

Adhesives and Sealants S1081

INTRODUCTION

S1081 is a modified, self-amalgamating, non flame-retarded, polyolefin based harness tape. It has a continuous operating temperature of -80°C to +130°C and a self-amalgamating temperature of +120°C.

Colour	Black
Dimensions	Width – 20mm nominal Thickness – 0.64mm nominal
Packaging	10m roll interleaved with release paper
Specification	RK6019

TYPICAL APPLICATIONS

S1081 is used as a protective wrap on damaged cables and irregular shapes where it is not practical to install a heat shrinkable moulded part or tubing. When heat in excess of 120°C, the tape shrinks lengthwise and self-amalgamates, forming a tightly fitting, continuous cover.

INSTALLATION GUIDELINES

Tightly wrap the S1081 tape around the substrate using a 50% overlap. The free end of the tape may be secured by “tacking” with a soldering iron or hot air gun. The entire taped area should then be heated in excess of 120°C using a hot air gun, alternatively placed in an oven at 120°C for 15 minutes. This will cause the tape to amalgamate.

When used with cable jacketed in Raychem DR-25 or RNF-100 tubing's, S1081 will also bond to the substrate to give a total seal. For other substrates, we recommend that a brief adhesion test is carried out prior to installation. When necessary, S1030 Adhesive Tape may be placed at each end, under the layer of S1081, in order to seal more effectively.

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Characteristics		S1081 is a crosslinked, heat activated non-flame retarded polyolefin based harness tape.
	Colour	Black
	Continuous operating temperature	-80°C to +130°C
	Self amalgamating	+120°C
	Shelf life	Not applicable
	Flash point	Not volatile
	Dimensions	Width 20 ± 2mm Thickness 0.64 ± 0.24mm
Typical applications		This tape is used as a protective wrap on cables and awkward shapes where it is not possible to use heat-shrinkable tubing or moulded parts. The tape shrinks lengthwise to form a tight fit over the components, and self-amalgamate to form a continuous cover. It is suitable for low temperature applications.
Specifications		RK 6019
Packaging		Packed in rolls of 10m interleaved with release paper spooled and packaged and labelled with description, quantity and batch number. Note that ordering unit of measure for one 10m roll is one piece.

Test	Test Method	Specification requirement RK 6019	Typical value
Dimensions	-	20 ± 2mm, 0.64 ± 0.24mm	-
Longitudinal change	Clause 2.1	-5 to -25%	-5%
Tensile strength	ISO 37	10 MPA min	20 MPa
Ultimate elongation	ISO 37	350% min	550%
Self amalgamating	Clause 2.3	Bond time to remain unbroken when material failure occurs	Pass
Heat Shock	Clause 2.5 ISO 37	Visual 200% min	Pass 520%
Heat ageing	ISO 188/ISO 137	5 Mpa min/300% min	15 MPa/440%
Electric strength	IEC 243	20 Mv/m min	30 Mv/M
Fluid resistance	ISO 1817/ISO 37	5 MPa min/300% min	10 MPa/600%