

SAFETY CLOTHING

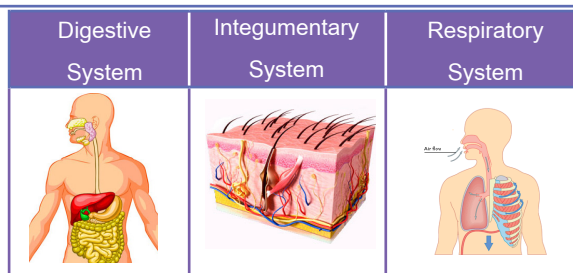


- Technical Data Information
- Chemical Protective Clothing
- Arc Flash Protective Clothing
- Apron/Mechanics Clothing
- Welding/Heat Protective Clothing
- Arm Protection
- Rain Coats
- Back Support

Technical Data Information

Danger from Chemicals

Absorption
Inhalation
Ingestion
Injection
Dermal Absorption



Physiological Classification of Materials

- Irritants
- Sensitizers - Allergic
- Asphyxiants - exert their effects through a depletion of oxygen to the tissues
- Systemic Poisons - the main toxic action includes the production of internal damage
- Carcinogens - induces cancer
- Narcotics or Anaesthetics - the main toxic action is the depressant effect upon the Central Nervous System.
- Teratogens –could generate defects in the fetus of pregnant women

Examples of Chemical Substances

- Solids: Lime, Asbestos
- Liquids: Mercury, Hydrochloric Acid
- Gases: Ammonia, Chlorine

Chemical Protective Clothing Selection

1. Design Considerations

Clothing configuration, Components and options, Sizes, Ease of donning and doffing, Clothing construction, Comfort, Accommodation of other selected ensemble equipment, Restriction of mobility, compatibility with other PPE



Level A Type 1

- Highest available level of respiratory, skin and eye protection from solid, liquid and gaseous chemicals.
- Full-face SCBA
- Ease of Decontamination



Level B Type 1

- Provides same level of respiratory protection as Level A but less skin protection. Liquid splash protection but no protection against chemical vapors or gases.
- Free movement
- Ease of donning and doffing

2. Material Chemical Resistance

Ideally, the chosen material (s) must resist permeation, degradation and penetration by the respective chemicals.

- Permeation is the process by which a chemical dissolves in or moves through a material on a molecular basis. In most cases, there will be no visible evidence of chemicals permeating a material.
- Penetration is the movement of chemicals through zippers, seams or imperfections in protective clothing materials
- Degradation involves physical changes in a material as the result of a chemical exposure, use or ambient conditions. The most common observations of material degradation are discoloration, swelling, loss of physical strength or deterioration.
- Mixtures of chemicals can be significantly more aggressive towards protective clothing materials than any single chemical alone.
- Sources of information. Guidelines for the Selection of Chemicals Protective Clothing, Quick Selection Guide to Chemical Protective Clothing or Vendor data or recommendations. Simple rating of "poor" "good" or "excellent" give no indication of how the material may perform against various chemicals.

3. Physical Properties

As with chemical resistance, manufacturer materials offer wide ranges of physical qualities in terms of strength, resistance to physical hazards and operation in extreme environmental conditions. Will the material resist tears, punctures, cuts and abrasions?

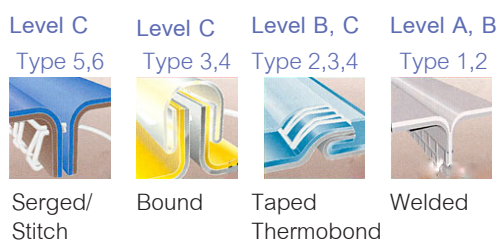
4. Ease of Decontamination

The degree of difficulty in decontaminating protective clothing may dictate whether disposable or reusable clothing is used or a combination of both.

5. Chemical Protective Clothing Standards

Protective clothing buyers may wish to specify clothing that meets specific standards such as the NFPA standards or EN standards, etc.

Seam Construction



Gas Tight Suit Selection Guide (Sample)

Details of how many minutes gas tight suit resists chemical penetration:

(G - Gas, L - Liquid, S - Solid)

CHEMICAL NAME	PHYSICAL PHASE	STANDARDIZED BREAKTHROUGH TIME (minutes)
Ammonia	G	79
Chlorine	G	>480
Ethylene oxide	G	65
Formaldehyde (formalin solution)	L	>480
Hydrochloric acid, 37%	L	>480
Hydrogen fluoride	G	imm
Fuming nitric acid	L	14
Sulfur dioxide	G	38
Concentrated sulfuric acid	L	>48

Zone: When Leaking Chemicals

Zone	Level
Hot zone	Leaking chemicals area
Warm zone	Decontamination area
Cold zone	Safety zone (Head office)



TYPE 1

TYPE 1 EN 463-1

Gas tight suits

Protective clothing against dangerous solid, liquid and gaseous chemicals, including liquid and solid aerosols.



TYPE 4

TYPE 4 EN 14605

Spray tight suits

Suit which can protect against saturation of liquid chemical, where the volume of the liquid builds up on the suit forming pools, resulting in rivulets. Requires a barrier fabric and sealed seam.



TYPE 6

TYPE 6 EN 13034

Reduced spray suits

Suits for protection against light spray and splashes of liquid chemicals where there is no directional spray or build up of liquid on the suit, but there may be a fine mist of droplets in the atmosphere.



EN 1149-5

ANTI-STATIC EN 1149-5

Electrotatic dissipative protective clothing with a surface resistance of maximum 2.5×10^9 ohms.



EN ISO 14116
INDEX 1/0/0

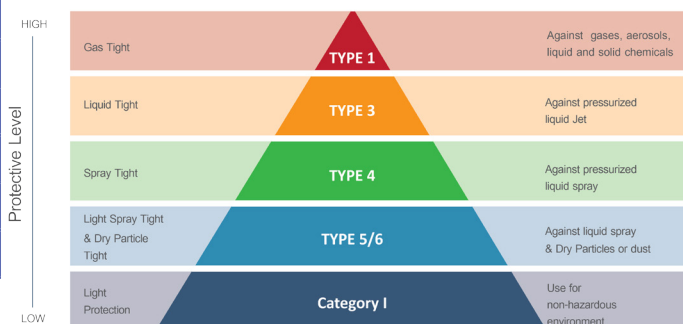
AGAINST LIMITED FLAME SPRAY PROTECTION

EN ISO 14116

Limited flame spray materials, material assemblies, and clothing.

