

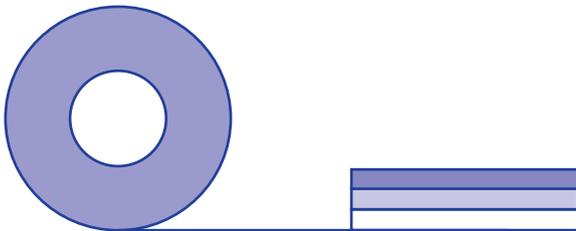
Product: **FIBERGUARD 3080H series**

Product group: **Surface Protection Tapes**

General description

Nitto FIBERGUARD series are surface protection tapes, which protects metal surfaces during Fiber and CO2 laser cutting processes. The unique concept exists of a special, printed blended PE carrier, combined with a special release layer and a modified rubber-based adhesive.

Construction



- Pressure sensitive rubber-based adhesive
- White PE-film, printed with arrows and the Nitto brand name *
- Special wax release coating

* in blue print: FIBERGUARD 3080H5 BLUE
in grey print: FIBERGUARD 3080H3 LIGHT

Characteristics

The rubber-based adhesive is pressure-sensitive and has the excellent adhesive quality required for both Fiber and CO2 laser cutting processes after automatic lamination. These tapes are available in two adhesion levels: medium (FIBERGUARD 3080H3 LIGHT) and very high (FIBERGUARD 3080H5 BLUE). The tape has enough oil resistance and therefore is usable to protect metals after milling operations. The absence of carbon black avoids discoloration and burrs on the cutting edge, reducing cleaning and polishing operations after the cutting process. The special wax release coating of FIBERGUARD series has low unwind properties during lamination which ensures improved laser cutting yield and less production shut-downs (no bubble-forming). Printed arrows allow you to install your metal in the appropriate direction after the laser cutting process. This will enable you to protect your metal till the end of the supply chain, resulting in an optimum protection from scratches and impurities during various mechanical processes (bending, stamping, forming, etc).

Application

Nitto FIBERGUARD series protect metal surfaces during both Fiber and CO2 laser cutting processes. The combination of a printed unique white PE carrier with a rubber-based adhesive and a special wax release layer makes it the ideal protective tape for laser cutting processes. FIBERGUARD 3080H3 LIGHT has a medium adhesion level and is suitable for laser cutting of metal surfaces with a thickness up to 2mm. FIBERGUARD 3080H5 BLUE has very high adhesion level and is recommended for metal surfaces with a thickness above 2mm. In case of very rough metal surfaces and complex and dense cut shapes FIBERGUARD 3080H5 BLUE is a true problem solver.

All white version



Features

- available in medium and very high adhesion level
- low unwind during lamination
- no pre-cutting required
- no bubble-forming
- no carbon black residue
- functional print
- film with high mechanical strength
- recyclable

Properties

	Typical Value		Test Method
	3080H5 BLUE	3080H3 LIGHT	
Film type	PE film	PE film	
Film colour	White	White	
Print colour	Blue	Grey	
Adhesive type	Rubber-based	Rubber-based	
Total thickness	0.80 mm	0.80mm	EN 1942
Adhesion on BA steel	13.7 oz/in	6.9 oz/in	EN 1939
Weatherability on BA steel*	2 weeks	4 weeks	ISO 4892-2
Tensile strength MD**	min. 6.6 lbs/inch		EN 14410
Elongation MD	min. 150%		EN 14410
Transport and storage conditions: Temperature 59 to 86°F			
Relative humidity 40 to 75% RH			

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

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

Lamination guidelines

- The tape should be applied to clean and dry surface by automatic mechanical means.
- In order to avoid entrapped air-bubbles, excessive tension and shear, the customer should determine appropriate lamination conditions in his process. In case of lamination on a 'coil to coil line', special attention is necessary to avoid wax release damage by mechanical friction.
- The best lamination conditions are obtained at a temperature between 59°F and 104 °F.

Application guidelines

- In order to reach the ideal adhesion level for laser cutting, it is advisable to wait 1 week after lamination.
- To avoid bubble-forming, the customer should determine appropriate laser cutting conditions.
- It is not advisable to use FIBERGUARD series on substrates which contain copper.
- It is not recommended to use this tape for heavy forming processes due to the risk for visual imprints on the substrate.
- FIBERGUARD series cannot be used for outside exposure.
- Surface protection tapes are not meant for permanent protection, they should be removed at the end of the supply chain.

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.

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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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