



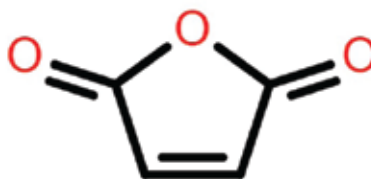
Olebond

Olebond is a trademark of Tisan Engineering Plastics for product groups includes maleic anhydride (MAH) grafted polymers. Base polymer is grafted with maleic anhydride by reactive extrusion process.

Olebond improves the performance of different polymers by combining them together.

Olebond is solutions for your products with different base polymers and needed grafted MAH level.

Tisan Engineering Plastics welcomes you to discuss for your special needs and improvements. Olebond is designed for our customers requirements.



Maleic Anhydride

Applications

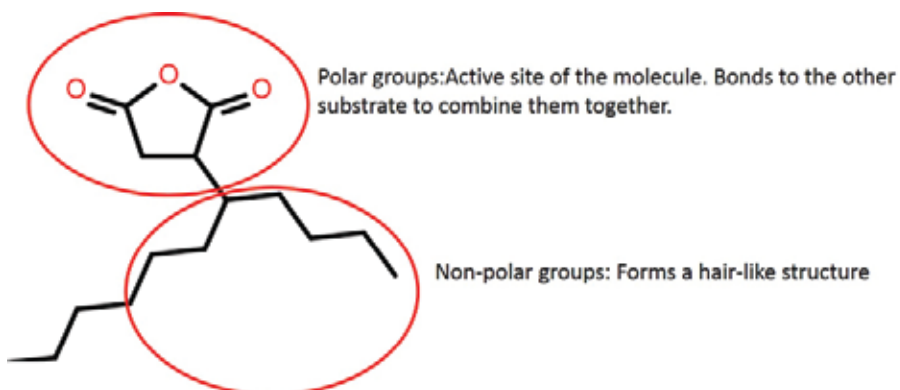
- **Compatibilizer** : Bonds two or more different polymers with each other.
- **Coupling Agent** : Increase the compatibility of polymers with mineral fillers and glass fibers.
- **Impact Modifier** : Increases the impact resistivity of the material.
- **Adhesive Agent** : Bonds the polymers to the metals such as aluminium.





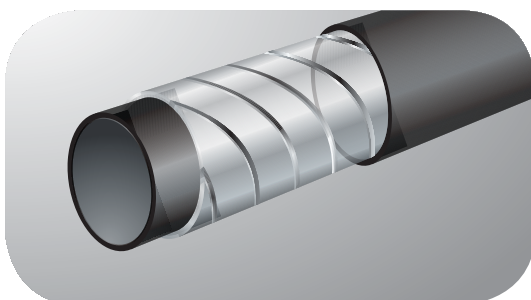
How Olebond Works

Olebond products consist of two part;



Used in:

- Compounding
- Composite Pipes
- Multilayer Pipes with Oxygen Barrier
- Composite Panels
- Cables with flame retardant
- Metal coating
- Co-extrusion
- Cast and Blown Films
- Recycling
- Etc.



Olebond 7401 Grades

Maleic anhydride grafted (MAH) polypropylene.

Olebond 7401 HH / HL / CH

APPLICATIONS: Coupling agent for PP compounds reinforced with glass fiber or other minerals. It is also compatibilizer for PP blends and can be used in coextrusion process. PP can be bonded by using this product with aluminium or steel in pipe production.

Grade	Graft	Melt Flow Index (MFR)*	Grafting Level (%)**	Density (g/cm³)	Melting Point (°C)
		ISO 1133	Tisan Method	ISO 1183	ISO 11357
7401 HH	MA	100	High	0.93	162
7401 HL	MA	30-40	Low	0.93	162
7401 CH	MA	30-40	High	0.93	162

Olebond 7401 R

APPLICATIONS: Adhesive agent for PP based composites. This product combines the polymers with other materials in multi - layer composites and pipes.

Grade	Graft	Melt Flow Index (MFR)*	Grafting Level (%)**	Density (g/cm³)	Melting Point (°C)
		ISO 1133	Tisan Method	ISO 1183	ISO 11357
7401 R	MA	5-10	Low	0.92	154

Olebond 7402 Grades

Maleic Anhydride grafted (MAH) polyethylene.

