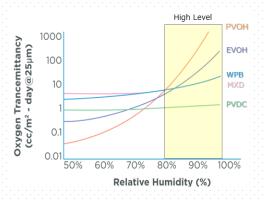
OXYGEN BARRIER COATING



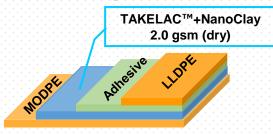
TAKELACTM WPB series for MDOPE mono-material

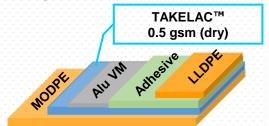
■Barrier coating of WPB series



- Non-chlorine based polymer
- ✓ The humidity dependence on O₂ barrier property is excellent compared to PVOH and EVOH
- High flexibility and good adhesion with PO films
- √ Good printability (55-58 dyne)

■Barrier coating for PE mono material design





Film Structure		OTR @20℃, 80%RH	Peel strength
Blank	MDO-PE//LLDPE	>1000cc	Material Failure
Non VM Nano-Clay	MDO-PE//TAKELAC+NanoCLAY//LLDPE	0.46cc	1.5N
Alu VM	MDO-PE//TAKELAC//AL//TAKELAC//LLDPE	0.08cc	1.3N

Takelac™ Advanced Coating Technology and oriented films create a synergy that enhances the barrier properties of recyclable packaging films, even under high humidity and heat conditions.

FAQ

What is the solid content?

25%-30%, the rest is water.

What coating weight is needed?

0,5-1gsm is enough as top coating.

What is the drying temperature?

80-115°C is recommendable, depending on time.

-Contact detail-

Mitsui Chemicals Europe GmbH

Helmholtzstr. 19, 40215 Düsseldorf, Germany

E-Mail: <u>akira.wahio@mcie.de</u> HP: eu.mitsuichemicals.com

How to coat?

Gravure coating / Flexo coating, etc.

How to store?

Not under 0°C . Avoid direct sunlight.

Food contact compliance?

Please contact us at the details below.

Mitsui Chemicals

Tokyo Midtown Yaesu, Tokyo, Japan Coatings & Engineering Materials Division E-Mail: Yusuke.Kanaya@mitsuichemicals.com

HP MITSUI CHEMICALS, INC. | MITSUI CHEMICALS, INC.

TAKELACTM WPB and WS series

for In-line coated barrier solution

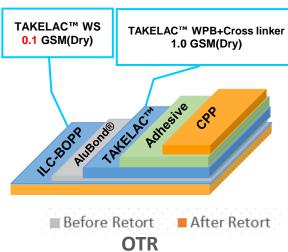
■ Collaboration Partners for the open innovation







Retortable barrier coating for mono material design (Over 90%)



[cc/20°C80%RH]

✓ In-line coating (ILC) is a wet chemical coating process applied directly during film production on Brückner's BOPP stretching machines.

✓ AluBond®, the most advanced of Bobst's vacuum metallization technology, offers enhanced barrier functionality, increased metal bond strength and higher surface energy.

✓Benefits summarized; thin coating layer, costefficient operation, excellent property for barrier and adhesion.

WVTR [g/40°C90%RH] 2 1.5 1 0.5 0.1 0



FAQ

0

2

1.5

0.5

1

What is the solid content?

0.2

25%-30%, left is water.

Food contact compliance?

Please contact us the detail below.

What is the drying temperature?

0.3

90-115°C is recommendable, depending on time.

-Contact detail-

Mitsui Chemicals Europe GmbH

Helmholtzstr. 19, 40215 Düsseldorf, Germany

E-Mail : <u>akira.washio@mcie.de</u> HP : eu.mitsuichemicals.com Takelac™ Advanced Coating Technology creates a synergistic effect with oriented films, significantly enhancing barrier properties both before and after the sterilization process, even under high humidity and heat conditions. Films coated with Takelac™ remain recyclable.

Mitsui Chemicals

Tokyo Midtown Yaesu, Tokyo, Japan Coatings & Engineering Materials Division E-Mail: Yusuke.Kanaya@mitsuichemicals.com HP: MITSUI CHEMICALS, INC. | MITSUI CHEMICALS, INC.