

# Dromex



## D59 FLAME & ACID BOILERSUIT



DW-D59FA-O

### Description

Dromex® D59 flame and acid boilersuit is designed to protect the user from the hazards of accidental flame contact and acid splashes, reducing injury when working in hazardous environments.

The Dromex DW-D59FA-O boilersuit is approved to the latest SANS 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 essential protection in the workplace.

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

This garment consists of the following:

- Collared boilersuit with button closure and internal hanger loop.
- High visibility flame retardant reflective tape on arms and legs for enhanced visibility when working in poor lighting environments.

- Concealed 2-way chunky zip with concealed plastic press stud closure (above zip).
- 2 Open waist pockets, 1 open rear pocket and 2 breast pockets with V flap and concealed plastic press stud closures. Left chest pocket with Dromex® sidewinder label.
- A tool pocket on the right leg.
- Inner elasticated waist for optimum fit and flexibility.
- Elasticated sleeve cuffs prevent the risk of loose clothing caught in machinery.
- Seams are triple needled with top stitching for added durability.
- Flame retardant and acid resistant embroidery on arm and leg for garment identification.
- A high visibility Dromex sidewinder label.

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.

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

### Specifications

Style:	Navy blue, boilersuit 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 2 piece pants and jacket style, Dromex part number DW-D59FA



### 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 workwear 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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Latest update: 11/11/2021

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%

#### CLASS C CATEGORY 3

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 DIN 32763 standard.

#### Packaging, Storage & Obsolescence

DW-D59FA-O: Sizes 28 - 48 are packed in individual polybags and sold as 15 units.  
 Sizes 50 - 64 are packed in individual polybags and sold as 10 units.

#### 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 as fading may occur.
  - Do not tumble dry.
  - Thoroughly rinse the garment to remove any wetting agents.
  - Do not hang in direct sunlight as fading may occur.
  - 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.

#### WARNING:

Acid resistant garments when wetted with an acid and allowed to dry or stand in its wetted state for a long period will destroy the fabric and holes will become visible and widen after each wash.

- Should acids wet the garment, it should be neutralised and washed 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.

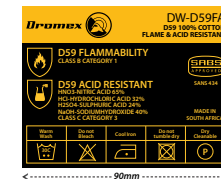
#### Sizes Available

28-64

Size designation	Nominal measurements of finished garment (cm)											Back Width
	Circumference of					Length of					Set-in sleeves and raglan sleeves	
	Chest	Waist (Extended)	Seat	Plain & Runched Cluff (Extended)	Bottoms	Back Neck to Waist	Outside Leg	Inside Leg	Long Sleeve	Short Sleeve		
<b>XS</b>	30/77	94	80	92	27	42	48	102	78	47	13	36
<b>S</b>	32/82	99	85	97	27	44	49	104	79	47	13	38
	34/87	104	90	102	27	46	50	106	80	48	13	40
<b>M</b>	36/92	109	95	107	28	48	51	108	81	48	14	42
	38/97	114	100	112	28	50	52	110	82	49	14	44
<b>L</b>	40/102	119	105	117	28	50	53	110	82	49	14	46
	42/107	124	110	122	29	50	54	111	82	50	15	48
<b>XL</b>	44/112	129	115	127	29	50	55	111	82	50	15	48
	46/117	134	120	132	29	51	56	111	81	51	15	52
<b>2XL</b>	48/122	139	125	137	30	51	57	111	81	51	16	54
	50/127	144	130	142	30	51	57	111	80	52	16	56
<b>3XL</b>	52/132	149	135	147	30	51	57	111	80	52	16	58
	54/137	154	140	152	31	52	57	112	80	53	17	60
<b>4XL</b>	56/142	159	145	157	31	52	58	112	80	53	17	62
	58/147	164	150	162	31	52	58	113	80	54	17	64
<b>5XL</b>	60/152	169	155	167	32	52	58	113	80	54	18	66
	62/157	174	160	172	32	52	58	113	80	54	18	68
<b>6XL</b>	64/162	179	165	177	33	52	59	114	80	54	18	69.5
	66/167	184	170	182	33	52	59	114	80	54	18	71

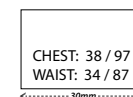
#### Marking

DROMEX



Position:  
Boilersuit-Neck (inside)

SIZE



Position:  
Boilersuit - Neck

PRODUCT STANDARD



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

SIDEWINDER



Position:  
Boilersuit - Top pocket

#### Disposal

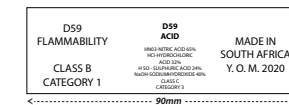
All industrial waste should be disposed of correctly according to local regulations and good disposal practice. Please consider recycling.

FR & ACID RESISTANT EMBROIDERY



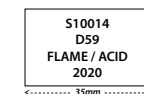
Position:  
Boilersuit-Right arm

INFORMATION LABEL



Position:  
Boilersuit - Neck

PRODUCT & YOM LABEL



Position:  
Boilersuit - Neck

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