glove systems
- Highest level of comfort and safety
- Superior protection from hazardous materials



Colors



## PRESSURE TEST KIT

### Features:

- Designed for use with all Level A suits in performing a leak test per ASTM F 1052 or ISO 17491:2002, Method A2, standards.
- Kit is not dependent on electricity
- Requires a compressed air source for easy operation.
- Has durable protective case.



Colors



## HAZPROOF®

### Features:

- Certified to NFPA 1991 for Chemical and Hazmat Cleanup, Emergency Response & Domestic Preparedness
- Chemical Resistance: Hazardous Wastes, Acids, Caustics, and other chemicals.
- Steel toe, steel mid-sole, antistatic puncture and slip resistant



Colors



CHEMICAL PROTECTION



TST Sweden task is to help people protect themselves against heat, cold and high water pressure to bacterial & chemical contamination. TST continually researching and developing new materials and products which can help us to achieve safer, more comfortable work situations. Something that is necessary in a world where risky situations are continually increasing.

TST have a complete assortment of personnel protection equipment for high level of splash protection for particles, dust and moisture when working in risk environments.

**TST RANGE:**

**Advanced Protective Equipment for Chemical Protection**

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**Leakage and Collection - Acids and Bases**

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- Collection Cushion ..... 33
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**High Pressure Cleaning Protection (500 Bar Pressure)**

- Jacket with Hood ..... 37
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- Boots (500 Bar) ..... 37



# UNIQUE PROTECTION EQUIPMENT



CHEMICAL PROTECTION



# AMMONIA KIT

## Advanced Protective Equipment for Chemical Protection

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### Features:

- A complete kit that provides a high level of splash protection for particles, dust and moisture when working in risk environments involving ammonia.
- Kit consists of a protective coverall, a chemical escape hood with carrying bag, insulating gloves and protective boots with steel toe caps and steel mid-soles.
- Everything is packed in a practical case
- Size: Coverall S-2XL, Boots 36-48

### Resistance table for Coverall

Chemical Substance	Concentration (weight %)	Class
Sulphuric acid (H <sub>2</sub> SO <sub>4</sub> )	30%	4
Sodium hydroxide (NaOH)	50%	3
n-Heptane (C <sub>7</sub> H <sub>16</sub> )	100%	3
Isopropanol (C <sub>3</sub> H <sub>8</sub> O)	100%	4
Hydrochloric acid (HCl)	10%	4
Ammonia (NH <sub>3</sub> )	25%	4
Benzene (C <sub>6</sub> H <sub>6</sub> )	100%	4



CHEMICAL PROTECTION



### Ammonia Kit includes:

- Escape Hood with carrying bag
- Protective Coverall
- Boots
- Insulating Gloves
- Case





## RE-CONDENSING SET



### Features:

- Complete equipment for treating discharges of condensed gases like ammonia, chlorine & sulphur dioxide.
- This equipment makes it possible to cover over or catch a leak either in liquid or gas form highly effectively.
- Includes 2 tarpaulins, re-condensing funnel, a basin and a submersible pump with 5 m/16 ft hose.

## Leakage and Collection - Acids and Bases



## FUNNEL WITH MAGNETS



### Features:

- A superior solution for when you want to catch leak quickly, but are not equipped for exposure to the chemical.
- The handle allows you to bring the funnel up to the leak and position it against the leaking area.
- Super magnets makes the funnel's sealing surface attaches to the base
- Funnel is fitted with a connection which makes it possible to attach fire hose or collection cushion to collect the leakage.
- Connections available: The funnel comes packed in a case, making it easy to store, for example in a rescue vehicle.



## COLLECTION CUSHION - 100L



### Features:

- Practical collection cushion that is easily attached to the funnel
- Holds 100 l/26 gal.



Products and Article Numbers		
Item	Article No.	Sizes
A. Ammonia Kit	26160TST154	Small to 2XL Boots 36-48
B. Re-Condensing Set	88161TST352	1.2 (L) x 0.5 (W) x 0.6 (H) m
C. Funnel with Magnets	88161TST350	
D. Collection Cushion - 100 Liters	88161TST351	



## COLLECTING BASIN WITH STAND - 1000L

### Features:

- A robust basin made of acid-resistant material and special compound PVC which can withstand acids and bases and temperatures down to -80°C/-112°F.
- The basin is foldable for easy storing and transportation.
- Can easily be managed by one person, even in the dark.
- The fabric is replaceable
- 1000 l/264 gal.
- Size raised 1 x 2 x 0.5 m, folded 1 x 2 x 0.12 m.

