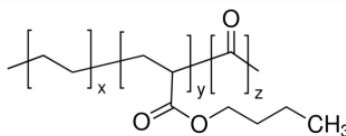
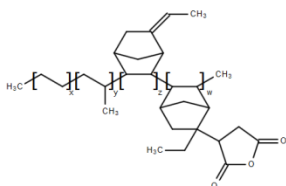


Tie resin guide between PK and other resins

I. LDPE – Tie resin for LDPE - PK

Mechanism of adhesion



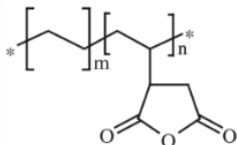
MA-g-EPDM: Dupont Fusabond N416 EBA-CO: Dupont Elvaloy HP441

- MA-g-EPDM was selected for adhesion between LDPE and tie resin.
- EBA-CO was selected for adhesion between PK and tie resin.
- The composition of Tie resin is recommended for MA-g-EPDM 60~80% and EBA-CO 20~40%.

Adhesion test

5 layer	Adhesion
	N/15mm
LDPE – Tie resin for LDPE – PK - Tie resin for LDPE - LDPE	5.6

II. HDPE – Tie resin for HDPE - PK



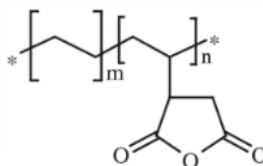
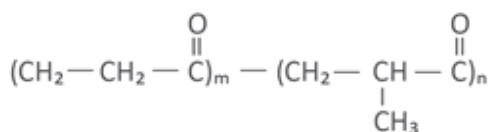
MA-g-HDPE: Dupont Fusabond E100

Adhesion test

No.	1	2	3	4	5	6
Pressure	0 MPa	0 MPa	0 MPa	5 MPa	5 MPa	5 MPa
Time	10 sec	20 sec	30 sec	10 sec	20 sec	30 sec
Adhesion (N/15mm)	4.01	8.55	10.26	8.34	9.78	10.62

III. PA12 – Tie resin for PA12 - PK

Mechanism of adhesion



Polyketone: M410F

MA-g-HDPE: Dupont Fusabond E100

- MA-g-HDPE was selected for adhesion between PA12 and tie resin.
- PK was selected for adhesion between PK and tie resin.
- The composition of Tie resin is recommended for MA-g-HDPE 10~20% and PK 80~90%.

Adhesion test

3 layer	Adhesion at R.T.	Adhesion at 90°C
	N/15mm	N/15mm
PA12 – Tie resin for PA12 - PK	PK film break	PK film elongation

Tie resin guide between PK and other resins

IV. PK and Al Adhesion

Material

Al : wide 45mm, thickness 200 μ m (Surface treatment)

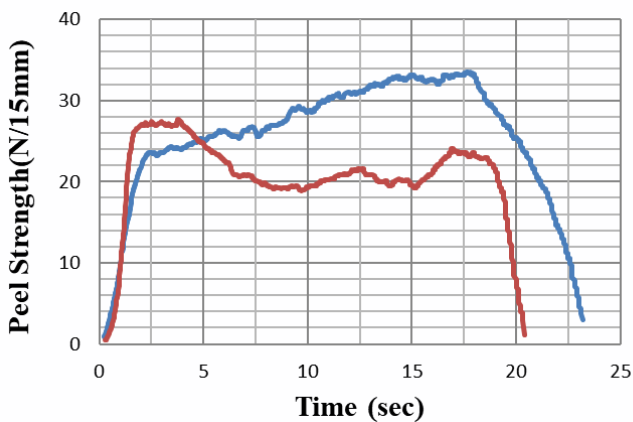
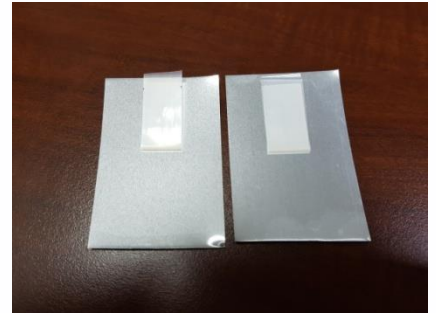
PK : M710F (wide 100mm, thickness 100 μ m)

Test method: heat welding

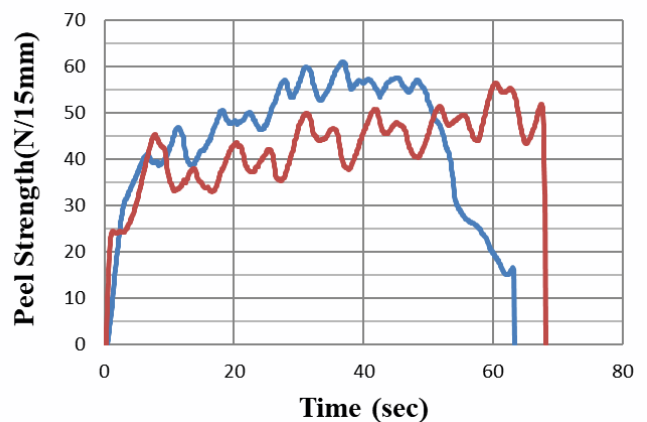
Result

Al/PK type의 peel strength : 20~30N/15mm

Al/PK/Al type의 peel strength : ~35N/15mm



Al/POK



Al/POK/Al

Al/POK adhesion