

# Dromex



## D59 FLAME & ACID JACKET AND PANTS



### Description

Dromex® D59 flame and acid treated jacket and pants are designed to protect the user from the hazards of accidental flame contact and acid splashes reducing injury and loss of life when working in hazardous environments.

The Dromex® DW-D59FA pants and jacket is approved to the latest SAN 434 specification and has the SABS permit marking.

The D59 drill fabric construction is heavy duty and durable whilst the flame acid garment treatment technology resists the effects of flame contact and acid corrosion offering the user much-needed protection in the workplace.

The 100% cotton satin weave finish, natural fibre construction makes this garment comfortable and breathable.



This garment consists of the following:

#### Jacket features:

- Collared jacket with internal hanger loop.
- High visibility flame retardant reflective tape on arms for enhanced visibility when working in poor lighting environments.
- Concealed brass YKK zip closure.
- 2 Open waist pockets and 1 left breast pocket with a mitred flap and concealed metal press stud closures.
- Side slits for better fit over waist.
- Elasticated sleeve cuffs prevents the risk of loose clothing caught in machinery.
- Seams with triple needle topstitching for added durability.
- Flame retardant and acid resistant embroidery on arm for garment identification.

#### Pants features:

- All seams with triple needle topstitching for durability.
- Flame retardant reflective tape on leg for enhanced visibility when working in poor lighting environments.
- A concealed brass YKK zip and with metal nickel button closure at waist.
- Two fronts swing pockets and a rear mitred open pocket.
- A tool pocket on the right leg.
- A high visibility Dromex® sidewinder label.
- Inner elasticated waist for optimum fit and flexibility with 7 belt loops.

This garment is suitable for use in general work environments such as engineering, smelting operations, mining, construction, oil and gas, petroleum, maintenance, repairs and welding industries.

#### 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 flame and acid garments 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 garment suitability for the intended use.

Flame and acid protective garments should be thoroughly inspected before use to ensure no damage is present.

#### Specifications

Style:	Navy blue pants and jacket with high visibility reflective tape on arms and legs.
Fabric composition:	100% Cotton.
Mass:	320gsm.
Reflective:	50mm Silver flame retardant tape.
Additional:	Also available in a Boilersuit style, Dromex® part number DW-D59FA-0.

#### Compliance & Conformity

- Garments comply to the latest SANS 434 standard (This standard specifies requirements for the material, cut, make and trim of boiler suits, two-piece work wear suits, bib and brace overalls, coats and unlined jackets).

#### This standard makes reference to the following relevant standards:

SANS 1362	Sewing threads.
SANS 1387-4	Part 4: Cotton jean and drill fabrics.
SANS 1387-10	Part 10: Pocketing.
SANS 1822	Slide fasteners.
SANS 5278	Sewing stitches per unit length.
SANS 10235	Fibre-content labelling of textiles and textile products.
SANS 50471	High-visibility warning clothing for professional use.

- The fabric is to SANS 1387-4 for D59 drill fabric, 4/1 satin weave @270gsm, 37 thread per cm weft and 19 threads per cm warp. The breaking strength is 940 N warp and 510 N weft.

#### • Flame retardant fabric is tested to SANS 1423-1 for textile fabrics of low flammability for apparel:

##### Class B Category 1:

The fabric ignites within a given time period and might continue to flame but at a rate of flame propagation that is within a specified limit. Surface Flash None.

Ignition time (seconds) \_ 20 sec.

Rate of flame propagation 5 mm/s.

\*\* Note this is a test situation for the fabric and does not cancel or imply otherwise to the labels wash instruction.

#### • Flame retardant silver retro-reflective tape is tested to SANS 50471:2006 (EN 471:2003 + A1:2008) and SANS 1423-1:2008 for textile fabrics of low flammability for apparel:

High visibility warning protective clothing capable of signalling the users presence visually, intended to provide conspicuity of the user in hazardous situations under any light conditions by day and under illumination by vehicle headlights in the dark. Performance requirements are included for retro-reflection and not for the entire garment.

#### • Acid resistant fabric is tested to ISO 6530:2005 for protection against liquid chemicals:

Two levels of the potential performance are assessed by this method of testing to meet with possible requirements for protection against:

- a) Deposition on the surface of a material, at minimal pressure, of spray droplets up to coalescence or occasional small drips.
- b) Contamination by a single low-volume splash or low-pressure jet allowing sufficient time to divest the clothing or take other action as necessary to eliminate any hazard to the wearer from chemical retained by the protective garment or in circumstances where pressure is applied to liquid contaminants on the surface of the clothing material, as a result of natural of the wearer (flexing of contaminated areas of clothing at arms, knees, shoulders) and contact with contaminated surfaces (e.g. walking through sprayed foliage).

