



D59 SABS FLAME & ACID JACKET & TROUSERS



JACKET CODE: 90/030/NV (SIZES 28 - 64) **TROUSERS CODE:** 90/060/NV (SIZES 26 - 60)

SANS 1423-1
SANS 1387-4
SANS 434
SANS 1362

Fabric Locally Produced In South Africa (Da Gama)
Proudly Made in South Africa



- Warm wash
- Do not use bleach
- Do not tumble dry
- Cool iron
- Dry cleanable

The Vulcan Workwear D59 Flame Acid garment is designed to protect the user from unintentional contact with flame and acid splashes. These are SABS approved garments licensed under SANS 434 schedule 1 for the Vulcan brand.

The D59 fabric is woven and sourced locally in South Africa from Da Gama textiles which is a proudly South African product. Our garments are also made in South Africa.



Test Chemicals

Hydrochloric Acid (HCl) 32%
 Sulphuric Acid (H₂SO₄) 24%
 Nitric Acid (HNO₃) 65%
 Sodium Hydroxide (NaOH) 40%

Fabric Composition & Standards

- D59 Cotton Drill
- 320gsm mass

Da Gama's W8 Finish and the combination between the W4 & W7 Finishes

The finish performs to the German DIN test 4846 where drops of concentrated acids (diluted 1 to 1 with water) – Hydrochloric, Sulphuric and Nitric are placed on the cloth and there is no absorption of these drops after 3 hours for Hydrochloric and Sulphuric and 1 hour for Nitric. The finish also performs in its "Resistance to Penetration of Fabrics to Chemical Substances" using the Test Method under the Guideline of DIN 32763. In this test Acids or Alkaline solutions are poured into a cone of fabric and there should be no penetration of the fabric within 10 mins. The Chemicals used in this test are 24% Sulphuric Acid; 65% Nitric Acid; 32% Hydrochloric Acid and 40% Caustic Soda.

The Da Gama Laboratory tests the fabric according to the German Din 32763 on each production run for the Chemical Resistance and furthermore samples are sent of each disposition to a external Testing Laboratory for independent re-assessment. The chemical used in this finish is a Fluorocarbon and is permanent, it should not lose it's effect after as many washes (50 washes is normally the level to which the is finish is promoted), however the washing procedure must include a thorough rinsing to remove any wettingagents followed by a hot ironing to regenerate the finish effect.

The Flame Retardant Finish W7 is a chemical finish applicable to 100% Cotton fabrics. 50 washes is normally the level to which the finish promoted depending on application, use and wash care. The fabric meets the requirements of the SANS 1423 Part I test where, when a flame is applied to the fabric for 20 secs there must be no afterflame of afterglow when the flame is removed, the performance must be maintained after 5 washes at 95°C.

The chemicals are produced by Thor (Actichem being their local subsidiary) and each batch of fabric is tested by Actichem to the requirements of SANS 1423 Part I. Internally each piece of each batch is tested for flame retardancy using a quick but severe test, no fabric leaves the factory without it being certificated by Actichem. The chemical finish has a negative effect on fabric strength, it is therefore not applicable to lightweight fabrics, it is best applied to heavy weights such as CS59 (D59).