



Mining And Surface Certification (Pty) Ltd



MASC Report No: 26-4548
Page 1 of 4

Test Report Ref. No:	26-4548	
This report was written by:	H Cronje Technical Officer	Signed: 
This report was verified by:	H De Wet Technical Specialist	Signed: 
Date of issue:	08 June 2026	
SANAS Test Lab	Mining and Surface Certification (Pty) Ltd (Not an ACB under the IECEx scheme)	
Address:	Unit #5, 45 Jurg Avenue, Lelyta Park, Centurion, South Africa	
Clients name:	Bosworth a DIV of Hudaco Trading (Pty) Ltd.	
Address:	21 Vereeniging Road, Alrode, 1451 Gauteng, South Africa.	
Standards:	SANS 1520-1 (2022) Edition 2.1 "Flexible electric trailing cables for use in mines Part 1: Cables with operating voltages of 640/1 100 V and 1 900/3 300 V	

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Test item description: Flexible Cable Joint



Model/type reference: Flexible Cable Joint

/I. Manufacturer...

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Manufacturer:	Flexible Cable Joint
Address:	21 Vereeniging Road, Alrode, 1451 Gauteng, South Africa.

MARKING:

Manufacturer: Bosworth a DIV of Hudaco Trading (Pty) Ltd.
Type: Flexible Cable Joint
Serial Number: (See "Conditions of Certification")

1. DESCRIPTION

This two-part polyurethane resin is specially formulated for durable and reliable electrical cable jointing applications. Packaged in a convenient, sealed foil pack, it ensures easy mixing, fast curing, and consistent performance across various environments.

Key Features

- **Heavy Duty:** Designed for demanding cable joint applications.
- **Fast Curing Time:** Begins to cure approximately 10 minutes after pouring @ +/- 20°C
- **Rapid Demolding:** Mould can be safely removed after 30-45 minutes @ +/- 20°C
- **Hardness:** 65–70 Shore A.
- **High Strength:** Strong, impact resistant, and abrasion resistant finish
- **Safe Formula:** Contains no harmful chemicals.
- **Color Options:** Available in Green, Yellow, and Red.
- **Application Ready Packaging:** Supplied in sealed foil packs for easy handling and long shelf life.

Shelf life & Storage

Store in a cool, dry place away from direct sunlight.
 Ideal storage temperature: 15–25°C.
 Shelf life: 12 months when unopened.

2. TEST METHODS AND RESULTS**Key Test Setup & Parameters**

- **Sample Preparation:** A single cable specimen of length (600 ± 25) mm is used.
- **Mounting Position:** The cable is mounted vertically and secured tightly in two horizontal supports (clamps).
- **Burner Angle & Position:** A burner is positioned at an angle of 45° ± 2° to the vertical axis of the cable. The inner blue cone of the flame hits the cable surface at (475 ± 5) mm below the lower edge of the upper support.
- **Test Duration:** The duration of flame application depends on the overall diameter of the cable under test:
 - Diameter ≤ 25 mm: 60 seconds
 - 25 mm < Diameter ≤ 50 mm: 120 seconds
 - Diameter > 50 mm: 120 seconds (with optional procedural adjustments)

Compliance & Passing Criteria

To successfully pass the test, the cable must meet the following conditions after the flame is removed and the burning ceases:

- **Self-Extinguishing:** The cable must self-extinguish on its own.
- **Fire Damage Limits:** The onset of charring or fire damage must stop at least 50 mm below the upper fixing clamp.
- **Damage Length:** The distance between the bottom start of charring and the top beginning of charring must not exceed 425 mm.

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3. CONDITIONS OF ASSEMENT

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- This report only covers the sample submitted and does not cover production units.

4. CONCLUSION

SANS 1520-1 (2022) Edition 2.1 “Flexible electric trailing cables for use in mines Part 1: Cables with operating voltages of 640/1 100 V and 1 900/3 300 V

From the above, the samples tested with the flammability characteristics complied to the requirements of SANS 1520.

Mining And Surface Certification

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