Gas tight Suits Conditions in Chemical Protective Suit Selection

- Identify, status and effect on the body when chemical is leaking.
- Evaluate the chemical Threshold Limit Values (TLV), Immediately Dangerous to Life or Health (IDLH)
- Chemical resistance factor of Gas Tight Suits
- Physical resistance factor of gastight Suits
- Protective suit level A, B, C, D, or Type 1, 2, 3, 4, 5, 6
- Barrier Zone: Hot zone, Warm zone and Cold Zone



European Gas Tight Suit Standard



TYPE 3

TYPE 3 EN 14605

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 5

TYPE 5 EN ISO 13982-1

Dry particle suits

suits for protection against hazardous dry particles.



EN 1073-2

AGAINST RADIOACTIVE CONTAMINATION

EN 1073 - 2

Protective clothing against particulate radioactive contamination.



EN 14126

AGAINST BIOLOGICAL HAZARDS EN 14126

Protection against biological hazards and infective agents.



DIN 32781





AGAINST PESTICIDES DIN 32781

Suits for protection against pesticides.

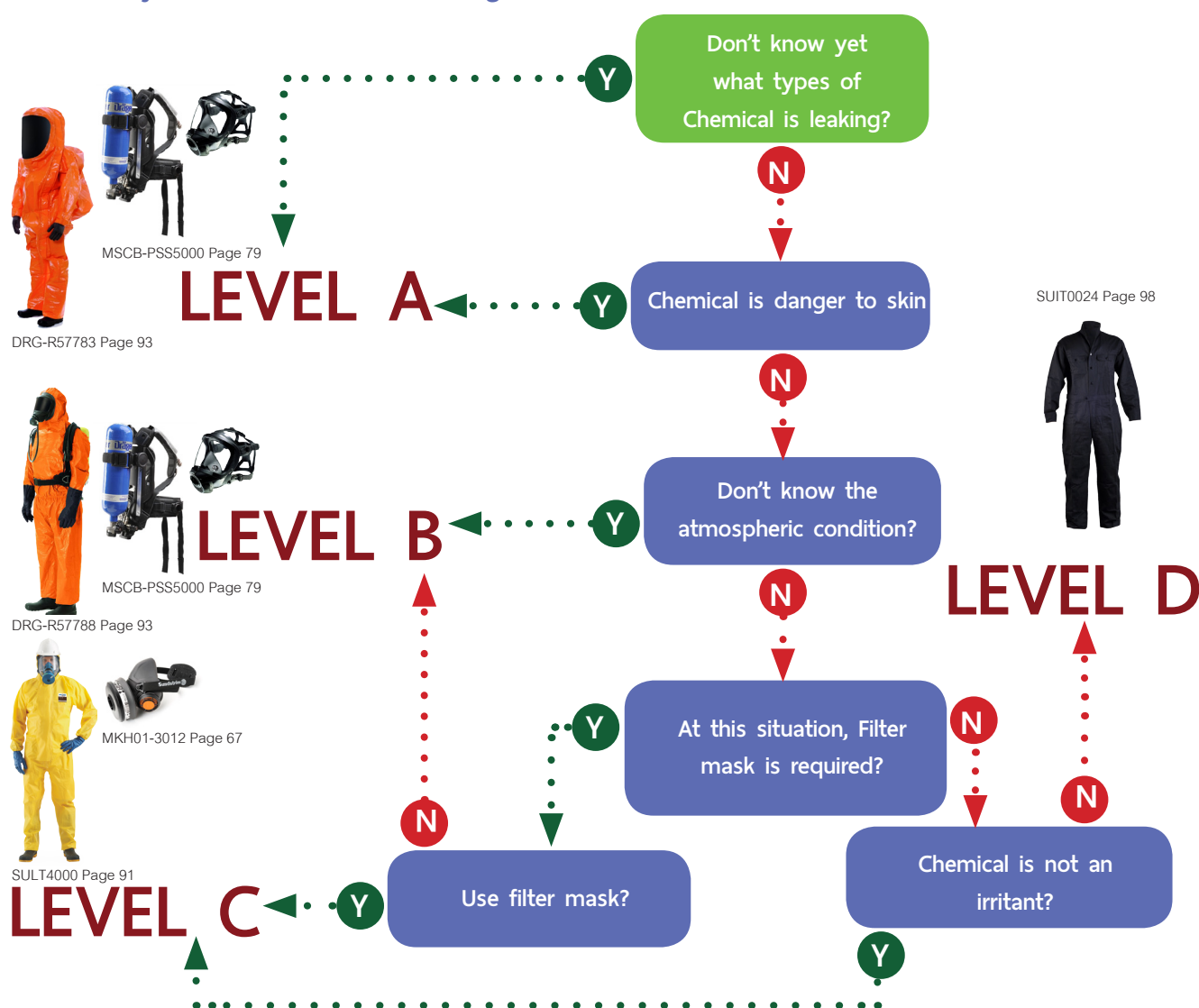
Technical Data Information

Levels of Protection

EPA : Environmental Protection Agency

 <p>Level A is required when the greatest potential for exposure to hazards exists and when the greatest level of skin, respiratory and eye protection is required. level A protects against all substances of chemical in solid, liquid or gas substances and also connect to SCBA and Air-line</p>	 <p>Level B is required under circumstances requiring the highest level of respiratory protection with lesser level of skin protection. At most abandoned outdoor hazardous waste sites, ambient atmospheric vapors or gas levels have not approached sufficiently high concentrations to warrant level A protection. Level B commonly uses to protect against liquid or spreading things and also connect to SCBA and Air-line</p>
 <p>Level C is required when the concentration and type of airborne substances is known and the criteria for using air purifying respirator is met. There is less directly danger to skin. Under working in this suit, the weather inspection must do often.</p>	 <p>Level D is the minimum protection required. Level D protection may be sufficient when no contaminants are present or work operations preclude splashes, immersion or the potential for unexpected inhalation or contact with hazardous levels of chemicals.</p>

Accidentally Release Chemical: Gas Tight Suit Selection



Coverall Size Chart



SIZE	CHEST (CMS)	HEIGHT (CMS)
S	84 - 92	162 - 170
M	92 - 100	170 - 176
L	100 - 108	176 - 182
XL	108 - 116	182 - 188
2XL	116 - 124	188 - 194
3XL	Special Oversize	



You are safe with us!

