

Product: **500**

Productgroup: **Bonding & Joining**

General description

Nitto double-coated tape 500 consists of a flexible non-woven tissue carrier impregnated with Nitto's own specifically designed adhesive. The synthetic resin adhesive is suitable for a wide variety of mounting applications.

Construction



Characteristics

Nitto double-coated tape 500 allows a firm bond between two different materials, even when dimensional change occurs due to thermal shock (eg. metal and plastic). The reliable adhesive assures good workability on multiple substrates used in different applications. The modified acrylic pressure sensitive adhesive allows an excellent long term bond.

Application

Nitto double-coated tape 500 is a specifically designed for bonding nameplates, metal sheets, plastic plates, foam materials and molds, mainly used in electrical appliances, automotive, office automation equipment and consumer electronics devices.

Features

- multi purpose
- good workability
- good adhesion on multiple substrates
- excellent ageing properties
- excellent temperature cycle resistance

Technical Properties

General physical properties

		Test method
Adhesive type	Modified acrylic	
Tape thickness*	0.16 mm	NITTO 01B
Release liner type / colour	Siliconised white paper	
Release liner thickness / weight	0.08 mm - 93 g/m ²	NITTO 01G
Carrier type	Non-woven	
Unwind force	10 cN/50 mm	NITTO 35A
Release value	40 cN/50 mm	NITTO 36A
Adhesion to stainless steel	1100 cN/20 mm	NITTO 15A
Creep on BA-steel	1 mm	NITTO 62A
Shear	510 N/4cm ²	NITTO 73A (BA steel)

* tape thickness = total tape thickness without liner

Performance properties

Adhesion	(test method: NITTO 15A)					
	2B steel	PC	PVC	PMMA	PET	PP
cN/20 mm	1100	1200	1200	1200	1300	1200
Cohesion						
Heat resistance	120° C					
WAPO	(test method: NITTO 4084)					
PP	10 min					
ABS	40 min					
BA steel	3 min					

Application guidelines

- The surface to be bonded must be clean i.e. free of dust, release agents, processing oils and grease.
- The temperature of the application should not be below the dew point of the surrounding air. The warmer the tape the better the adhesive will wet out and consequently the higher the immediate adhesion will be.
- To ensure optimal anchorage of the tape to foam attention should be paid to the lamination pressure, temperature and time.

Our technical center is always at your disposal for special application requests.
Please contact us to make an appointment.

Precautions

All products manufactured by NITTO EUROPE NV are guaranteed to be free from defect at the time of shipping when tested according to NITTO EUROPE NV product specifications. Properties of the products are susceptible to change due to various influences such as composition and condition of the substrate, impurities in or on the substrate, temperature and humidity of storage and the surrounding environment during application etc. When the NITTO product is used in combination with other material, the user shall assure by his own tests the compatibility of the NITTO product in the resulting combination and whether the combination results in the expected performance.

Packaging and storage

The product should be protected against direct sunlight and extremes in temperature and humidity and stored upright in its original packaging. Once removed from its packaging, it should be protected against dust and other impurities.

Test methods and results

The properties of these products are determined in accordance with NITTO test methods. Detailed description of these methods are available on request. The above figures are average values, established to our best knowledge, but not to be used for specification purpose.

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Nitto Europe NV has obtained following certificates:

