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Rotunda 2515 and 2517 : EPR SELF-AMALGAMATING TAPES

<u>Description:</u>	Self-amalgamating tapes based on ethylene propylene rubber.
<u>Colour:</u>	Black
<u>Uses:</u>	<p>For jointing (splicing) and repair of a wide range of solid dielectric power cables up to 60 kV.</p> <p>The tapes have excellent physical and electrical properties.</p> <p>The temperature performance of the tapes in a joint will be compatible with the 90°C continuous, 130°C overload, rating of crosslinked polyethylene insulated cables.</p> <p>The thinner (0.5mm) 2515 tape helps a smooth void free build up of insulation to be achieved when the tapes are being used at the higher end of the above voltage range, however both tapes have identical compositions and electrical properties and providing care is taken to ensure a void free build up of tape either tape will provide satisfactory performance over the voltage range noted above.</p> <p>The 2515 tape is also suitable for use in joints up to 132 kV joints either alone or in combination with Rotunda 2513 EPR tape (0.3mm).</p> <p>In addition to its uses at high voltages, as noted above, the tapes are suitable for insulating and waterproofing electrical components and connections at lower voltages.</p>
<u>Main Features:</u>	<ul style="list-style-type: none">* Excellent physical and electrical properties.* Electrical properties highly stable under prolonged use on cables at conductor temperatures up to 130°C.* Compatible with a wide range of polymeric cable insulation materials including polyethylene, PVC, ethylene propylene rubber, crosslinked polyethylene and butyl rubbers and neoprene.* Tapes amalgamate rapidly when applied under tension to provide a void free homogenous insulation build up without the need for external heat or pressure.* Tapes are non tacky and easy to handle and apply.* Excellent resistance to prolonged immersion in water.* Ozone resistant* Compatible with most hot pouring compounds used in joint boxes at pouring temperatures up to 160°C.

Main Features:

- * Compatible with acrylic and epoxy resin systems.
- * Tapes remove cleanly from most surfaces when cut, allowing them to be used as temporary protection material.

Note: The tapes are not resistant to hydrocarbon type solvents, oils and greases. They should not be used where they may come into contact with transformer oils or the oils used in paper cable impregnants as these will cause softening of the tape.

Application:

Strip back the interleaving and stretch the tape to reduce its width by between one third and one half. Keep the tape under tension and wrap, overlapping successive layers by 50%, until the desired build-up of insulation is achieved. Finish the wrapping by holding the tape under thumb and snap by stretching. The high degree of stretch as described above will prevent the inclusion of voids and ensure rapid amalgamation.

Average Properties:

Test Method

Thickness:	2515: 0.50mm (0.020 inches) 2517: 0.75mm (0.030 inches)	
Tensile Strength:	3.0 MPa	BS 903 Part A2 1989
Elongation at Break:	800%	BS 903 Part A2 1989
Fusion and Tackiness:	Passes	ASTM D 1373:70
Water Absorption:	0.05% (24 hours)	ASTM D 570: 63
Corrosion Liability:	None	BS 3924: 78
Flammability:	Similar to that of Polyethylene	
Ozone Resistance:	Pass	ASTM D 1373:70
Dielectric Strength:	36 kV/mm (Short time method)	ASTM D 149: 64
Dielectric Constant:	2.8 (50 Hz)	ASTM D 150: 74
Power Factor (Tan):	0.006 (50 Hz)	ASTM D 150: 74
Volume Resistivity (20°C):	10 ¹⁵ ohm-cm	ASTM D 257: 75
Temperature Range:	-40°C to 90°C continuous. Up to 130°C for limited periods during overload conditions.	
Durability:	The life of the tape exposed out of doors in the UK is expected to be several years. In enclosed locations, such as cables, its life should be at least equal to that of the cable. Where the tape may be subjected to abrasion or exposure to weather an external covering of other Rotunda 2702, 2705 or 2731 black PVC adhesive tape is recommended.	

The properties given above are average values except where otherwise stated, and this information sheet should not be treated as a specification, not used for the purpose of writing specifications.

Storage:

The rolls of tape must be stored flat on their cut edges in the original packing, until required for use, and must be protected from dust, heat, moisture, direct sunlight, corrosive and solvent fumes. Under these conditions the storage life of the tape in a temperate climate will be not less than five years.

Product Testing:

Users are recommended to test the tape for its suitability in their particular application.

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