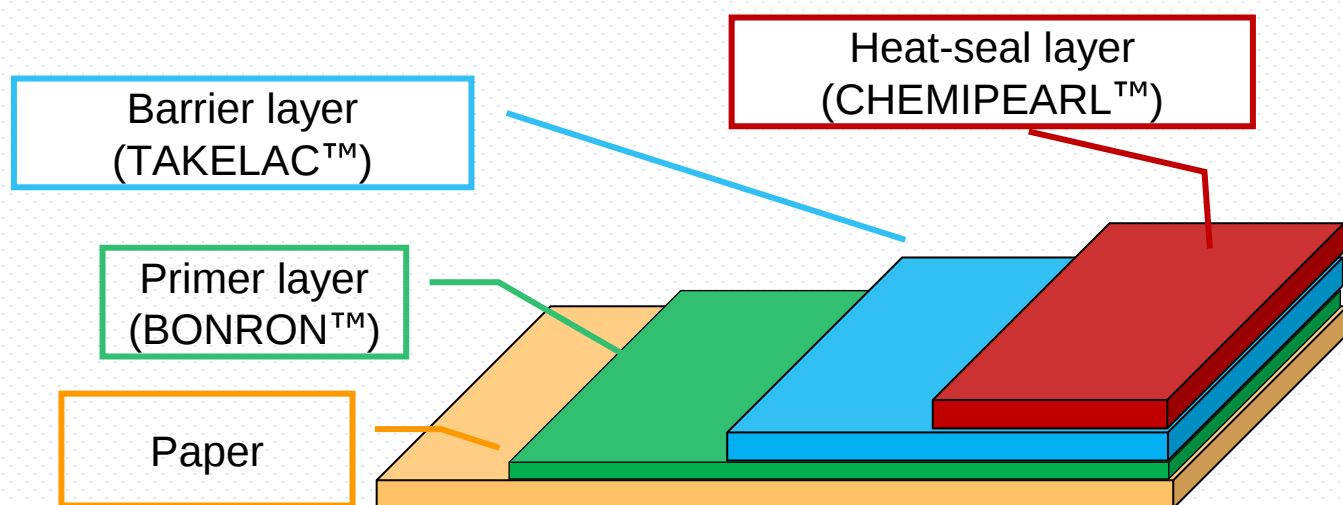


BONRON™ - TAKELAC™ - CHEMIPEARL™

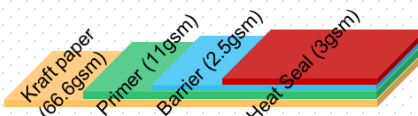
Three-layer coating barrier solution

Mitsui Chemicals offers a solution for barrier paper packaging combining 3 technologies:

- ✓ BONRON™ is developed for primer on paper with excellent folding resistance.
- ✓ TAKELAC™ gives superior gas barrier property on paper and film coating.
- ✓ CHEMIPEARL™ finishes as eat-seal coating for packaging application.



Coating condition

	Barrier Layer Type	OTR (cc/m ² ·d·atm : 20°C, 80%RH)	WVTR (cc/m ² ·d·atm : 40°C, 90%RH)	Seal strength (N/15mm)
	TAKELAC™ WPB-341M only	21.6	106	3.8 (MF)
	TAKELAC™ WPB-341M + Clay	1.3	14	2.7

WPB341/Clay=9/1 (dry wt) 1-1.5gsm(dry)

*MF: Material failure

Heat seal layer (dry) : CHEMIPEARL™ 3gsm
 Barrier layer (dry) : TAKELAC™ WPB-341M 2.5gsm
 Primer layer (dry) : BONRON™ 1gsm

Dry condition : 110°C×2min
 Aging condition : 50°C × 48h
 Heat sealing condition: 140°C × 2kgf × 1sec

FAQ

What is the solid content?

25%-42% dispersed in water.

How to coat?

Gravure coating / Flexo coating / Curtain coating, etc.

