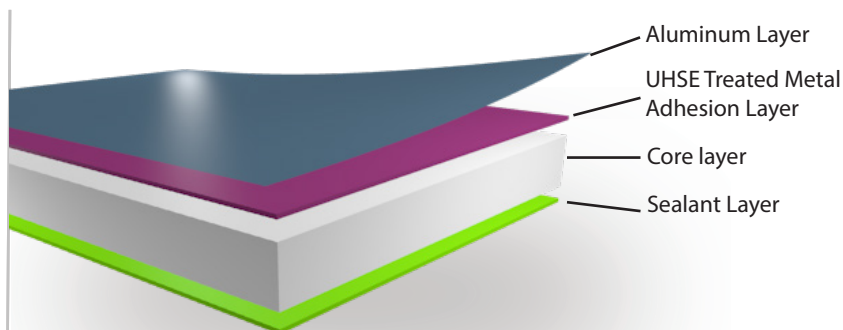


# TORAYFAN<sup>®</sup> PWX4

## Applications

- Confections
- Snacks
- Bakery
- Pet food
- Ag/Chem
- Medical



ONE SIDE HEAT SEALABLE,  
ONE SIDE METALLIZED  
BOPP FILM

## Summary

One side vacuum deposited Aluminum on Toray's Ultra High Surface Energy (UHSE), one side heat sealable. Designed as an inside moisture and oxygen barrier metallized BOPP film for gas flushed applications. Superior barrier durability during bag making.

## Technical Data \*

| PROPERTIES                               | METHOD     | UNITS                      | TYPICAL VALUES     |         |         |         |         |
|------------------------------------------|------------|----------------------------|--------------------|---------|---------|---------|---------|
| Thickness                                | -          | 0.00001"                   | 60                 | 70      | 80      | 100     |         |
| Nominal Yield                            | -          | in <sup>2</sup> /lb        | 51,500             | 44,000  | 38,300  | 30,500  |         |
| Tensile Strength at Break                | MD         | ASTM D882                  | lb/in <sup>2</sup> | 21,500  | 21,500  | 21,500  | 21,500  |
|                                          | TD         |                            |                    | 45,500  | 45,500  | 45,500  | 45,500  |
| Young's Modulus                          | MD         | ASTM D882                  | lb/in <sup>2</sup> | 316,000 | 316,000 | 316,000 | 316,000 |
|                                          | TD         |                            |                    | 548,000 | 548,000 | 548,000 | 548,000 |
| Elongation at Break                      | MD         | ASTM D882                  | %                  | 200     | 200     | 200     | 200     |
|                                          | TD         |                            |                    | 60      | 60      | 60      | 60      |
| Heat Shrinkage<br>(284°F for 15 minutes) | MD         | ASTM D1204                 | %                  | 8       | 8       | 8       | 8       |
|                                          | TD         |                            |                    | 5       | 5       | 5       | 5       |
| Coefficient of Friction (Sealant Side)   | ASTM D1894 | $\mu_s$                    | 0.66               | 0.66    | 0.66    | 0.66    |         |
|                                          |            | $\mu_d$                    | 0.45               | 0.45    | 0.45    | 0.45    |         |
| Heat Seal Strength @ 250°F               | 1          | g/in                       | 380                | 430     | 430     | 430     |         |
| Seal Initiation Temp (>200g/in)          | 1          | °F                         | 185                | 185     | 185     | 185     |         |
| MVTR - 100°F, 90% RH                     | ASTM F1249 | g/100in <sup>2</sup> /day  | 0.005              | 0.005   | 0.01    | 0.01    |         |
| O <sub>2</sub> Barrier - 73°F, 0% RH     | ASTM D3985 | cc/100in <sup>2</sup> /day | 0.6                | 0.6     | 0.6     | 0.6     |         |

1 Sentinel Sealer model 12 ASL, 0.5 sec, 20 psi. UPPER: flat, Teflon™ coated. LOWER: rubber with glass cloth, unheated

The product described is covered by one or more of the following patents or patents pending:  
US 6844078, US 6916526, EP1474289

## Key Features

- Excellent oxygen barrier - gas flushable
- Superior moisture barrier
- Superior barrier durability after bag making
- Non craze metal surface
- Increased oil resistance
- Increased stiffness and puncture resistance
- Excellent hot tack and wide heat seal range

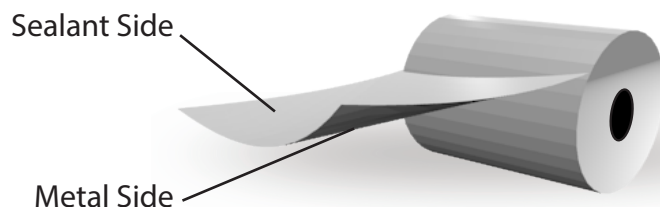
## Similar Products

- PMX2
- PWS3
- PWX3
- PCSF

## Typical Structures

- F61W/ink/PE or ADH/PWX4
- F62W/ink/PE or ADH/PWX4
- PA10/ink/PE or ADH/PWX4
- O.L./ink/PWX4
- O.L./ink/Paper/PE/PWX4

## Winding Direction



## \* These values do not constitute specific binding specifications

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