Olebond 7402 CL-H / CW

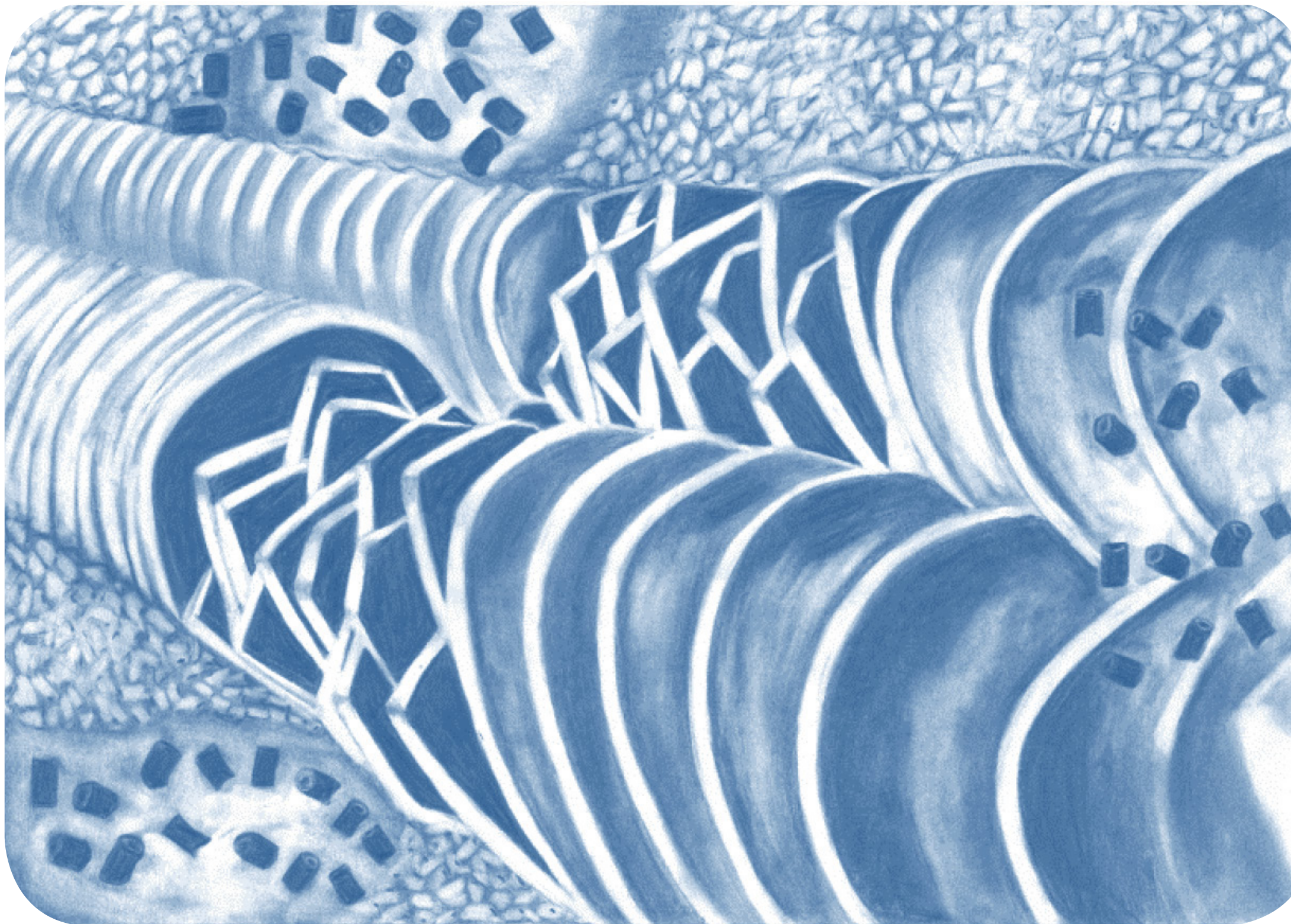
APPLICATIONS: Coupling agent for PE compounds. It is also used in cast / blown film co-extrusion, blow molding, tube co-extrusion of PE. It can be used to bond the polymer matrices in PE blends with other polymers, ATH, MgOH and etc.

