

Sealant PE Film Our wide-ranging Sealant PE films can be selected based on basic properties such as mechanical strength and thermal resistance or even sensory qualities such as texture. These films are renowned as sealants for food packaging and benefit from the proven safety and reliability of Tamapoly product systems.

LL Our diverse LLDPE lineup ranges from medium to ultralow density and fully exhibits the advantages of LLDPE, including its superior strength. We can vary the amount of additives to meet the exact needs of each customer.

| Product | Thickness [μ m] | Additive agent | | | Easy to tear | Features and applications | Tensile strength[MPa] | | Elongation[%] | | Modulus[MPa] | | Tear resistance[N/cm] | | Impact strength [J/cm] | Haze [%] | Gloss [%] | Coefficient of static Inaction Inclined plate method tan θ | Thickness[μ m] | Product |
|--|-------------------|----------------|---------------------|------------|--------------|---|--|----|---------------|-----|-----------------------|-----|-----------------------|-------------|------------------------|----------|-----------|--|----------------|---------|
| | | Slipping agent | Anti-blocking agent | Stabilizer | | | JIS Z 1707 | | JIS Z 1707 | | Conforms to ASTM D882 | | JIS K 7128 | | | | | | | |
| | | | | | | | MD | TD | MD | TD | MD | TD | MD | TD | | | | | | |
| Heat-resistant for semi-retort food | | | | | | | | | | | | | | | | | | | | |
| UH-1 | 40~150 | | | ● | | Suitable for 115°C semi-retort food. Excels at high rigidity and chemical resistance. | 35 | 30 | 700 | 700 | 710 | 950 | 100 | 370 | 90 | 21 | 77 | 0.40 | 50 | UH-1 |
| UB-3 | 35~150 | | | ● | | Suitable for 110°C semi-retort food. Excels at high rigidity and chemical resistance. | 35 | 31 | 690 | 620 | 550 | 780 | 180 | 1200 | 140 | 20 | 82 | 0.50 | 50 | UB-3 |
| NB-1 | 35~150 | | | ● | | Suitable for 110°C semi-retort food. Excels at high rigidity and chemical resistance(C4 type). | 35 | 30 | 620 | 820 | 570 | 740 | 40 | 1700 | 90 | 25 | 59 | 0.40 | 50 | NB-1 |
| Heat-resistant for boiled food | | | | | | | | | | | | | | | | | | | | |
| SE625L | 30~150 | ○ | ● | ● | | Heat-resistant, rigid, and impact-resistant, this film is suitable for packaging heavy objects. | 42 | 42 | 600 | 720 | 380 | 500 | 480 | 2600 | 230 | 16 | 85 | 0.24 | 50 | SE625L |
| SE625N | 40~150 | | ● | ● | | | 42 | 42 | 600 | 720 | 380 | 500 | 480 | 2600 | 230 | 12 | 85 | 0.38 | 50 | SE625N |
| Standard sealant | | | | | | | | | | | | | | | | | | | | |
| UB-1 | 30~60 | ● | ● | ● | | This standard all-purpose C6LLDPE film is available in three slipping-agent variations for different applications. The UB-OB type, with no slipping agent, is suitable for beverage packaging. | 39 | 34 | 700 | 800 | 270 | 390 | 910 | 1700 | 240 | 19 | 80 | 0.19 | 50 | UB-1 |
| UB-1T | 30~150 | ○ | ● | ● | | | 39 | 34 | 700 | 800 | 270 | 390 | 910 | 1700 | 240 | 19 | 80 | 0.40 | 50 | UB-1T |
| UB-OB | 30~150 | | ● | ● | | | 39 | 34 | 700 | 800 | 270 | 390 | 910 | 1700 | 240 | 19 | 80 | 0.65 | 50 | UB-OB |
| MZ-180 | 50~100 | | ● | ● | | Featuring good anti-pinhole strength and flexibility, this film is suitable for BIB and has no additive agents on the contact surface. | 32 | 29 | 700 | 800 | 140 | 190 | 1200 | 1400 | 450 | 23 | 68 | 0.65 | 55 | MZ-180 |
| LC-2 | 30~60 | ● | ● | ● | ○ | This film uses easy-to-cut C4LLDPE material that is superior to LDPE types in terms of strength and sealing properties. | 37 | 32 | 650 | 900 | 270 | 380 | 130 | 1200 | 170 | 9 | 110 | 0.25 | 50 | LC-2 |
| LC-2T | 30~150 | ○ | ● | ● | ○ | | 37 | 32 | 650 | 900 | 270 | 380 | 130 | 1200 | 170 | 9 | 110 | 0.31 | 50 | LC-2T |
| Low-temperature sealant | | | | | | | | | | | | | | | | | | | | |