CE certification, High quality, Reasonable price

Selection Chart by Risk

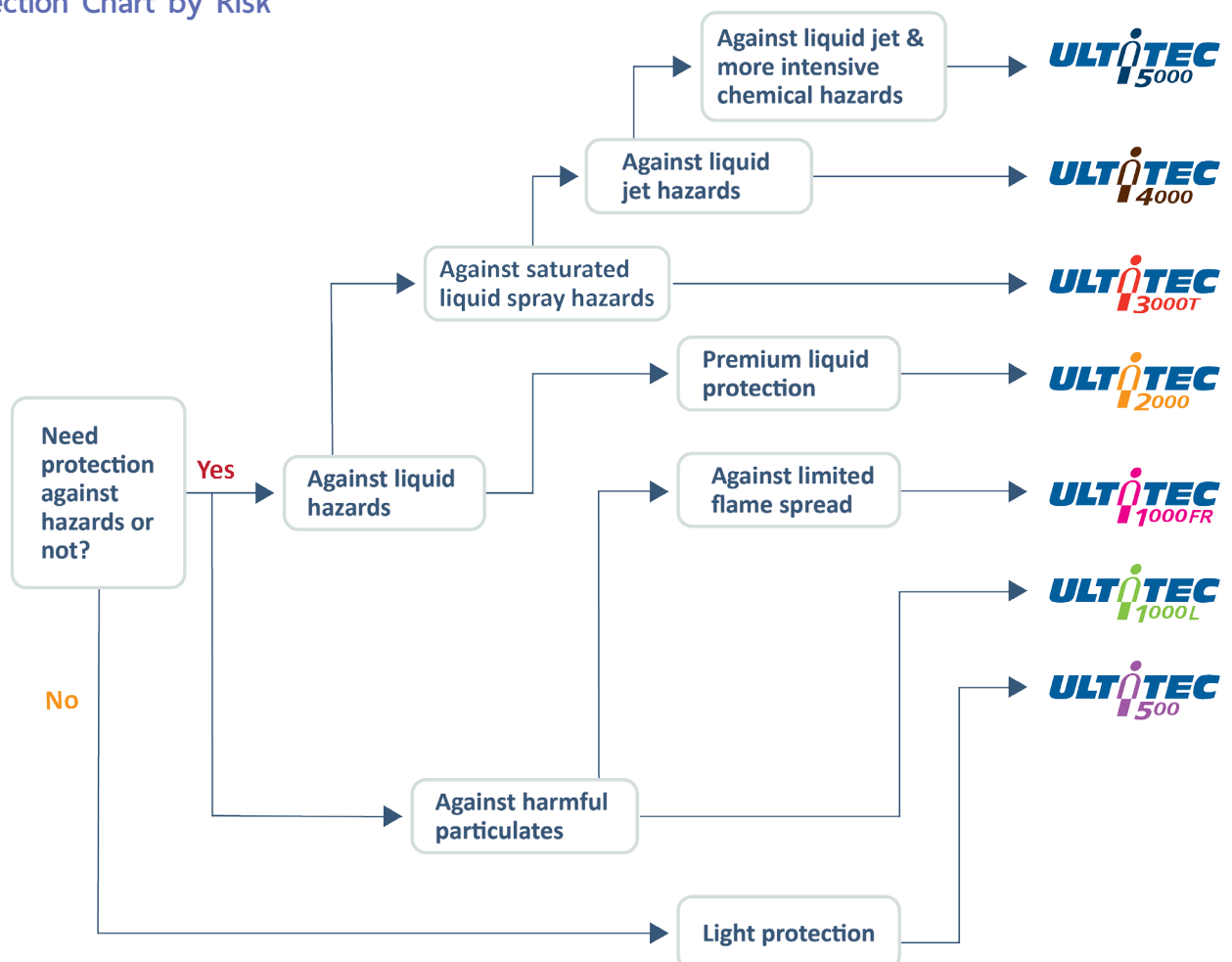


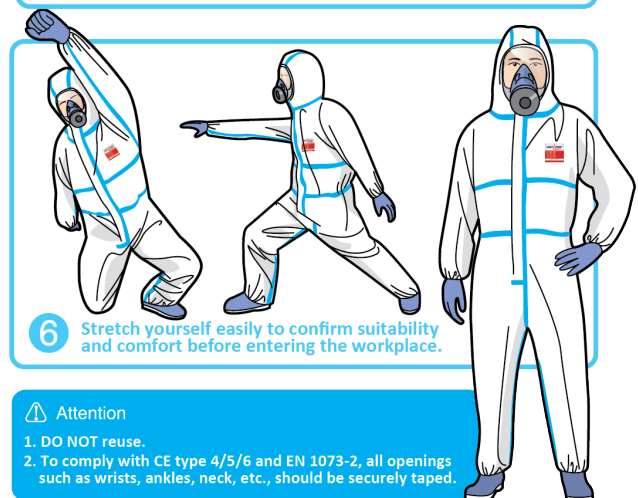
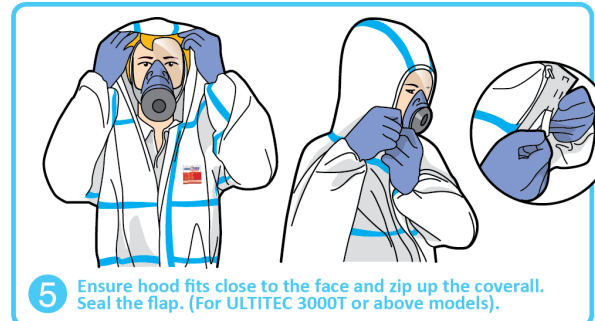
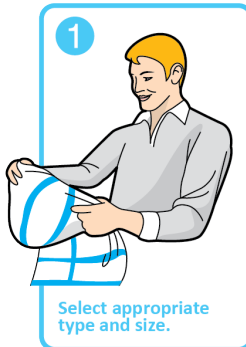
Table: Works& Safety
Clothing Selection



Aerospace						
Agriculture & Farming						
Asbestos Handling						
Biological Hazards						
Automotive						
Chemical Handling						
Civil Protection						
Clean Room						
Construction						
Decontamination						
Disease/Disaster Management						
Decorative Work						
Electronics						
Engineering						
Food Processing & Packing						
Gas						
Hazardous Material						
Industrial Clean Up / Maintenance						
Medical / Emergency						
Metal						
Military						
Mining						
Oil Handling / Tank Cleaning						
Oil Refining / Exploration						
Paint Spray						
Petrochemical						
Pharmaceutical						
Printing						
Powder Coating						
Railway						
Sewage Purification Installation						
Utilities						
Visitors						
Waste Management						
Welding						



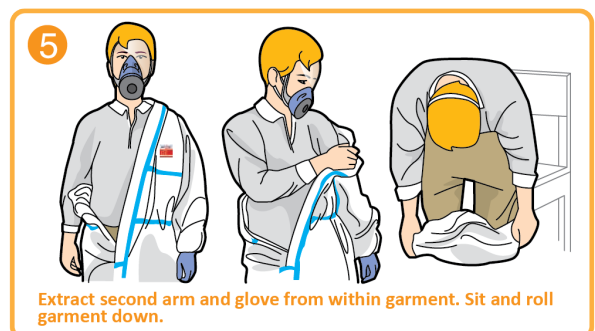
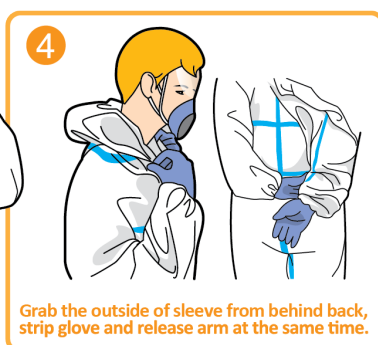
ULTITEC Coverall Donning Instruction



⚠ Attention

1. DO NOT reuse.
2. To comply with CE type 4/5/6 and EN 1073-2, all openings such as wrists, ankles, neck, etc., should be securely taped.

