SURFACE PROTECTION TAPES

FIBERGUARD 509H80P

General description

Nitto FIBERGUARD 509H80P consists of a printed black and grey PE film with a special release coating and coated with a pressure sensitive natural rubber-based adhesive with a high adhesion level.

Features

- Laser cutting of stainless steel up to 3 mm
- No pre-cutting required
- No bubble-forming
- Functional print
- High adhesion
- Film with high mechanical strength
- Recyclable film

Application

Nitto FIBERGUARD 509H80P protects metal surfaces during both Fiber and CO_2 laser cutting processes. It is ideal for high speed and performance laser cutting machines.
Printed arrows allow you to install your metal in the appropriate direction after the laser cutting process. This will enable you to protect your substrate till the end of the supply chain, resulting in an optimum protection from scratches and impurities during various mechanical processes (bending, stamping, forming, etc).

Properties

	Typical value*	**Test method**
Film type	LDPE film	n/a
Adhesive type	Rubber-based	n/a
Total thickness	80µm	BTM019
Adhesion to BA steel	340 cN/25mm	ISO 29862
Breaking strength MD**	40 N/25mm	ISO 29864
Elongation MD**	350%	
Weatherability on BA steel***	100h	ISO 4892-2
Color	Black and Grey film printed with arrows and Nitto brand	n/a

*CAUTION: The above are typical values and should not be used in writing specifications. Details from the test methods are described on the customer product specification.
**MD = Machine Direction
***The weatherability is measured on BA steel. Depending on the substrate the weatherability performance can be different.

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 6 months thereafter, subject to the conditions set out herein.

Availability

Widths: 1000 mm, 1250 mm and 1500 mm
Lengths: 500 m and 1000 m
Please contact us for specific dimensions.

Storage conditions

The product should be protected against direct sunlight and extremes in temperature and humidity. Recommended storage and transport conditions are between 15 °C and 30 °C and between 40% and 75% relative humidity. The product should be stored in its original packaging in a well-ventilated room to avoid deterioration, deformation and contamination. Once removed from its packaging, it should be protected against dust and other impurities. Do not over stack the product, as this may cause deformation.

Lamination guidelines

- The tape should be applied to clean and dry surface by automatic mechanical means.
- To avoid entrapped air-bubbles, excessive tension and shear, the customer should determine appropriate lamination conditions.
- The best lamination conditions are obtained at a temperature between 15 °C and 40 °C.

Application guidelines

- To reach the ideal adhesion level for laser cutting, it is recommended to wait 1 week after lamination.
- To avoid bubble forming, it is recommended to determine appropriate laser cutting conditions.
- This surface protection tape may contain fish eyes and gels. It is not recommended to use this tape for heavy forming processes due to the risk of visual imprints on the substrates.
- Nitto FIBERGUARD 509H80P is not recommended for use on substrates containing copper.
- Surface Protection Tapes are not meant for permanent protection, they should be removed at the end of the supply chain.

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 willful misconduct, Nitto Bento Bantçılık San. Ve Tic. A.Ş.'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 Bento Bantçılık San. Ve Tic. A.Ş.has assisted in any manner with the selection, treatment, or application of the product. Nitto's liability is limited to the terms and conditions provided in the Product Specification and Nitto's General Terms and Conditions of Sale.

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.

Nitto Bento Bantçilik has obtained the following certificates

- ISO 9001
- ISO 14001
- ISO 45001