## Leakage and Collection - Acids and Bases



## SELF-ERECTING BASIN 700 TO 5000L

### Features:

- An easy-to-use practical basin made of chemical-resistant material. On filling, the basin self-erects using four floatation devices around the opening of the basin.
- Available in the following capacities:
  - 700 l/185 gal
  - 2000 l/530 gal
  - 3000 l/790 gal
  - 5000l/1100 gal
- Other volumes on offer.
- Can be folded or rolled to a small size for storage
- Also available with hose connection



Products and Article Numbers

Item	Article No.	Sizes
E. Collecting Basin with Stand 1000 Liters	88161TST353	Raised: 1 x 2 x 0.5 m folded 1x2 x 0.12 m
G. Self-erecting Basin: 700, 2000, 3000, 5000 Liters	88161TST355	
G. Self-Erecting Basin 400 Liters	88161TST354	Filled 1.2 x 1.2 x 0.35 m Empty 1.2 x 1.2 x 0.1 m
H. Spring-Lid Seal, Cushion	88161TST356	
I. Spring-Lid Seal, Basin	88161TST357	

## SELF-ERECTING BASIN 400L

### Features:

- Basin has low, soft edges.
- It is easy to position where a leak occurs, also in small spaces.
- It is ideal for use as a collecting basin during decontamination of e.g. chemical divers.
- The basin can be folded or rolled for easy transportation and storing.
- 400 l/106 gal.
- Size filled 1.2 x 1.2 x 0.35 m, empty 1.2 x 1.2 x 0.1 m.

## SPRING-LID SEAL, CUSHION

### Features:

- Ideally stored filled, enabling it to be placed extremely quickly over a grating or similar as a seal.
- Weighs 45 kg/100 lb when filled with water.
- Fitted with carrying handles on both sides for easy handling.

## SPRING-LID SEAL, BASIN

### Features:

- Place the basin over the grating and fill it with water, sand or something similar.
- Has a capacity of 90 l/24 gal and can also be used as a collecting basin.
- Takes up very little space when empty.

## Leakage and Collection - Acids and Bases





# JACKET WITH HOOD

## Features:

- Three layers functional jacket which is CE certified for protection against High Pressure Cleaning
- Very smooth and flexible to wear
- Water and dirt repellent outside
- Lined for highest comfort
- Waist adjustable with drawstrings
- Inside pocket with zipper
- Special pocket for phone
- Protection on the entire front and head
- Protected areas identified by stripes
- Label indicates protection
- Weight 1.6 kg / 3.5 lbs



**The strongest fiber in the world!**

Dyneema® is the world's strongest fiber (15 times stronger than steel on a weight for weight basis). This makes it possible to offer high levels of protection against waterjetting hazards even with lightweight fabric.

Being much thinner & more flexible than traditional materials such as leather, cotton and metals, products made with Dyneema® are very comfortable & durable. Dyneema® fiber provides comfort, combined with higher protection.



## High Pressure Cleaning Protection (500 Bar Pressure)



### Colors



Detachable hood with 3 adjustment possibilities



Waterproof zippers with overlapping flap



Cuffs adjustable with Velcro



Openable ventilation in the armpits



Pocket for ID card on the right sleeve



2 pockets with water proof zippers

# TROUSERS

## Features:

- Three layers functional trousers which is CE certified for protection against High Pressure Cleaning.
- Water and dirt repellent outside.
- Detachable braces (included)
- Leg pocket with waterproof zipper on left leg
- Protection on the whole front
- Weight 1.3 kg / 2.9 lbs



## Colors



Double Belt loop



Pockets for knee pads



Adjustable elastic back waist



Reinforcements on the knees



Zippers down on the legs



2 pockets with waterproof zippers



Knife pocket on right leg

CHEMICAL PROTECTION

# BOOTS (500 BAR)

## Features:

- Waterproof boots with protection for up to 500 bar / 7500 psi pressure
- Completely vulcanized rubber boots, fitted with steel toecap and steel inserts to withstand both pressurized liquids on the upper part, and for sharp objects under
- Certified with the CE directive 89/686/EEC, for pressurized liquids
- Sizes: 42 to 48



## Fabrics and Article Numbers

Item	Article No.	Sizes
J. 500 Bar Jacket and Hood	88160TST342	XS to 3XL
K. 500 Bar Trousers	88160TST343	XS to 3XL
J. Boots 3000	88160TST344	UK 42-48 / US 9-13



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