ULTITEC Coverall Doffing Instruction



⚠ Attention

1. Be careful that no contaminant comes into contact with the wearer.
2. Contaminated garment should be disposed in accordance with local regulations.

Ultitec Specification

ULTITEC 500 to ULTITEC 3000T



ULTITEC 4000 to ULTITEC 5000



CE STANDARDS FOR PROTECTIVE CLOTHING

Protective coveralls are designed to resist various hazardous situations. EEC guideline 89/686 (2016/425), PPE is divided into 3 categories:

Category I: Basic PPE protects against minimal risks.

Category II: PPE that cannot be clearly classified under Category 1 or 3 is assigned to Category 2.

Category III: PPE of complex design is intended to protect against mortal danger and/or serious and irreversible injury to health

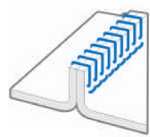
Protective clothing complies with category III, and the requested certification enumerate on the following explanation.

General Features

- Polypropylene material, light with good ventilation
- Weaving by Spunbound and Melt Brown, soft, strong and durable
- The seams are sewn for strength and over sealed with a chemical proof tape to ensure no penetration of liquid.
- Designed elasticated hood, waist& ankles for ease of movement.
- Ample crotch avoids pulling rupture when squatting or crawling.
- Flap zipper for additional prevention against penetration or permeation.



Light Protection Protective Coverall



Stitched Seam
Reinforced 4-thread
overlocked seam offers
stronger seam strength
and better protection.

Breathability



Liquid Protection



Dry Particulate Protection



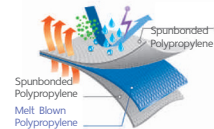
Category I



Dust & Light Liquid Spray Protective Coverall



Stitched Seam
Reinforced 4-thread
overlocked seam offers
stronger seam strength
and better protection.



Breathability



Liquid Protection



Dry Particulate Protection



Features

- Strong and durable fabric offers light protection for non-toxic environment.
- Designed to fit your body shape, make you more comfortable when working.
- CE Category I coverall

Features

- **Lightweight & more durable**
Our multi-layers SMS fabric provides superior physical performance while it is breath-able for wearer's comfort.
- **Excellent particle barrier**
The fabric filters resist 99.8% of particles of size 0.5-1 um.
- **Designed to fit your body shape**
Fully elasticated hood, ankle, wrists, and waist afford optimum comfort and ease of movement.
- **Antistatic (EN 1149-5) is optional!**
If antistatic is not required, then ULTITECH 1000L-NA can be an option. It provides a more cost-effective solution and is especially suitable for asbestos removal. Different colors are also available in blue, red and yellow.

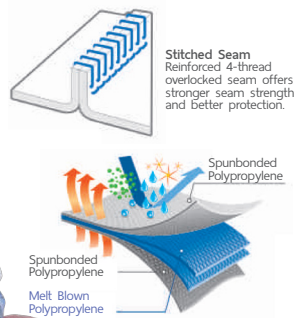


Code	Description	Color	UOM	Package	Code	Description	Color	UOM	Package
SULT0500ZZZM	Light-protection Coverall Pangocare 500 #M+	White	1 piece	1 piece/pack	SULT1000LZZZS	Light-protection Coverall Pangocare 1000L #S+	White	1 piece	1 piece/pack
SULT0500ZZZL	Light-protection Coverall Pangocare 500 #L+	White	1 piece	1 piece/pack	SULT1000LZZZM	Light-protection Coverall Pangocare 1000L #M+	White	1 piece	1 piece/pack
SULT0500ZZZX	Light-protection Coverall Pangocare 500 #XL+	White	1 piece	1 piece/pack	SULT1000LZZZL	Light-protection Coverall Pangocare 1000L #L+	White	1 piece	1 piece/pack
					SULT1000LZZXL	Light-protection Coverall Pangocare 1000L #XL+	White	1 piece	1 piece/pack

ULTITEC
1000FR



Dust, Light Liquid Spray & Flame Retardant Protective Coverall



Breathability



Liquid Protection



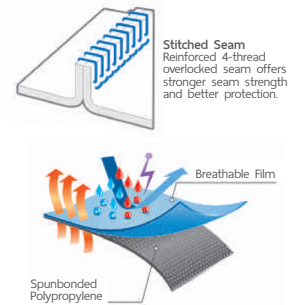
Dry Particulate Protection



ULTITEC
2000



Dust & Liquid Splash Resistant Coverall



Breathability



Liquid Protection



Dry Particulate Protection



Features

- **Extend the shelf life or your reusable flame resistance garments**
Worn on top of the flame-resistant garments when working, it brings to prolong the usage duration and saves laundry costs.
- **Durable & breathable**
Multilayer SMMS fabric is not only strong and durable, but also soft and breathable. It brings an effective barrier against particulates and low-level liquid spray.

Notes:

According to EN ISO14116 Index 1, the limited flame spread coverall must never be in direct contact with skin. The ULTITEC 1000FR must be always worn on top of index 2 or 3 thermal protective garments and hoods.



Features

- **The Premium microporous fabric offers an outstanding barrier against wide range of Chemical liquids, blood, body-fluid and infective agents.**
Fully meets EN368, ASTM F1670 & EN14126. The performance also exceeds both WHO protective clothing specification option 1 & 2 for Ebola infection control.
- **Protective suits against pesticides**
Meets DIN 32781 requirement on both protection and comfort in agriculture application.
- **Breathable & comfortable**
Fabric allows water-vapour transmission, which offers breathability to keep the wearer comfortable.
- **Low linting**
Reduces the risk of fiber contamination to the work environment.