| SE620M | 30~60 | ● | ● | ● | | As this film contains only a small fraction of low molecular weight material, it excels at low-temperature sealing but does not cause blocking. It contains metallocene polymer that offers both laminating and slipping stability. There are four slipping agent variations, enabling the optimum grade to be selected depending on the application and thickness. | 45 | 45 | 610 | 700 | 230 | 320 | 550 | 1800 | 380 | 17 | 75 | 0.15 | 50 | SE620M |
| SE620L | 30~150 | ○ | ● | ● | | | 45 | 45 | 610 | 700 | 230 | 320 | 550 | 1800 | 380 | 17 | 75 | 0.27 | 50 | SE620L |
| SE620A | 30~150 | △ | ● | ● | | | 45 | 45 | 610 | 700 | 230 | 320 | 550 | 1800 | 380 | 17 | 75 | 0.35 | 50 | SE620A |
| SE620N | 30~150 | | ● | ● | | | 45 | 45 | 610 | 700 | 230 | 320 | 550 | 1800 | 380 | 17 | 75 | 0.70 | 50 | SE620N |
| MZ-710U | 35~60 | ● | ● | ● | ○ | | This film is characterized by MDPE-like rigidity, but is easy to tear. | 26 | 38 | 120 | 630 | 340 | 340 | 100(※Notes) | 110(※Notes) | 650 | 12 | 86 | 0.23 | 40 |
| MZ-521 | 50~60 | ● | ● | ● | | A grade with both low-temperature sealing and rigidity. | 40 | 41 | 690 | 790 | 340 | 420 | 650 | 2200 | 230 | 15 | 88 | 0.18 | 60 | MZ-521 |
| UB-106 | 30~60 | ● | ● | ● | | This film excels at low-temperature sealing, flexibility, impact resistance, and pinhole resistance. It is best suited for use as standing pouches for beverages and automatic packaging machines. | 41 | 37 | 700 | 780 | 210 | 290 | 1000 | 2000 | 400 | 14 | 86 | 0.25 | 50 | UB-106 |
| UB-106T | 30~150 | ○ | ● | ● | | | 41 | 37 | 700 | 780 | 210 | 290 | 1000 | 2000 | 400 | 14 | 86 | 0.40 | 50 | UB-106T |
| Ultralow-temperature sealant | | | | | | | | | | | | | | | | | | | | |
| LK410M | 30~60 | ● | ● | ● | ○ | This film features sealing properties equivalent to those of UL-1, is easy to cut, and is best suited for stick packaging. | 30 | 27 | 700 | 790 | 150 | 210 | 220 | 550 | 190 | 10 | 82 | 0.18 | 50 | LK410M |
| LK410L | 30~150 | ○ | ● | ● | ○ | | 30 | 27 | 700 | 790 | 150 | 210 | 220 | 550 | 190 | 10 | 82 | 0.40 | 50 | LK410L |
| MZ-250 | 30~50 | ● | ● | ● | ○ | This film combines high-speed tilling capability with easy horizontal cutting and is best suited for stick packaging. | 25 | 22 | 240 | 710 | 220 | 360 | * | 410 | 180 | 7 | 99 | 0.13 | 40 | MZ-250 |
| UL-1 | 30~60 | ● | ● | ● | | This standard VLDPE film is flexible, impact-resistant and offers ultralow-temperature sealing properties. | 42 | 37 | 600 | 750 | 150 | 220 | 800 | 1530 | Non-breakable | 18 | 73 | 0.20 | 50 | UL-1 |
| SE605M | 30~60 | ● | ● | ● | | This VLDPE uses metallocene polymer and is suitable for packaging soups. | 52 | 47 | 650 | 750 | 110 | 160 | 750 | 1300 | Non-breakable | 11 | 89 | 0.17 | 50 | SE605M |
| LD As a basic form of polyethylene, LDPE features a simple structure that enables wide-ranging usage. | | | | | | | | | | | | | | | | | | | | |
| V-1 | 30~200 | ● | ● | ● | | This standard LDPE balances strength, heat resistance and slipping properties. V-1 is treated with corona and V-2 is not. | 24 | 19 | 360 | 590 | 290 | 340 | * | 560 | 160 | 10 | 92 | 0.31 | 50 | V-1 |
| V-2 | 30~200 | ● | ● | ● | | | 24 | 19 | 360 | 590 | 290 | 340 | * | 560 | 160 | 10 | 92 | 0.31 | 50 | V-2 |
| EVA | | | | | | | | | | | | | | | | | | | | |
| SB-5 | 30~150 | ● | ● | ● | | This 5% EVA film with good transparency and slip withstands boiling up to 85°C. | 22 | 15 | 230 | 480 | 170 | 220 | * | 500 | 220 | 9 | 94 | 0.25 | 50 | SB-5 |
| SB-7 | 35~100 | ● | ● | ● | | This 7% EVA film with low-temperature sealing and flexibility is suitable for soups. | 25 | 16 | 230 | 500 | 120 | 170 | * | 400 | 240 | 13 | 75 | 0.26 | 50 | SB-7 |

