

Product: 15 Selffusing Insulation Tape

Product group: Cable Materials

General description

Nitto 15 is a self-fusing, butyl rubber tape, widely used for the electrical insulation, protection, sealing, splicing and termination of 6 to 22 kV cables.

Nitto has eliminated the conventional need for a liner thereby reducing the time required to apply the tape. Nitto 15 is available in 2 thicknesses: 0.5 mm and 0.75 mm.

Construction



Characteristics

Nitto 15 has an excellent volume resistivity, a high breakdown voltage and a low dissipation factor. It is totally resistant to moisture, water and chemicals.

Nitto 15 offers excellent electrical insulation, workability and weather protection.

The product has a superior weatherability and ozone resistance and because of the linerless system a very short application time. It completely self-amalgamates in two hours.

Application

Nitto 15 can be used for termination, splicing and corrosion protection of cables. Also insulation and protection of lead shielded cables is possible.

The product is used for its waterproof sealing and corrosion protection of cables in marine and off-shore environments.

Application temperature: min. -10 °C and max. 40 °C

Maximum service temperature: continuously 65 °C and short periods 100 °C Above 40 °C the tape begins to amalgamate to itself and can become difficult to unwind.

Features

- excellent volume resistivity
- high breakdown voltage
- low dissipation factor
- total resistance to moisture, water and chemicals
- superior weatherability and ozone resistance
- excellent workability
- completely self-amalgamating
- excellent electrical insulation

Properties

		Test method
Thickness	0.5 mm	ASTM D 1000
Tensile strength 23 °C	3.2 N/mm²	ASTM D 1373 (500mm/min)
Tensile strength 100 °C, 96 hrs	3.0 N/mm²	ASTM D 1373
100% Modulus 23 °C	1.3 N/mm²	ASTM D 1373
100% Modulus 100 °C, 96 hrs	1.3 N/mm²	ASTM D 1373
Elongation 23 °C	550%	ASTM D 1373
Elongation 100 °C, 96 hrs	570%	ASTM D 1373
Brittle point	-60 °C	
Breakdown voltage	44 kV/mm	
Volume resistivity	1 x 10exp15 ohm.cm	ASTM D 1373
Dielectric dissipation factor	0.04%	
Dielectric constant	2.6	ASTM D 150
Power factor (60 Hz)	0.05-0.08%	ASTM D 1373
Self-amalgamating property		
stretched 180%, 5 min	Not yet amalgamated	Nitto test method
stretched 180%, 60 min	Nearly amalgamated	
stretched 180%, 24 hrs	Completely amalgamated	
Ozone resistance (0.02%, 24 hrs)	Good	ASTM D 470
Crack test (30 min immersed in water 80 °C) No cracks		Nitto test method

^{*} Nitto 15 is also available in 0.75 mm thickness.

Availability

Thickness	Width*	Length	Rolls/carton	Rolls/layer	Rolls / pallet
0.5 mm	19 mm	5 m	100	1200	4800
0.5 mm	19 mm	10 m	100	1000	4000
0.5 mm	25 mm	10 m	100	1000	3000
0.5 mm	25 mm	66 m	40	240	960
0.5 mm	38 mm	10 m	50	350	1050
0.5 mm	50 mm	10 m	50	350	1050
0.75 mm	19 mm	5 m	100	1000	2000
0.75 mm	38 mm	5 m	50	500	1000

^{*} Other sizes are available on request.

If you require additional information on technical properties and application as well as product sampling or testing, please contact your local Nitto Europe sales office.

General conditions of use and precautions:

The properties of the product might be adversely affected by various elements such as composition, condition and surface of and impurities in or on the substrate, temperature and humidity during storage and the surrounding environment at and after application and time of exterior use.

When the product is used in combination with another material or process, the user shall assure the compatibility of the product in such combination and whether this combination results in the expected performance. The same principle applies in the event of product use in extreme conditions or circumstances, whether at or after the moment of application, including extended exposure to sunlight or extreme temperatures and pressure.

Packaging, transport and storage:

During transport and storage the product should always be protected against direct sunlight and extremes in temperature and humidity and contained in its original packaging. Once removed from its packaging, it should be promptly applied and remain shielded from direct sunlight and extreme temperature as well as protected against dust and other impurities.

Liability:

Except for its wilful misconduct, Nitto Europe's liability shall be limited to a replacement, a reimbursement or an additional delivery of the product, and shall not exceed the purchase price of the products. In no event shall Nitto be liable in respect of any indirect or consequential damages, including loss of profits.

The above limitations of liability shall equally apply if Nitto Europe has assisted in any manner with the selection, treatment or application of the product.

Product information:

This datasheet provides a general description of the product properties and application scope. Full technical details in connection with this product are presented in the customer product specification, which is available upon request.

Please be advised that the information reflected in this datasheet is subject to change and the product described herein may be modified or discontinued without notice.

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This datasheet replaces all previous versions.

Nitto Europe NV has obtained following certificates:

- ISO 9001
- ISO 14001
- ISO/TS 16949

Please check our website for applicable scope



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www.nitto.com