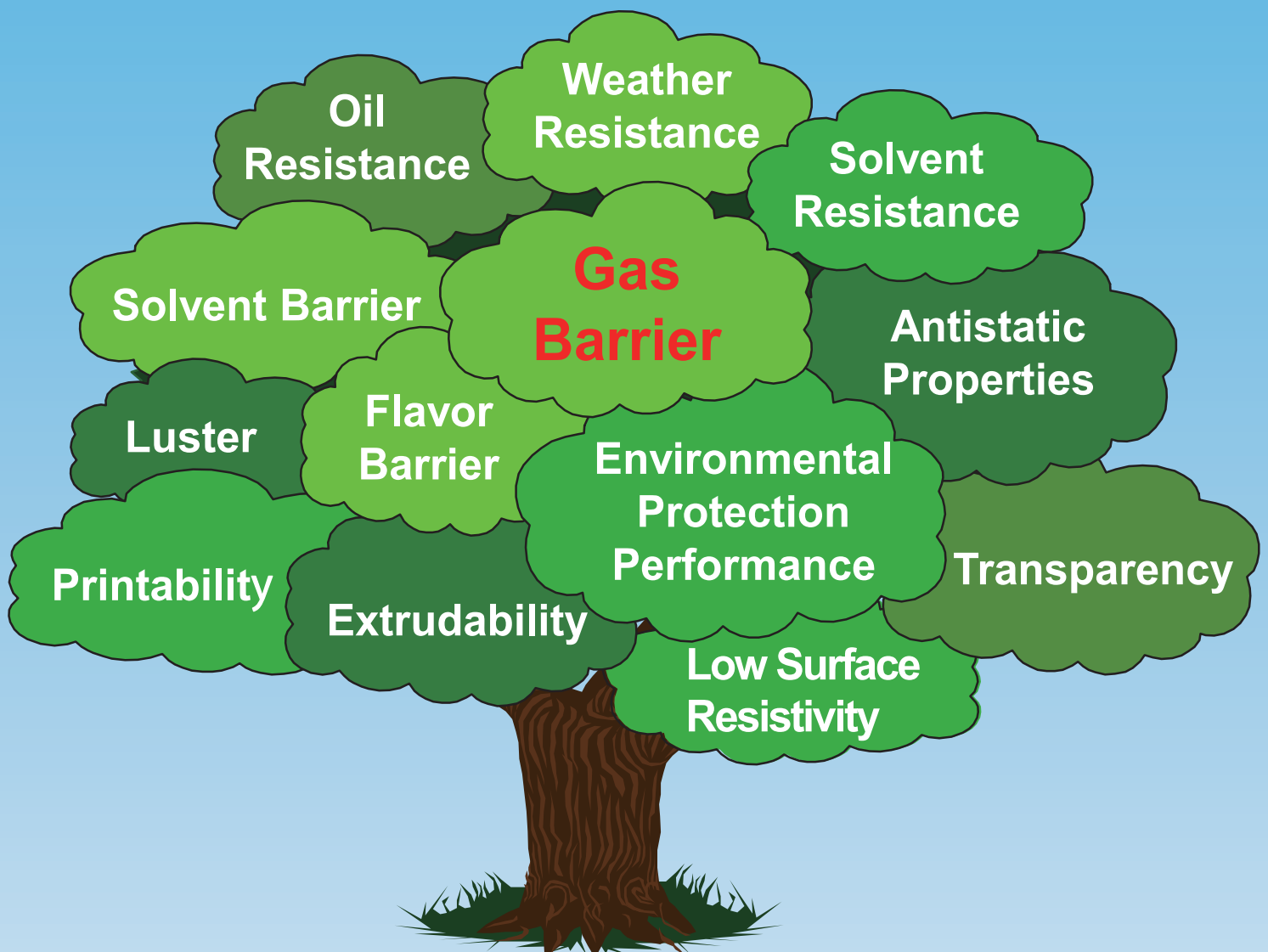


GAS/OXYGEN BARRIER

BAG and TUBE



Trend Sign Co., Ltd

Product Overview

This product is a 5-layer film formed by extruding three types of plastics with the 5-layer extrusion die of a blown forming machine. Ethylene Vinyl Alcohol Copolymer (EVOH) is used for the middle layer and Polyethylene (PE) for the surface layer to maintain formability while improving the gas barrier properties. The production equipment is a large blown forming machine, and the manufactured tube is used for heavy-duty pouches.