Functional PE Film This product lineup makes use of a manufacturing method adapted to limited production of a wide variety of products specialized for pinpointed needs. Although specialized, these products also combine high functionality with stable performance as they are designed with consideration to general usability.

Static charge

| Product | Thickness [μ m] | Additive agent | | | Easy to tear | Features and applications | Tensile strength[MPa] | | Elongation[%] | | Modulus[MPa] | | Tear resistance[N/cm] | | Impact strength [J/cm] | Haze [%] | Gloss [%] | Coefficient of static Inaction Inclined plate method tan θ | Thickness[μ m] | Product |
|---|-------------------|----------------|---------------------|------------|--------------|---|-----------------------|----|---------------|-----|-----------------------|------|-----------------------|---------------|------------------------|----------|-----------|--|----------------|--------------|
| | | Slipping agent | Anti-blocking agent | Stabilizer | | | JIS Z 1707 | | JIS Z 1707 | | Conforms to ASTM D882 | | JIS K 7128 | | | | | | | |
| | | | | | | | MD | TD | MD | TD | MD | TD | MD | TD | | | | | | |
| LA-7 | 30~70 | | ● | ● | ○ | Standard-sealant type antistatic film | 42 | 33 | 600 | 800 | 320 | 440 | 150 | 1400 | 170 | 20 | 80 | 0.32 | 50 | LA-7 |
| LA-9 | 30~60 | | ● | ● | ○ | Ultralow-temperature-sealant type antistatic film | 29 | 26 | 760 | 850 | 140 | 170 | 220 | 610 | 180 | 9 | 86 | 0.39 | 50 | LA-9 |
| LD | | | | | | | | | | | | | | | | | | | | |
| VE-7 | 30~50 | | ● | ● | | General type antistatic film | 27 | 19 | 230 | 660 | 290 | 380 | * | 520 | 170 | 12 | 91 | 0.36 | 40 | VE-7 |
| VE-7F | 30~80 | | ● | ● | | VE-7F contains half the usual antistatic additive. | 27 | 19 | 230 | 660 | 290 | 380 | * | 520 | 170 | 12 | 91 | 0.45 | 40 | VE-7F |
| No Additive agents This molded film contains no additive agents and generates very little decomposition byproduct. | | | | | | | | | | | | | | | | | | | | |
| LL | | | | | | | | | | | | | | | | | | | | |
| SF625P | 30~100 | | | | | This standard sealant type film contains no additive agents. | 44 | 41 | 730 | 820 | 370 | 520 | 190 | * | 180 | 12 | 85 | 0.61 | 50 | SF625P |
| SK615P | 30~130 | | | | | This low-temperature sealant type film contains no additive agents. | 27 | 27 | 560 | 780 | 180 | 250 | 280 | * | 160 | 26 | 63 | 0.90 | 50 | SK615P |
| LD | | | | | | | | | | | | | | | | | | | | |
| A-1 | 35~150 | | | | | This film transfers minimal taste to package contents, making it ideal for beverages such as alcohol, juice, and mineral water. | 19 | 18 | 330 | 620 | 270 | 350 | * | 310 | 90 | 26 | 56 | 0.55 | 50 | A-1 |
| AJ-1 | 40~150 | | | | | | 31 | 22 | 340 | 650 | 230 | 290 | * | 400 | 200 | 11 | 83 | 1.22 | 50 | AJ-1 |
| Ionomer, EMAA | | | | | | | | | | | | | | | | | | | | |
| HM-52 | 30~150 | | | ● | | This film excels at sealing strength and hot tack strength and offers excellent adhesion to metal. | 34 | 24 | 140 | 510 | 220 | 310 | * | 220 | 310 | 18 | 60 | 1.60 | 50 | HM-52 |
| NC-5 | 30~100 | ● | ● | ● | | This film features low-temperature sealing, anti-blocking properties, and good heat adhesion. | 37 | 22 | 230 | 480 | 180 | 250 | * | 400 | 330 | 15 | 70 | 1.40 | 40 | NC-5 |
| HD | | | | | | | | | | | | | | | | | | | | |
| HD | 40~200 | | | ● | | This film features paper-like opacity, ample slip, and moistureproof qualities. | 40 | 33 | 580 | 350 | 1110 | 1540 | 50 | 300 | 40 | 70 | 17 | 0.28 | 50 | HD |
| HS31 | 30~100 | | | ● | | This film features moderate rigidity and sealing strength and was developed for wrapping the straw attached to paper-pack drinks. | 42 | 25 | 580 | 5 | 990 | 1460 | 19 | * | 20 | 27 | 60 | 0.28 | 30 | HS31 |
| Coloring | | | | | | | | | | | | | | | | | | | | |
| SE620L white | 30~150 | ○ | ● | ● | | This white coloring film is based on SE620L. | 41 | 47 | 660 | 760 | 250 | 350 | 910 | Non-breakable | 330 | Coloring | Coloring | 0.45 | 80 | SE620L white |
| LD-BLACK | 40~70 | ● | ● | ● | | This black coloring film is based on LD. | 31 | 16 | 220 | 640 | 370 | 560 | 30 | 760 | 130 | Coloring | Coloring | 0.15 | 40 | LD-BLACK |
| HD white | 50~100 | | | ● | | This white coloring film is based on HD. | 43 | 30 | 650 | 600 | 1000 | 1390 | 50 | 620 | 50 | Coloring | Coloring | 0.31 | 60 | HD white |
| V-4 white | 50~160 | | | ● | | This white coloring film is based on V-4. | 21 | 17 | 270 | 600 | 240 | 330 | * | 350 | 140 | Coloring | Coloring | 0.53 | 60 | V-4 white |

