

# Dromex



## DW-ARC 9.6 CAL SHIRT



### Description

Dromex A.P.T™ (Arc Protective Technologies) product range is designed to protect the user from the hazards of heat and to reduce total burn injury when working in environments exposed to electric arc hazards.

The Dromex A.P.T™ 9.6 cal/cm<sup>2</sup> attire is suitable for use in category 1 and 2 ARC related hazards.

This attire consists of the following:

- Flame retardant reflective tape on shoulders for enhanced visibility when working in poor lighting environments.
- Placket and flap closures designed for ease of putting on and taking off with flame-retardant melamine buttons.
- Seams with triple needle top stitching.
- Two breast pockets with a mitred flap and button closure.
- Sleeve cuffs with flame retardant melamine buttons.
- ATPV 9.6 cal/cm<sup>2</sup> embroidery for garment suitability identification.

These garments are commonly used in the following industries:

- Automotive
- Construction
- Mining
- Petroleum
- Utilities
- Data centres
- High volume manufacturing

Dromex A.T.P™ fabrics are self-extinguishing, heat resistant and resistant to ignition.

### Special Instructions

None of the materials or processes used in the manufacture of these products are known to be harmful to the wearer.

The manufacturer has examined under the system for ensuring quality of production by means of monitoring and inspection.

These Arc flash suits are designed to accommodate the basic safety requirements and standards for Personal Protective Equipment.

The information contained herein is intended to assist the wearer in the selection of personal protective equipment.

Actual conditions of use cannot be directly simulated in a test environment therefore it is the responsibility of the end user and not the manufacturer or supplier to determine the arc flash suitability for the intended use.

Arc flash protective suits should be thoroughly inspected before use to ensure no damage is present.

### Specifications

|                     |   |
|---------------------|---|
| Style:              | Sky blue long sleeve collared shirt with reflective tape on sleeves   |
| Fabric composition: | 88% COTTON 12% NYLON  |
| Mass:               | 237 GSM   |
| Reflective:         | 50mm  |
| Additional:         | Arc protective shirts and visors must be worn with other arc protective attire and equipment to ensure complete protection against the hazards of arc flash.<br>Refer to table "Arc Flash PPE Categories for further compatible ppe". |

### Packaging

DW-ARC9,6 is packed in a polybag and sold individually.

### Sizes Available

Small - 3XL.

### Compliance & Conformity

- Complies to marking SANS 724, Personal protective equipment and protective clothing against the thermal hazards of an electric arc.
- IEC 61482-1-1 - Live working - Protective clothing against the thermal hazards of an electric arc - Open Arc Test Method. It determines the Arc Thermal Protection Value (ATPV level) of the garment. The basic principle is that the ATPV of the garment must be higher than the Arc Flash energy.
- IEC 61482-1-2, Live working - Protective clothing against the thermal hazards of an electric arc - Box Test Method. It determines the Arc Protection Class Rating of the material or garment by using a constrained and directed arc:
- EN 61482-1-2:2014 - LIVE WORKING - PROTECTIVE CLOTHING AGAINST THE THERMAL HAZARDS OF AN ELECTRIC ARC - PART 1-2: TEST METHODS - METHOD 2: DETERMINATION OF ARC PROTECTION CLASS OF MATERIAL AND CLOTHING BY USING A CONSTRAINED AND DIRECTED ARC (BOX TEST) (IEC 61482-1-2:2014).
- NFPA 2112 - Standard on flame resistant clothing for protection of industrial personnel against short duration thermal exposures from fire.
- ASTM F1959, Standard Test Method for Determining the Arc Rating of Materials for Clothing.
- ASTM F2621-12, Standard Practice for Determining Response Characteristics and Design Integrity of Arc Rated Finished Products in an Electric Arc Exposure.
- EN 11611:2015, Protective clothing for use in welding and allied processes.
- EN 11612:2015 Protective clothing -- Clothing to protect against heat and flame -- Minimum performance requirements.
- ASTM F2178-12 -Standard Test Method for Determining the Arc Rating and Standard Specification for Eye or Face Protective Products.

### Cleaning & Maintenance

For electric arc exposures, wear the correct number of flame resistant clothing layers as dictated by an electric arc hazard analyst. In potentially explosive environments, proper grounding procedures must be used for protection against electrostatic spark ignition. Do not put on or remove garments when in a potentially explosive environment.

Garments of Dromex A.P.T™ brand fibre can be cleaned by home or commercial laundry or by dry cleaning procedures without loss of their inherent protective features.

