

Product: **509N**

Product group: **Repulpable Double-Coated Tapes**

## General description

Nitto repulpable double-coated tape 509N consist of a non-woven tissue carrier, saturated with a water-soluble pressure sensitive adhesive.

## Construction



## Characteristics

Nitto 509N has a good adhesion in combination with a high shear resistance, which makes it suitable to adhere on different kinds of paper.

The high heat resistance keeps the splice intact during heat set processes.  
The tape resists humidity for a limited period of time, although it is designed to be water-soluble.

For storage, the tape is hermetically sealed in plastic bags, to maintain constant moisture content.

Nitto 509N passes repulpability test by TAPPI Method UM-213-A.

## Application

Nitto 509N is suitable for easy and quick overlap splicing operations in paper- and printing industries. The tape can also be used for core start and reel closing.

## Features

- high initial tack to different papers
- good adhesion on different papers
- high temperature resistance
- full pH range repulpability
- repulpability passes the TAPPI Method UM-213-A
- RoHS compliant (2002/95/CE)

## Technical Properties

### General physical properties

	Typical Value	Test Method
Tape Thickness*	0.100 mm	EN 1942
Adhesive type	Green water-soluble acrylic	
Release liner type/colour	Siliconised havana paper	
Release liner weight	95 g/m <sup>2</sup>	DIN 53104
Carrier type	Non-woven tissue	
Adhesion to test carton	500 cN/20mm	EN 1939
Release value	20 cN/50mm	Nitto Europe Test Method
Static Shear	0 mm/3h	Nitto Europe Test Method
Transport and storage conditions	Temperature 15 °C to 30 °C Relative humidity 40 to 75% RH	

\* Tape thickness = Total thickness without liner  
Details from the test methods are described on the customer product specification.

### Performance properties

	Typical Value	Test Method
Temperature resistance	180 °C	3 min. , 200 g/cm <sup>2</sup>
Repulpability	Good	Nitto Europe Test Method (ISO 5263)
Adhesion to BA-Steel	700 cN/20mm	EN 1939
Dynamic Shear	250 N/4cm <sup>2</sup>	Tested after 15 min., 300mm/min.
Oozing & Bleeding (1.5T/7days)	Minor contamination	Nitto Europe Test Method

## Warranty

The product is guaranteed to be free from defect in material and workmanship and will be suitable for use for the period as indicated on the packaging, subject to the conditions set out in the product specification.

### Application guidelines:

- Keep the tape in its original individual packaging until use.
- For optimum results, an even rub down pressure must be applied to the taped area to create the best possible adhesion between tape and the web surface.
- Remove the liner prior to splicing.
- The tape should be applied to clean and dry surfaces.
- The best application conditions are obtained at a temperature between 15 °C and 40 °C.

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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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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