High-precision PE Film Tamapoly's flagship lineup continues to challenge the field of high precision once considered impossible for polyethylene. This film, made possible by the latest production facilities and ever-improving production technologies, is utilized in cutting-edge electronics.

Masking Base

| Product | Thickness [μ m] | Features and applications | Tensile strength[MPa] | | Elongation[%] | | Modulus[MPa] | | Tear resistance[N/cm] | | Impact strength [J/cm] | Haze [%] | Gloss [%] | Coefficient of static Inaction Inclined plate method tan θ | Thickness[μ m] | Product |
|----------|-------------------|--|-----------------------|----|---------------|-----|-----------------------|-----|-----------------------|-----|------------------------|----------|-----------|--|----------------|----------|
| | | | JIS Z 1707 | | JIS Z 1707 | | Conforms to ASTM D882 | | JIS K 7128 | | | | | | | |
| | | | MD | TD | MD | TD | MD | TD | MD | TD | | | | | | |
| M-6 | 50~100 | This film is used to protect surfaces as a base material with an adhesive coating. | 22 | 19 | 250 | 690 | 300 | 410 | * | 340 | 120 | 28 | 46 | 0.51 | 50 | M-6 |
| M-6 blue | 50~100 | This blue coloring film is based on M-6. | 24 | 21 | 300 | 610 | 310 | 450 | * | 270 | 130 | 29 | 45 | 0.45 | 50 | M-6 blue |

Self-adhesive Masking

| | | | | | | | | | | | | | | | | |
|-------|--------|--|----|----|-----|-----|-----|-----|---|-----|-----|----|-----|------|----|-------|
| PT691 | 50~100 | Since adhesive is not applied, resistance against surface contamination is outstanding. Re-tacking ability is also excellent, and there are few defects such as contaminants or fish-eye appearance. | 22 | 21 | 400 | 700 | 300 | 390 | * | 500 | 130 | 12 | 82 | 0.58 | 60 | PT691 |
| PT810 | 40~60 | LLDPE is used as the adhesive, providing enhanced resistance against surface contamination compared to earlier EVA protective films. The increase in adhesiveness is limited under high humidity, making excess adhesion unlikely. | 27 | 29 | 450 | 710 | 240 | 300 | * | 950 | 170 | 6 | 135 | 1.23 | 50 | PT810 |

Note: Additive agent ● : Standard, ○ : Reduced, △ : Further reduced

Notes: The above figures are typical values only. Asterisks

(*) indicate that measurement was not possible, or that measured results were beyond scale limits.