The following suggestions will help keep your garment looking neat, attractive and safe. Should home procedures not remove contaminants, commercial laundering or dry-cleaning is recommended:

- Launder garments of Dromex A.P.T™ separate from personal non-flame resistant clothing to help avoid contamination by flammable materials. Pre treat greasy stains and collar/cuff lines.
- Wash garments in hot water with heavy duty detergent.
- Do not overload home laundry equipment.
- Do not use chlorine bleach or detergents containing chlorine bleach.
- Chlorine bleach may cause fading and reduce fabric strength.
- Tumble dry garments at a low setting. Use the cool down cycle if available.
- Remove and hang garments as soon as tumbler stops.
- Do not hang in direct sun.
- Sunlight can cause fading and reduce fabric strength.


When using commercial laundry aids, be sure to read and carefully follow the manufacture's instructions.

## Disposal

All industrial waste should be disposed of correctly according to local regulations and good disposal practice. Workwear should be disposed of considering the hazardous substances they were used for as well as the material they are made up of. Please consider recycling.

## Marking

### TYVEK ATPV LOOP FOLD CARE LABEL



**ATPV 9.6 cal/cm<sup>2</sup>**  
This garment is made of **Dromex A.P.T™** (Arc Protective Technologies) and is a trademark of Dromex. Manufactured by Dromex P.O. Box 2005, New Germany, 3620 Tel: 031 713 1960, Fax: 031 705 6508 The purpose of this garment is to protect against the thermal hazards created by an Arc Flash.

This garment is not suitable for fire fighting or any other exposures where flame is of a continuous nature.

Flammable contaminants will reduce the thermal protection of any flame-resistant garment. Wash the garment frequently to ensure that no greasy, oil soils and other flammable contaminants are present when the garment is worn. Repairs to the garment must be made with flame resistant components.

**RECOMMENDATIONS**

To maximise protection, garments should be:

- Loose fitting.
- Worn with flame resistant undergarments.
- Only made of cotton, silk or wool.

To maximise comfort:

- Try on garments to check for correct fit before washing.
- Wash new garments before wearing to remove fabric processing aids or finishes.

For electric ARC exposure, wear the correct number of flame resistant clothing layers as dictated by an electric arc hazard analyst.

In potentially explosive environments, proper grounding procedures must be used for protection against electrostatic spark ignition. Do not put on or remove garments when in a potentially explosive environment.

Garments of Dromex A.P.T™ brand fibre can be cleaned by home or commercial laundry or by dry cleaning procedures without affecting the lifespan of the garment or its protective features. The following suggestions will help keep your garment looking neat, attractive and safe. If home procedures do not remove contaminants, commercial laundering or dry cleaning is recommended.

Launder garments of Dromex A.P.T™ separate from personal non-flame resistant clothing to help avoid contamination by flammable materials. Pre-treat greasy stains and collar/cuff lines.

Wash Garments in hot water with a heavy duty detergent. Do not overload home laundry equipment.

Do not use chlorine bleach or detergents containing chlorine bleach as it may cause fading and reduce fabric strength.

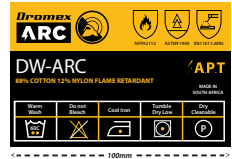
Tumble dry garments at a low setting. Use the cool down cycle if available. Remove and hang garments as soon as tumble dryer stops. Do not hang in direct sunlight as it can cause fading and reduce fabric strength.

When using commercial laundry aids, be sure to read and carefully follow the manufacturer's instructions.

170mm

Position:  
Shirt - Side seam (Above hem)

### MAIN LABEL



Position:  
Shirt - Neck (Inside)

### POCKET SIDEWINDER LABEL



Position:  
Shirt - Left chest pocket

### EMBROIDERY (WHITE THREAD)



Position:  
Shirt - Above pocket  
-Right hand side of chest

### ORIGIN & YOM LABEL



Position:  
Shirt - Neck (Inside)

### SIZE LABEL



Position:  
• Shirt - Neck (Inside)

## Arc Flash PPE Categories

| Hazard/ Risk Category | Recommended clothing used at this level  | Required minimum ATPV (Cal/cm <sup>2</sup> ) as per EN | Workwear  | Other PPE   |
|-----------------------|--|--|---|---|
| HRC 1                 | FR shirt (T-shirt Short sleeve worn inside Long sleeve shirt) and FR pants; or coveralls; (Single base layer of FR protection)   | 4  | <br><br><br><br> | <br><br><br><br>       |
| HRC 2                 | FR under garments (undershirt, underwear), FR shirt and FR pants; or FR coveralls; (2 or more layers of FR protection)           | 8  | <br>  | <br><br><br><br> |
| HRC 3                 | FR under garments (undershirt, underwear), FR shirt, FR jacket, FR pants or FR coveralls; (2 -3 or more layers of FR protection) | 25   | <br>  | <br><br><br><br> |
| HRC 4                 | (Undershirt, underwear), FR shirt, FR jacket/coat, FR pants or FR coveralls; (3-4 or more layers of FR protection)               | 40   |    | <br>  |