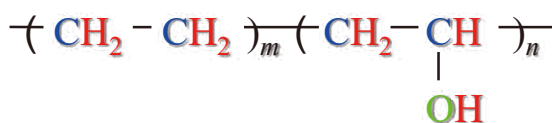
EVOH

The gas barrier properties are obtained from the characteristics of Ethylene Vinyl Alcohol Copolymer (EVOH) present in the middle layer.

* Soarnol™ of Mitsubishi Chemical Corporation is used to manufacture the products of our company.

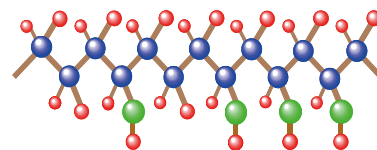
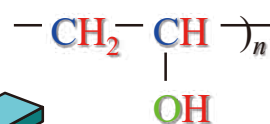
Poly Ethylene (PE)

Extrudability



Poly Vinyl Alcohol (PVA)

Gas Barrier



● : C
● : O
● : H

Structure of Soarnol™

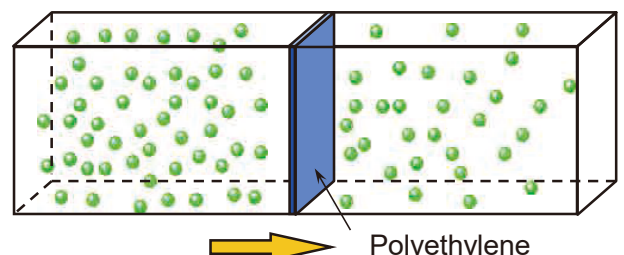
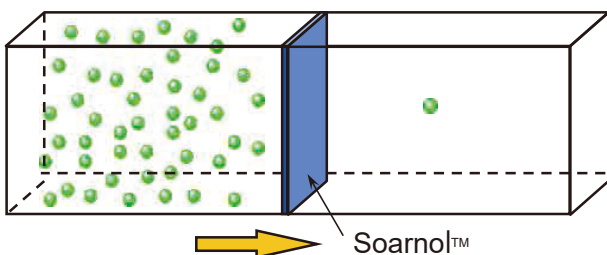
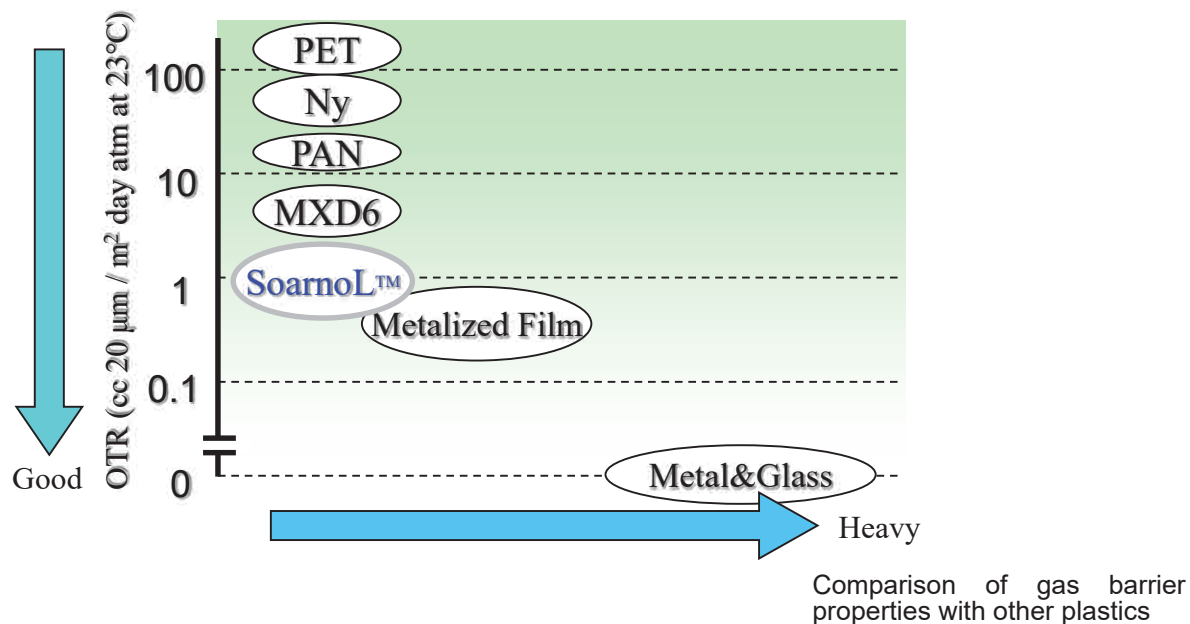


