

Product: **PVC 228SK**

Product group: **Electrical Insulating Tapes**

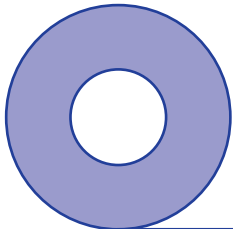
This datasheet contains provisional product information and is therefore subject to change. The product is in a test phase and is not yet released for commercial use. Consequently the product described herein may be modified or discontinued without notice.

PROVISIONAL

General description

Nitto PVC 228SK is a flame-retardant electrical insulating tape consisting of a pure PVC carrier coated with a rubber-based pressure sensitive adhesive. The tape is certified for electrical purposes and classified under IEC 60454-3-1-7/F-PVCp/90 and applicable for in- and outdoor uses. Due to its flexibility and conformability at low temperature, PVC 228SK has a minimum application temperature of $-18\text{ }^{\circ}\text{C}$.

Construction



- Rubber-based pressure sensitive adhesive
- Primer
- Plasticized PVC film

New formulation: DEHP replaced by REACH compliant alternative plasticizer, free from SVHC (Substances of Very High Concern).

Characteristics

Nitto PVC 228SK is a genuine "soft" tape. No fillers of any kind are used to guarantee excellent physical properties. A good balance between adhesion strength, unwind force and film flexibility assures outstanding workability, high conformability and good sealing properties. The tape can be applied at very low temperature ($-18\text{ }^{\circ}\text{C}$). Nitto PVC 228SK is a 190 micron thick PVC tape with excellent electrical insulation properties and is self-extinguishing. The tape has a good resistance against abrasion, moisture, oils and solutions with acids and alkaline. The PVC tape is suited for outside use thanks to the good ageing and weatherability properties.

Application

Nitto PVC 228SK is an electrical insulation tape for professionals with excellent conformability even in cold weather.

Features

- excellent workability: high conformability, no flagging, excellent elasticity, non-sticky sides
- good weatherability & UV resistance
- good sealing properties
- self-extinguishing
- good moisture and chemical resistant
- filler free plasticized PVC
- WEEE compliant (2002/96/CE)
- RoHS compliant (2002/95/CE)
- REACH compliant

Properties

	Typical Value	Test Method
Total thickness	0.19 mm	IEC 60454-2 §4
Tensile strength LD*	205 N/10 mm ² (section) 39 N/10 mm width	IEC 60454-2 §8
Elongation LD	300 %	IEC 60454-2 §8
Adhesion to BA steel	2.2 N/10 mm	IEC 60454-2 §11 (Dwelling time 15 min.)
Adhesion to backing		
at room temperature	2.1 N/10 mm	IEC 60454-2 §11
at low temperature (-18 °C)	7.80 N/10 mm	IEC 60454-2 §12
Electrical strength		
at room temperature	8.8 kV	IEC 60454-2 §17
after humid conditioning	9.5 kV	IEC 60454-2 §18
Electrolytic corrosion	min. 1x10 ¹¹ Ohm/25mm width	IEC 60454-2 §7.6 (IEC 60167) (23 °C, 40 °C and 55 °C)
Low temperature properties (-18°C)	no cracking no unwinding, no breakdown	IEC 60454-2 §9
Penetration at elevated temperature	64°C	IEC 60454-2 §10
Shear adhesion to backing after water immersion	23.0 N	IEC 60454-2 §13
Flammability	self-extinguishing	IEC 60454-2 §19
Max. operating temperature	+90 °C	IEC 60454-2 §21

* LD = Length Direction

Warranty

The product is guaranteed to be free from defect in material and workmanship at the time of delivery and will be suitable for use for a period of 12 months thereafter, subject to the conditions set out herein.

Availability

Colours: black, grey

Widths: 15, 19, 25, 30, 38 and 50 mm Lengths: 10 and 20 m

Core diameter: 31.5 mm

* Please contact us for other dimensions

Application guidelines

- The tape should be applied on a clean and dry surface.
- Apply the tape with a moderate tension and with an overlap of 50%.

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, 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.

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

Edition: December 2014

Code: DS/03.08/B1 PVC 228SK ENG

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