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Acid resistance for protective clothing against liquid chemicals for performance requirements for chemical protective clothing offering limited protective performance against liquid chemicals. The acid resistant finish is primarily a liquid proof coating that is not destroyed by the action of acids or other chemicals. It doesn't allow the cloth to be wetted by the acids and is therefore "acid resistant":

The test chemicals are:

- Hydrochloric Acid (HCl) 32%
- Sulphuric Acid (H<sub>2</sub>SO<sub>4</sub>) 24%
- Nitric Acid (HNO<sub>3</sub>) 65%
- Sodium Hydroxide (NaOH) 40%

There is no SANS specification for Acid Resistance therefore alternate testing is done in the absence of a national standard. The tests are done to the ISO 6530:2005 and the chemical selection and concentration to the withdrawn DIN32763 standard.

### Packaging, Storage & Obsolescence

Dromex® DW-D59FA-J - jackets are packed in individual polybags and sold as 10 units per carton.

Dromex® DW-D59FA-P - pants are packed in individual polybags and sold as 10 units per carton.

Should there be visible damage such as tears or burn holes, it is recommended to replace the garment immediately.

### Cleaning & Maintenance

- The following suggestions will help keep your garment safe and neat:
- D59 garments can be cleaned by home cleaning or commercial laundering provided all the recommended conditions and setting are adhered to.
- Should home procedures not remove contaminants, then dry cleaning is recommended.
- Our recommended cleaning for these garments is as follows:
  - Flame Retardant garments should not be washed with personal non-flame retardant clothing to avoid contamination by flammable materials.
    - Pre-treat greasy stains and wash the garment in warm water with a light cleaning solvent.
    - Do not use Hypochlorite bleach or detergents containing Hypochlorite bleach.
    - Chlorine bleach may cause fading and reduce fabric strength.
    - Do not overload home laundry equipment.
    - Do not tumble dry garments.
    - Thoroughly rinse the garment to remove any wetting agents.
    - Do not hang in direct sun.
    - Sunlight can cause fading and reduce fabric strength.
    - Iron the garment to enhance and re-generate the finish effect
    - When using commercial laundry aids, be sure to read and carefully follow the manufacturer's instructions.



• Note:

The flame-retardant finish is a permanent finish applied to the cotton fabric which reacts with the cotton fibre to produce a permanent covalent bond.

This is used internationally to produce a wash fast flame-retardant finish that lasts at least 50 washes.

Acid resistant garments when wetted with an acid and is allowed to dry or stand in it's wetted state for a long period will destroy the fabric and holes will become visible as after each wash the holes would fray wider.

- Should acids wet the garment, it should be washed and neutralised as soon as practically possible.
- The chemical used in the acid finish is a Fluorocarbon and is permanent therefore should not lose its effect after 50 washes.

### Sizes Available

Jacket: 28-68

Size designation	Nominal measurements of finished garment (cm)			
	Chest circumference	Back length <sup>b</sup>	Back width	Sleeve length
77	94	70	36	47
82	99	71	38	47
87	104	72	40	48
92	109	73	42	48
97	114	74	44	49
102	119	74,5	46	49
107	124	75	48	50
112	129	75,5	50	50
117	134	76	52	51
122	139	76,5	54	51
127	144	77	56	52
132	149	77,5	58	52
137	154	78	60	53
142	159	78,5	62	53
147	164	79	64	54
152	169	79,5	66	54
157	174	80	68	54

Pants: 24-64

Size designation	Nominal measurements of finished garment (cm)		
	Waist extended	Outside leg length	Inside leg length
77/67	80	102	78
82/72	85	104	79
87/77	90	106	80
92/82	95	108	81
97/87	100	110	82
102/92	105	110	82
107/97	110	111	82
112/102	115	111	82
117/107	120	111	81
122/112	125	111	81
127/117	130	111	80
132/122	135	111	80
137/127	140	112	80
142/132	145	112	80
147/137	150	113	80
152/142	155	113	80
157/147	160	113	80

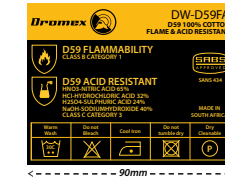
### Disposal

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

### Marking

DROMEX

EMBROIDERY FR & RESISTANT



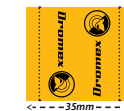
- Position:
- Jacket-Neck (Inside)
  - Pants-Left pocket (Inside)

SIZE



- Position:
- Jacket-Neck
  - Pants-Inside (left pocket-next to main label)

SIDEWINDER



- Position:
- Jacket-Top pocket
  - Pants-Back (Right pocket)

PRODUCT STANDARD

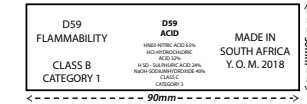


SANS 1387-4, SANS 1423-1, SANS 434 ISO6530: 2005



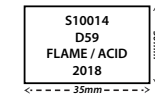
- Position:
- Jacket - Right arm (Centre of panel)
  - Pants - Front (Right leg)

INFORMATION LABEL



- Position:
- Jacket-Neck (Below main label)
  - Pants-Inside (left pocket-below main label)

PRODUCT & YOM LABEL



- Position:
- Jacket-Neck(Next to main label)
  - Pants-Inside (left pocket-Next to main label)