Image of gas barrier properties of Soarnol



Film structure

LLDPE/Tie/middle layer/Tie/LLDPE
(40/10/20/10/40 μm , Total 120 μm)

After 8 days

23°C, 50%RH



Test for gas barrier properties for apple

Product and Size

• 5-layer tube

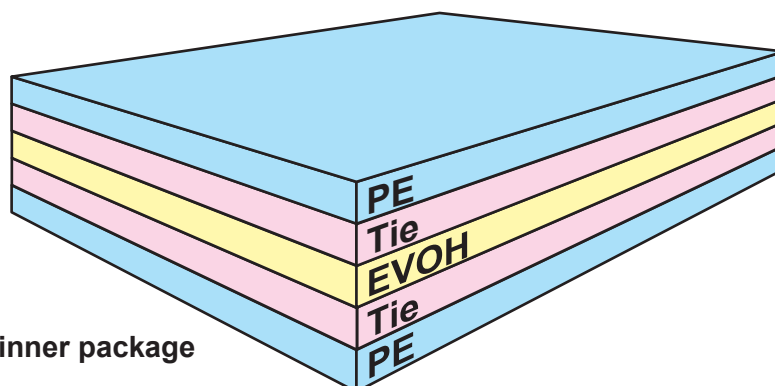
Width: 440 mm to 820 mm
Length: 3000 m
Thickness 70/80/90/100 μm

• Inner package or kraft paper bag + inner package

Length 500 mm to 1500 mm
Thickness 70/80/90/100 μm

* We provide original printing (printing with three colors for width up to 650 mm, and one color for width above 650 mm)

* We can manufacture kraft paper bags up to 3 layers



Features

- Cuts off the atmosphere and suppresses intrusion of oxygen (oxidation) into the container.
- Does not allow odors from the container to escape into the atmosphere.
- Recycling or disposal is simple as only plastic materials are used in production.
- Retains freshness of items in the container for a longer period, extending the storage duration.
- Prevents mold, dampness and pests.
- High performance at low cost.
- Storing items at room temperature is possible as the product is effective in preventing oxidation.
- Prevent "Powder explosion"



Applications

- Transportation and storage of milk powder and whole milk powder
- Transportation and storage of pasture seeds, corn, soybean and rice seeds
- Transportation and storage of items with odor such as garlic
- For perfumes, raw materials for perfumes, spices, dry tobacco and vanilla
- For fish meal, dried shrimp, feed and fertilizers
- For chemicals and powders that are affected by oxidation
- For items that require isolation from the atmosphere or leakage prevention of internal contents

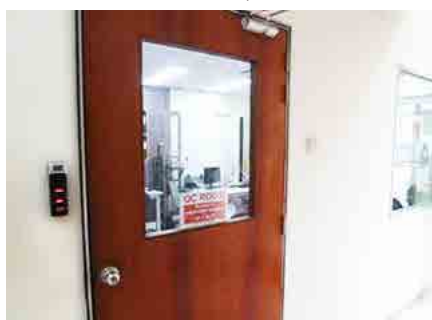


Quality Control and Track Record

Production and quality control are implemented in a ISO90002 certified factory

Our company has a proven track record with products that have been used over many years for food products, perfume raw materials, chemicals and seeds.

Production lot number is printed by Ink Jet printer.



<https://www.o2cut.com>

Trend Sign Co., Ltd

10th floor, Shinjuku Mitsui Bldg. No.2, 3-2-11 Nishi-Shinjuku,
Shinjuku-Ku, Tokyo 160-0023

TEL: 03-5937-5721 FAX: 03-5937-5722

URL: <https://www.trendsign.co.jp> E-mail: info@o2cut.com