-Contact detail-

Mitsui Chemicals Europe GmbH

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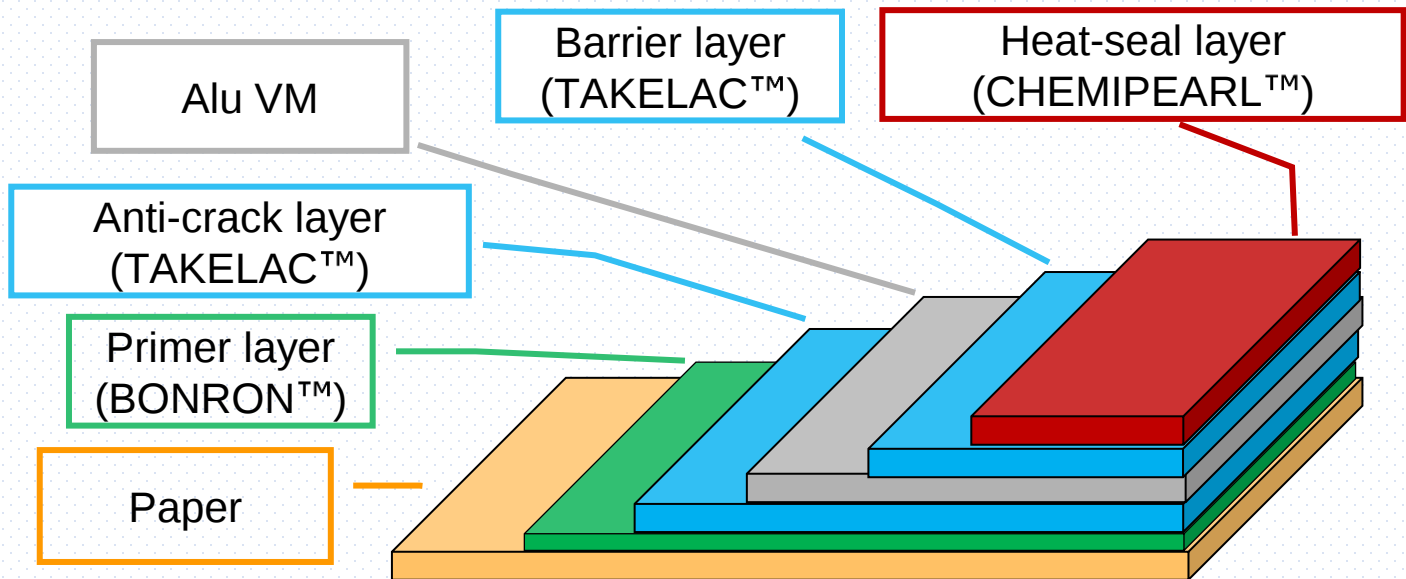
HP : eu.mitsuichemicals.com

BONRON™ - TAKELAC™ - CHEMIPEARL™

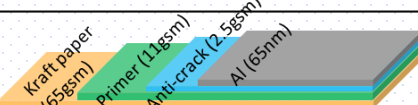
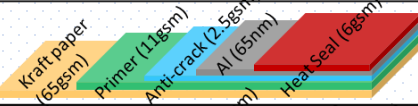
Anti-fold high barrier solution

Mitsui Chemicals offers a solution for barrier paper packaging combining 3 technologies:

- ✓ BONRON™ is developed for primer on paper with excellent folding resistance.
- ✓ TAKELAC™ gives superior gas barrier property on paper and film coating.
- ✓ CHEMIPEARL™ finishes as eat-seal coating for packaging application.



Coating condition

Condition	OTR (cc/m2·d·atm : 20°C, 80%RH)			WVTR (cc/m2·d·atm : 40°C, 90%RH)			Seal strength (N/15mm)
	Initial	Barr.Side Internal Cross fold	Barr.Side External Cross fold	Initial	Barr.Side Internal Cross fold	Barr.Side External Cross fold	T-Type peel
	0.3	175.9	> 200	2.7	5.9	9.7	-
	0.3	1.2	> 200	1.9	3.5	7.8	4.0 (MF)
	0.2	0.6	2.1	0.2	0.6	1.3	3.8 (MF)

Heat seal layer (dry) : CHEMIPEARL™ 3gsm
Barrier layer (dry) : TAKELAC™ WPB-341M 0.5gsm
Anti-crack layer (dry) : TAKELAC™ WPB-LJ5 2.5gsm
Primer layer (dry) : BONRON™ 11gsm

Dry condition : 110°C×2min *MF: Material failure
Aging condition : 50°C × 48h
Heat sealing condition: 140°C × 2kgf × 1sec

-Contact detail-

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