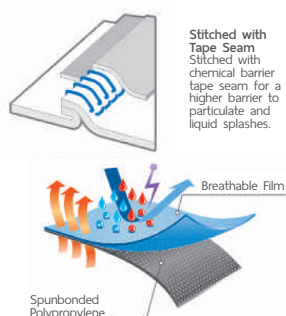


Code	Description	Color	UOM	Package	Code	Description	Color	UOM	Package
SULT1000FRZZM	Light-protection Coverall Pangocare 1000FR #M+	White	1 piece	1 piece/pack	SULT2000ZZZS	Light-protection Coverall Pangocare 2000 #S+	White	1 piece	1 piece/pack
SULT1000FRZZL	Light-protection Coverall Pangocare 1000FR #L+	White	1 piece	1 piece/pack	SULT2000ZZZM	Light-protection Coverall Pangocare 2000 #M+	White	1 piece	1 piece/pack
SULT1000FRZZXL	Light-protection Coverall Pangocare 1000FR #XL+	White	1 piece	1 piece/pack	SULT2000ZZZL	Light-protection Coverall Pangocare 2000 #L+	White	1 piece	1 piece/pack
					SULT2000ZZZXL	Light-protection Coverall Pangocare 2000 #XL+	White	1 piece	1 piece/pack

ULTITEC
3000T



Oil, Chemical & Infective Agent Resistant Coverall



Breathability



Liquid Protection



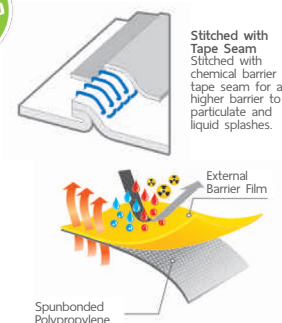
Dry Particulate Protection



ULTITEC
4000



Chemical & Liquid Jet Resistant Coverall



Breathability



Liquid Protection



Dry Particulate Protection



Features

- The premium microporous fabric offers an outstanding barrier against wide range of chemical liquids, blood, body-fluid and infective agents.
Fully meets EN368, ASTM F1670 & EN14126.
The performance also exceeds both WHO protective clothing specification option 1 & 2 for Ebola infection control.
- Protective suits against pesticides**
Meets DIN 32781 requirement on both protection and comfort in agriculture application.
- Breathable & comfortable**
Fabric allows water-vapour transmission, which offers breathability to keep the wearer comfortable.
- Low linting**
Reduces the risk of fiber contamination to the work environment.
- Sealed seam**
All seam are covered by liquid-proof tape to make sure no no seepage.



Type 4-B Type 5-B Type 6-B EN 1149-5 EN 1073-2 EN 14126 DIN 32781

Features

- Excellent protection against wide range of hazards
The special impervious fabric meets the highest requirement of EN14126 biological test. All seams are sealed by chemical proof tapes, which reaches protection level type 3 and provides an effective barrier against directional liquid jets, various chemicals, and biological hazards.
- Sealed design offers optimum protection**
Well-designed hood fits respirator perfectly, double layer storm flaps ensure liquid tight seal for the zipper, and the bright yellow fabric offers high visibility. These designs provide excellent protective when working under dangerous and dark environments.
- Lightweight & durable**
The fabric is lightweight and strong. It provides comfortable wearing experiences and allows the wearer to work efficiently.



Type 3-B Type 4-B Type 5-B EN 1149-5 EN 1073-2 EN 14126

Code	Description	Color	UOM	Package	Code	Description	Color	UOM	Package
SULT3000TZZZS	Light-protection Coverall Pangocare 3000T #S+	White	1 piece	1 piece/package	SULT4000ZZZM	Light-protection Coverall Pangocare 4000 #M+	Yellow	1 piece	1 piece/package
SULT3000TZZZM	Light-protection Coverall Pangocare 3000T #M+	White	1 piece	1 piece/package	SULT4000ZZZL	Light-protection Coverall Pangocare 4000 #L+	Yellow	1 piece	1 piece/package
SULT3000TZZZL	Light-protection Coverall Pangocare 3000T #L+	White	1 piece	1 piece/package	SULT4000ZZZXL	Light-protection Coverall Pangocare 4000 #XL+	Yellow	1 piece	1 piece/package
SULT3000TZZXL	Light-protection Coverall Pangocare 3000T #XL+	White	1 piece	1 piece/package					

Type 1 : Gas-tight	Type 1a Compressed air breathing apparatus worn on the inside
	Type 1b Compressed air breathing apparatus worn on the outside
	Type 1c Breathing air supply through a compressed air hose system
Type 2: Not gas-tight	Breathing air supply through a compressed air hose system
Type 3: Liquid-proof	
Type 4: Spray-proof	
Type 5: Particle protection	
Type 6: Limited spray-proof	

SIZE	HEIGHT (CMS)
S	150 - 165
M	160 - 175
L	170 - 185
XL	180 - 200
2XL	195 - 210

Penetration class

According to standard: DIN, EN ISO 6529 Chemicals and Gas Protective clothing is classified in 6 classes, dependent on penetration period measurement.

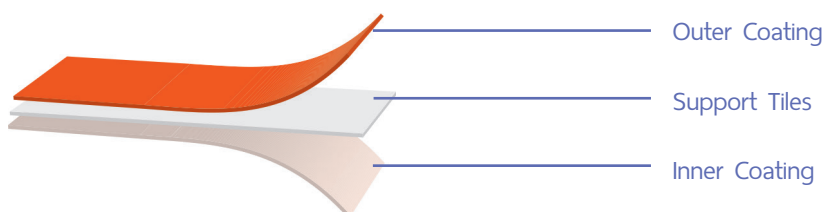
Class	Penetration period
1	> 10 minutes
2	> 30 minutes
3	> 60 minutes

Class	Penetration period
4	> 120 minutes
5	> 240 minutes
6	> 480 minutes

Clothing components

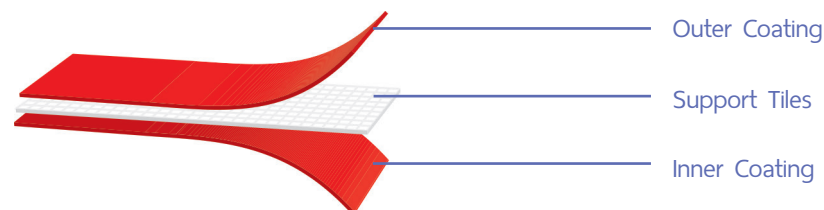
Zytron

- Limited Use Fabric, industrial use
- Flexible, soft and light weight
- Chemicals, bio-gas, and military protection



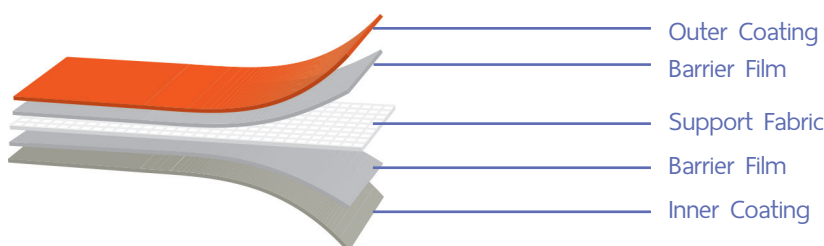
Umex

- Reusable
- Soft, light weight and flexible
- Not fragile to cold temperature



D-mex

- Reusable
- Durable, soft, light weight and flexible
- High protection in Chemicals, bio-gas, and military
- Not fragile to cold temperature
- Flame retardant fabric



