Let's create beautiful forests on this planet.

SHIELDPLUS

SHIELDPLUS is a paper-based barrier material.
It has been created by adding a barrier coating layer incorporating a water-based coating technology for papermaking onto a base paper completely made from woody materials.

Features

1 Very environmentally friendly because paper is its base material

- The paper used as base material for SHIELDPLUS is made from wood, which is a renewable material.
  The replacement of plastic-based barrier materials with SHIELDPLUS means a higher biomass content and the reduction of plastics.
- SHIELDPLUS is biodegradable. Lamination with a biodegradable sealant film will increase the biodegradability of the wrapping material.

2 Oxygen and flavor barrier properties comparable to the properties of different barrier films

- SHIELDPLUS has outstanding oxygen barrier properties to protect content and to maintain its quality.
- Its superior flavor barrier properties retain the aroma of the content and suppress odor leakage and transfer.

3 Differentiated by the paper texture

※ Photo is for illustrative purposes only.



Example applications for SHIELDPLUS

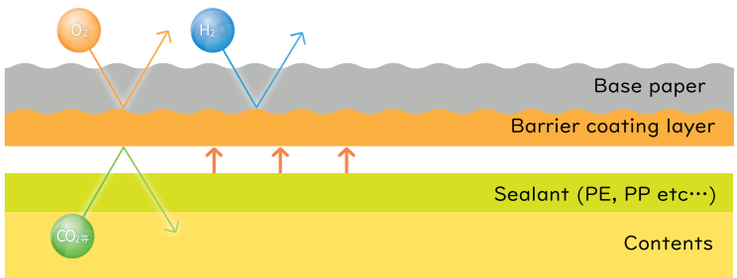
Examples of Use

Packaging applications for different kinds of food, household goods, cosmetics, transportation and industrial applications, including building materials

Click here to download the catalog.

NIPPON PAPER INDUSTRIES CO.,LTD.

Barrier properties

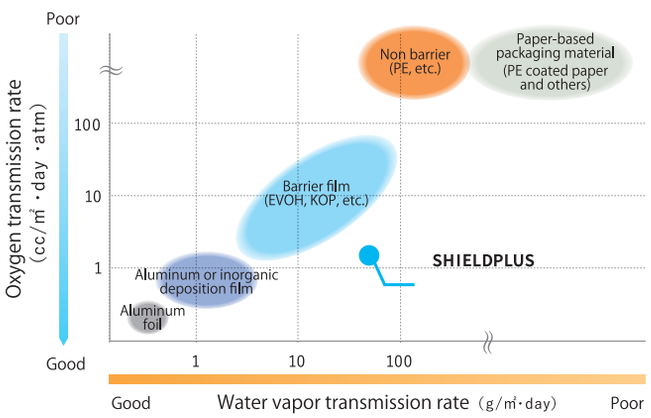


＊We are able to design a wide variety of sealant layers according to the application and the needs of the customer.

(Note)
SHIELDPLUS is not designed to be used in any manner in which it is in direct contactwith food. Make sure that the barrier coating does not come into contact with moisture.

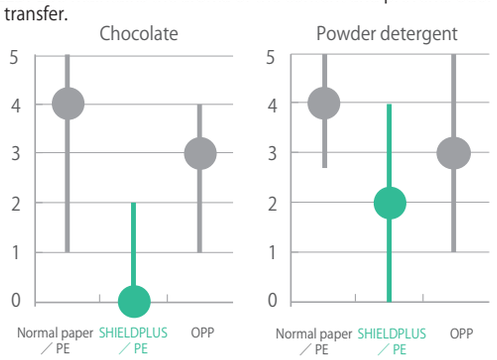
Material composition diagram

●Oxygen and vapor barrier properties



●Flavor barrier properties

SHIELDPLUS maintains the aroma of the content and prevents odor leakage and transfer.



*Assessment method
A specimen is placed and firmly sealed in a three-sided pre-sealed bag made from each film.
The degree of odor leakage from the content is evaluated on a six-point scale, from 0 to 5, using sensors (conducted by Nippon Paper Industries).(○: Median value, I: Upper/lower limit of evaluation results)

Lineup

※2026.10

	basis weight g/㎡	thickness μm	Oxygen transmission rate cc/㎡・day・atm	width mm	length m	Roto Grabure	FDA
SHIELDPLUS Ⅱ (White) □	60	約 70	5 >	1,000	2,000	-	○
SHIELDPLUS Ⅱ (Graphic coat) □	70	約 65	5 >	1,000	2,000	◎	○
SHIELDPLUS Ⅱ (MG Brown) ■	60	約 75	5 >	1,000	2,000	○	○

＊This date is for reference only and are not guaranteed values.
＊The basis weight is the stated value, not the measured value.
＊Oxygen transmission rate measurement: 30 μm layer of L-LDPE was laminated onto the barrier-coated surface, and the measurement was conducted at 23° C and 50% RH in accordance with JIS K 7126-2.
＊SHIELDPLUS is available in other sizes and specifications than specified above upon request. Please feel free to contact us.
＊Extrusion lamination is recommended. However, the white grade is also suitable for dry lamination.

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