Grade	Graft	Melt Flow Index (MFR)*	Grafting Level (%)**	Density (g/cm³)	Melting Point (°C)
		ISO 1133	Tisan Method	ISO 1183	ISO 11357
7402 CL-H	MA	1-3	High	0.95	154
7402 CW	MA	4-6	High	0.93	115

Olebond 7402 AE

APPLICATIONS: Coupling agent for PE compounds. It can be used to bond the polymer matrices in PE blends with other polymer especially polyamides.

Grade	Graft	Melt Flow Index (MFR)*	Grafting Level (%)**	Density (g/cm³)	Melting Point (°C)
		ISO 1133	Tisan Method	ISO 1183	ISO 11357
7402 AE	MA	3-5	High	0.93	122



Compounding

Co- extrusion

Multilayer Pipes

Metal Coating

HFFR Cables

Blow Molding

* 230°C, 2.16 kg, for PP, 190°C, 2.16 kg for PE and EVA, 220°C, 10kg for ABS.
 ** Low: 0.1-0.3%, Medium: 0.3-0.5%, High: 0.5-1%
 *** The color of the product is natural, but it can be also yellowish. The difference in color does not affect the performance of the product.

Olebond 7403 Grades

Maleic anhydride grafted (MAH) polyethylene used as impact modifiers for polyamides compounds.

Olebond 7403 IM-C

APPLICATIONS: Impact modifier for PA compounds even if at low temperature because of its low glass transition temperature below -50°C.

Grade	Graft	Melt Flow Index (MFR)*	Grafting Level (%)**	Density (g/cm³)	Melting Point (°C)
		ISO 1133	Tisan Method	ISO 1183	ISO 11357
7403 IM-C	MA	2.5	High	0.87	-

Olebond 7403 IM-R

APPLICATIONS: Impact modifier for PA compounds at room temperature.

Grade	Graft	Melt Flow Index (MFR)*	Grafting Level (%)**	Density (g/cm³)	Melting Point (°C)
		ISO 1133	Tisan Method	ISO 1183	ISO 11357
7403 IM-R	MA	2.5	High	0.87	-

Olebond 7403 IM-Z

APPLICATIONS: Impact modifier for PA compounds even if at low temperature because of its low glass transition temperature at 0°C

Grade	Graft	Melt Flow Index (MFR)*	Grafting Level (%)**	Density (g/cm³)	Melting Point (°C)
		ISO 1133	Tisan Method	ISO 1183	ISO 11357
7403 IM-Z	MA	2.5	High	0.87	-

Olebond 7404 Grades

Maleic Anhydride (MAH) graftes ABS polymer.

APPLICATIONS: Coupling agent when used in compounds with mineral fillers and glass fiber to strength the physical properties of ABS based compounds. This product also provides compatibility and toughening in PA/ABS and PC/ABS blends.

Grade	Graft	Melt Flow Index (MFR)*	Grafting Level (%)**	Density (g/cm³)	Melting Point (°C)
		ISO 1133	Tisan Method	ISO 1183	ISO 11357
7404	MA	10	Medium	1.05	-

Olebond 7405 Grades

Maleic Anhydride (MAH) grafted EVA polymer

APPLICATIONS: Coupling agent for PE compounds reinforced with glass fiber or other minerals. It is also compatibilizer for PE blends and can be used in coextrusion process. PE can be bonded by using this product with ATH, MgOH, aluminium or steel.

Grade	Graft	Melt Flow Index (MFR)*	Grafting Level (%)**	Density (g/cm³)	Melting Point (°C)
		ISO 1133	Tisan Method	ISO 1183	ISO 11357
7405	MA	3-5	High	0.96	70



Tisan Factory 1

Address:

Ekşioğlu Mah. Yavuz Selim Cad. 86. Sk.
No:4 Alemdağ / İstanbul / TURKEY

Tisan Factory 2

Address:

Ekşioğlu Mah. Atabey Cad. No:24
Çekmeköy / İstanbul / TURKEY

Phone : +90 216 429 36 65

Fax : +90 216 312 14 78

E-mail : tisan@tisan.com.tr