Features

- Compatible with self-contained breathing apparatus
- Comfortable even for extended use.
- Tailor-made for use, zip in the suitable position and easy to handle in an emergency
- Double flaps zipper protection, the loop handle of a zip allows the ease at use
- Flash or rubbing resistant, depends on models
- The softest laminate material, each seam has been sewn and then hot-air taped internally and externally. The material and production quality allow for long shelf life.
- Fixed gloves combine butyl outer with laminate inner lining for increased protection against chemicals and punctures
- Additional: Reusable chemical protective boots and limited use gloves
- Design for use with various SCBA equipment
- Various sizes available
- Global and EN standard quality

Reusable Suit

<div></div> <div><p>Type1 Gas tight</p></div>	<div></div> <div><p>Type1 Gas tight</p></div>																								
<div>Level : A</div>	<div>Level : B</div>																								
<div>Features</div> <div><ul style="list-style-type: none">• Excellent protection against industrial chemicals, biological agents and other toxic substances. Limited use• Zytron laminate fabric• Suitable when handling toxic or hazardous materials.• The lightweight pliable suit material adapts to the wearer's movement and provides full flexibility.• Flexible, foldable and soft visor gives excellent panoramic vision.• Integrated belt for body adjustment• Life time of 10 years</div>	<div>Features</div> <div><ul style="list-style-type: none">• Gastight (Class 6) limited use protective suit• Made of Zytron laminate fabric• Pressure relief valve for discharging air from the suit, easy to keep and maintain• Large opening for donning/doffing (diagonally across the front); with no additional assistance required• Life time of 10 years</div>																								
<div>Standard</div> <div><div>EN943-1&2:2002</div><div>SOLAS II-2, Reg. 19</div><div>NFPA 1994: 2007</div></div>	<div>Standard</div> <div><div>EN943-1&2:2002</div><div>SOLAS II-2, Reg. 19</div><div>ISO 16602:2007</div></div>																								
<div>Accessories</div> <div><ul style="list-style-type: none">• Available with airline connecting valve• Gas-tight socks offer flexibility</div>	<div>Accessories</div> <div><ul style="list-style-type: none">• Available with airline connecting valve• Gas-tight socks offer flexibility</div>																								
<table><tr><td>Code</td><td>Description</td><td>Color</td><td>Color</td><td>UOM</td><td>Package</td></tr><tr><td>DRG-R57783</td><td>Chemical Protective Suit Level A, CPS5900 #R57783</td><td>Orange</td><td>S - XL</td><td>1 piece</td><td>1 piece</td></tr></table>	Code	Description	Color	Color	UOM	Package	DRG-R57783	Chemical Protective Suit Level A, CPS5900 #R57783	Orange	S - XL	1 piece	1 piece	<table><tr><td>Code</td><td>Description</td><td>Color</td><td>Size</td><td>UOM</td><td>Package</td></tr><tr><td>DRG-R57788</td><td>Chemical Protective Suit Level B, CPS5800 #R57788</td><td>Orange</td><td>S - XL</td><td>1 piece</td><td>1 piece</td></tr></table>	Code	Description	Color	Size	UOM	Package	DRG-R57788	Chemical Protective Suit Level B, CPS5800 #R57788	Orange	S - XL	1 piece	1 piece
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Code	Description	Color	Size	UOM	Package																				
DRG-R57788	Chemical Protective Suit Level B, CPS5800 #R57788	Orange	S - XL	1 piece	1 piece																				

Reusable Suit



Type1 Gas tight



Type1 Gas tight



Level : A

Level : B

Features

- Reusable chemical and gas protective suit : Class 6
- U-mex laminated fabric
- Cold resistant, down to -40°C
- Indicator belt for body adjustment
- Bags for accessories
- Flexible PVC face shield

Features

- Reusable chemical and gas protective suit : Class 6
- Umex laminated fabric
- Cold resistant, down to -30°C
- Stripe to cover face, sock, and gloves
- Bag for accessories

Standard

EN943-1:2002
EN1073-1:1998 & 2002
EN14126:2003
EN14593-1:2005
ISO16602:2007
SOLAS II-2, Reg. 19

Standard

EN943-1:2002
EN1073-1:1998 & 2002
EN14126:2003
EN14593-1:2005
EN14594:2007
ISO16602:2007
SOLAS II-2, Reg. 19

Accessories

- Separate Control Valve and able to connect to airline
- Anti-fog visor
- Viton and Tricotril coated gloves
- Gas-tight socks offer flexibility
- Pressure gauge holder to mount gauge within wearer's field of vision.
- Additional loops for equipment.

Accessories

- Separate Control Valve and able to connect to airline
- Viton and Tricotril coated gloves
- Gas-tight socks offer flexibility

Code	Description	Color	Size	UOM	Package	Code	Description	Color	Size	UOM	Package
DRG-R29410	Chemical Protective Suit Level A, CPS6900 #R29410	Orange	S - XL	1 piece	1 piece	DRG-R29460	Chemical Protective Suit Level B, CPS6800 #R29460	Orange	S - XL	1 piece	1 piece

Reusable Suit	
<div></div> <div><p>Type1 Gas tight</p></div>	<div></div> <div><p>Type1 Gas tight</p></div>
Level : A	Level : B
<div>Features</div> <ul style="list-style-type: none">• Reusable chemical and gas protective suit : Class 6• Complete protection against hazardous gases, chemical, bacteria, toxic, poison, biological or chemical warfare agents.• Cold-proof, down to -80°C• Flexible PVC shield, loophole for equipment under shield• Fixed gloves combine Viton outer and butyl laminate inner lining for increased protection against chemicals and punctures• Protection against mechanical stress and flash fire.• Life span of 15 years	<div>Features</div> <ul style="list-style-type: none">• Reusable chemical and gas protective suit : Class 6• D-mex laminated fabric• Excellent protection against a broad range of chemicals: Class 6• Cold resistant, down to -30°C• Stripe to cover face, sock, and gloves• Fixed gloves combine Viton outer and butyl laminate inner lining for increased protection against chemicals and punctures• Protection against flash fire.• A tear-proof textile
<div>Standard</div> <div>EN943-1&2:2002 EN1073-2 EN14126:2003 BS 8467 SOLAS II-2, Reg. 19 EX-Protection Proof</div>	<div>Standard</div> <div>EN943-1&2:2002 EN1073-1:1998 & 2002 EN14126:2003 EN14593-1:2005 Vfdb 08/01:2006-11 BS 8467 SOLAS II-2, Reg. 19</div>
<div>Accessories</div> <ul style="list-style-type: none">• Separate Control Valve and able to connect to airline• Anti-fog visor• Viton and Tricotril coated gloves• Gas-tight socks offer flexibility• Additional loops for attaching equipment.	<div>Accessories</div> <ul style="list-style-type: none">• Separate Control Valve and able to connect to airline• Viton and Tricotril coated gloves• Gas-tight socks offer flexibility• Additional loops for equipment

Code	Description	Color	Size	UOM	Package	Code	Description	Color	Size	UOM	Package
DRG-R29500	Chemical Protective Suit Level A , CPS7900 #R29500	Orange	S - XL	1 piece	1 piece	DRG-R29650	Chemical Protective Suit Level B, CPS7800 #R29650	Blue	S - XL	1 piece	1 piece

Arc flash

An Arc is a luminous bridge formed in a gap between two electrodes
An Arc Flash occurs during a fault, or short circuit condition, which passes through this arc gap.

The Arc Flash can be initiated through accidental contact, equipment which is underrated for the available short circuit current, contamination or tracking over insulated surfaces, deterioration or corrosion of equipment and, or parts, as well as other causes.

An Arc Flash event can expel large amounts of deadly energy. The arc causes an ionization of the air, and arc flash temperatures can reach as high as 35,000 degrees Fahrenheit. This is hotter than the surface of the sun.

This kind of temperature can set fire to clothing and severely burn human skin in fractions of a second at a significant distance from the event. The heat can also result in ignition of any nearby combustible materials. Arc Flash temperatures can also liquefy or vaporize metal parts in the vicinity of the event such as copper, aluminum conductors or steel equipment parts. This material rapidly expands in volume as it changes state from a solid to vapor, resulting in explosive pressure and sound waves. The pressure wave can knock workers off balance or off ladders and even throw them across the room against walls or other equipment. The sound blast can cause eardrums to rupture resulting in temporary or permanent hearing loss. Molten metal can be sprayed by the blast throughout the vicinity. Solid metal debris and other loose objects, such as tools, can be turned into deadly projectiles by the explosion. The bright flash from the event can result in temporary or permanent blindness. All of these will most likely result in equipment damage as well as personnel injury, and possibly death.

Fire resistant clothing

Fabric has flame-resistant properties built into the fibers. (no chemical affects for flame) Fabric will never be affected by washing, abrasion, or exposure to heat. So you get a tougher, more durable fabric with a longer lifespan and, ultimately better value.

Flame Retardant Clothing

Fire retardant designed for treatment of fabrics. Fabric will be coated or mixed with fire retardant and forms carbon char, gas or flash when the treated fabric is exposed to fire. Once the carbon char is formed there will be minimal flame propagation, smoke evolution or afterglow. Fabric will be affected by washing or limited use.

Arc Flash Switching Suit

Hood and shield

- Hood covers the helmet inside.
- Green shade lens Anti-mist coated visor

Cloth

- High technology polyester material protects heat and flame.
- Fabric touch, neatly stitch, edge and zip covers provide better protection
- Sweat absorber and good ventilation.
- Anti-scratch.

ArcShield

- Wide view and Anti-mist coated on both sides. A Green shade helps to reduce the glare from arcing.

Gloves

- Weaving and knitting testing and meet standard of Switching Suit ATPV51ca/cm.
- Light weight

Other qualifications

- Set package: jacket, pants, gloves, and hood.
- Easy and comfortable to wear. Multi-Hazard Protection.
- Metal or static free material
- Anti-static: Class HRC4
- Heat resistant: 93.9% and arc flash: 51 Cal/ Cm2 (ATPV)
- Long life time



SUIT0056ZZZZ

CE EN 11612 , ASTM F1506
OSHA 1910 . NFPA 70E

Code	Description	UOM	Package
SUIT0056ZZZZ	Arch protective Suit	1 piece	1 piece

Apron



PVC Apron

- PVC material, tear resistant
- Prevention from chemicals and liquid splash
- PVC prevents penetration better than other materials

Code	Description	UOM	Package
SUIT0008BUZZZ	PVC Apron+	1 piece	1 piece



Plastic Apron

- Plastic apron
- Suitable for laundry and cleaning
- Light and comfortable

Code	Description	UOM	Package
SUIT0009ZZZZZ	Plastic Apron+	1 piece	1 piece



Denim Apron

- Denim material protects against dust and dirt
- Fabric touch
- Light and comfortable

Code	Description	UOM	Package
SUIT0010ZZZZZ	Denim Apron+	1 piece	1 piece



Polyester & Cotton Apron

- Polyester and cotton material protects against dust and dirt
- Fabric touch
- Light and comfortable

Code	Description	UOM	Package
SUIT0011BUZZZ	Toray Apron+	1 piece	1 piece



Coverall with Back reflective Band



Welding Coverall

- West point Fabric Several sizes available
- Buttons to adjust size
- Pockets for accessories

Code	Description	Size	Color	UOM	Package
SUIT0024	Welding coverall +	S-5L	Dark Blue/Orange	1 piece	1 piece

Coverall with Back Reflective Band

- Jumpsuit style
- Cotton material
- 2 inch reflective tape at the back
- Various colours and sizes available

Code	Description	Color	Size	UOM	Package
SUIT0026	Coverall +	Dark Blue/Orange	S -4L	1 piece	1 piece



Coverall with long zip

- Jumpsuit style
- Cotton material
- Easy to wear with long zip at front
- Various colours and sizes available

Code	Description	Color	Size	UOM	Package
SUIT0048	Coverall/Zip +	Dark Blue/Orange	S - 4L	1 piece	1 piece



Welding Suit

Welding Split Leather Suit



- Leather split material, durable
- Heat resistant from welding
- Protects against arc flash from welding
- Length 44 inches.
- Pockets at front
- Free size

Code	Description	Size	UOM	Package
SUIT0003ZZZZZ	Welding suit+	Free Size	1 piece	1 piece

Cow Split Leather Arm Sleeves



- Leather split, durable
- Heat resistant from welding
- Protects against arc flash from welding
- Length 19 inches
- Fully adjustable

Code	Description	Size	UOM	Package
SUIT0031ZZZZZ	Cow split sleeve +	19 inches	1 pair	1 pair

Arm Sleeves



Polyester & Cotton Arm Sleeves

- Tetoron Fabric
- Thick and durable
- Light, comfort and active
- Elastic at the both ends

Code	Description	Color	UOM	Package
SUIT0040ZZZZZ	Tetoron sleeves+	Blue	1 pair	1 pair



Denim Arm Sleeves

- Denim material, protect against dust and dirt
- Fabric touch
- Light and comfortable
- Length: 20.5 inches
- Elastic at the both ends

Code	Description	Size	UOM	Package
SUIT0035ZZZZZ	Denim Sleeve+	19 in.	1 pair	1 pair



Safety First Cotton Armband

- Cotton materials
- Fabric touch
- Length: 8 inches

Code	Description	Size	UOM	Package
SUIT0036GRZZZ	Safety armband / Green+	8 in.	1 piece	1 piece
SUIT0036WHZZZ	Safety armband / White+	8 in.	1 piece	1 piece



Raincoat



Raincoat (Light duty)

- Lightweight PVC raincoat
- Coat covers knees
- Hood adjustment cord
- Buttoned front

Code	Description	Color	UOM	Package
SUIT0016ZZZZZ	Raincoat (Slim)+	Orange	1 piece	1 piece



Raincoat (Heavy duty)

- Thick PVC raincoat
- Coat covers the knees
- Hood and adjustment cord
- Ventilation holes
- Reflective stripe at the back
- Double button steps: zip and button

Code	Description	Color	UOM	Package
SUIT0017ZZZZZ	Raincoat (Thick)+	Orange	1 piece	1 piece



Two-Pieces Rain Suit (Light duty)

- Thick PVC raincoat
- 2 piece: Jacket and pants
- Hood adjustment cord
- Ventilation holes
- Reflective stripe at the back
- Double security with zip & button front

Code	Description	Color	UOM	Package
SUIT0018ZZZZZ	Two-Pieces Rain Suit (Thick)+	Orange	1 piece	1 piece



Two-Pieces Rain Suit (Heavy duty)

- PVC raincoat
- 2 pieces: Jacket and pants
- Hood adjustment cord
- Reflective stripe at the back
- Double security with zip & button front

Code	Description	Color	UOM	Package
SUIT0019ZZZZZ	Two-Pieces Rain suit (Slim)+	Orange	1 piece	1 piece



Two-Piece Rain Suit

- Polyester Taffeta fabric
- 2 piece: Jacket and pants
- Good quality seams
- Hood adjustment cord and 2 front pockets
- Reflective stripe at the back

Code	Description	Color	UOM	Package
SUIT0053ZZZZZ	Two-Pieces Rain Suit #314+	Dark Blue	1 piece	1 piece



Chemical Protective Suit (Two-Piece)

- PVE/PE materials, prevent penetration of mild chemicals: Acid,alkaline and oil
- 2 piece: Jacket and pants, provide comfort

Code	Description	Color	Size	UOM	Package
SUIT0020ZZZZL	Chemical Protective Suit #L+	Yellow	L	1 piece	1 piece

Lifting Laws and Regulations

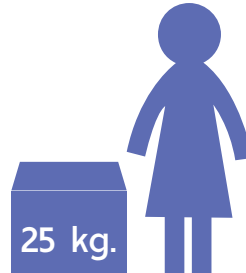
In 2006 - 2008 th Thai Government issued regulations relating to metrial handling. It set the maximum weight limit that an employee can lifet, without machanical assistance. Please see the pictograms below.



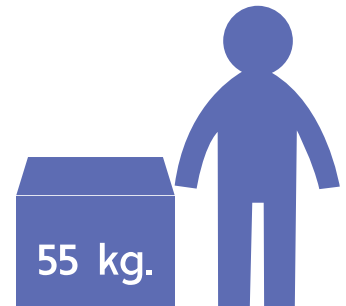
20 kgs For the female employee, aged 15-18 years



25 kgs. For the male employee, aged 15-18 years



25 kgs. For the female employee

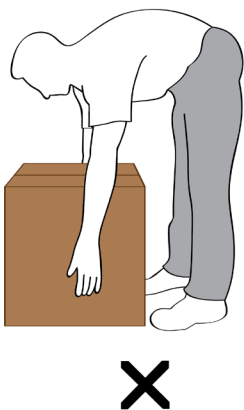


55 kgs. For the male employee

In the event that a load exceeds the limits a bove , the employee must provide facilities and equipment suitable for ensuring employee safety.

Moving Loads Safety

Moving loads from place to place may appear easy. However, each year many people are injured through poor moving practices. To solve this problem each employee should adopt safe moving practices as outlined below



1. Stand close to the package and place the feet to achieve good balance
2. Kneel down with the back straight to evenly spread the pressure on the backbone
3. Take hold of the package with the palms of the hand and not just fingers
4. Keep both arms and the package close to the body to spread the weight through the legs
5. While keeping the head vertical to the backbone, lift slowly by using the power of the leg muscles
6. If in doubt, do not attempt to lift the package and seek advice from the OH&S supervisor



HRNB0003



HRNB0009



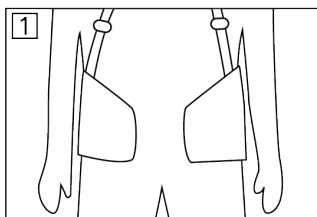
HRNB0012

Back Support

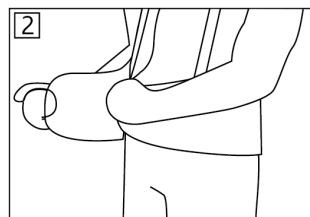
- Made of high quality elastic, light weight, good ventilation.
- Flexible with polycarbonate poles
- Adjustable belt for wearer comfort
- Adjustable shoulder straps
- Supports the lower backbone and abdomen

Code	Description	Size	Color	UOM	Package
HRNB0003	Back Support: 1 strap +	S, M, L, XL, XXL	Black	1 piece	1 piece
HRNB0009	Back Support: 2 straps+	S, M, L, XL, XXL	Black	1 piece	1 piece
HRNB0012	Back Support: 2 straps #10"+	S, M, L, XL, XXL	Black	1 piece	1 piece

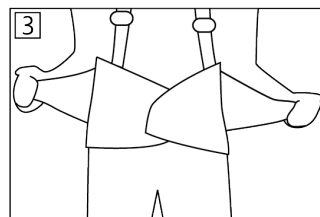
How to Wear Back Support



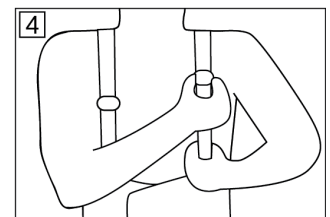
1. Put on the strap over the shoulders



2. Adjust the size by release the flaps from the Velcro and park it at another side of the belt.



3. Wrap the belt around to the front. Make sure you belt is not too tight.



4. Adjust the suspenders

SIZE	FOR WAIST		FOR HIP	
	inch	cm.	inch	cm.
S	20 – 26	50.8 – 66.0	24 – 30	61.0 – 76.2
M	26 – 32	66.0 – 81.3	30 – 36	76.2 – 91.4
L	32 – 38	81.3 – 96.5	36 – 42	91.4 – 106.7
XL	38 – 44	96.5 – 111.8	42 – 48	106.7 – 122.0
XXL	44 – 60	111.8 – 126.0	48 – 54	122.0 – 137.0

Maintenance

1. Hand cleaning only with soap. Don't leave in water.
2. Warm water, not over 45°C
3. Do not use Chemical detergent or Dry Clean
4. Rubbing at the dirty point and do not twist the belt
5. Dry out in the shade