

PolyE 4000D

Direct thermal, polyethylene, recyclable label with permanent acrylic adhesive

As of December 2018, 87 billion packages were delivered annually, with that number only expected to grow.* A significant amount of these use polyethylene air-filled padded envelopes as packaging. As e-commerce and package deliveries continue to grow, so does the global concern for our environment. When a paper shipping label is adhered to these air-filled mailers, the package becomes non-recyclable unless the label is cleanly removed. Unfortunately, label removal is no easy task, making it almost impossible to properly recycle any of this type of packaging. Zebra's PolyE 4000D material is a direct thermal polyethylene label, which, when adhered to the common polyethylene packages, enables the package to be easily recycled by the consumer. When you choose to utilize Zebra's PolyE 4000D label for your shipping needs, you are demonstrating your dedication to helping our environment, while keeping operations running smoothly with the consistently exceptional performance you have come to know from a Zebra Certified label.



Count on Consistently Exceptional Performance with Zebra Certified Supplies

Printing supplies can impact everything from printhead lifespan to operational efficiency. That's why we design, produce and rigorously pre-test our own line of thermal printing supplies to ensure consistent, optimized performance. We utilize an ISO 9001 certified, 23-point quality inspection to ensure consistent quality — and we never swap out materials. No matter when you order your labels, you can count on the same great performance.

Environmentally-Friendly

When a standard shipping label is adhered to the common air-filled padded envelopes, even if it is put in a recycling bin, it won't be recycled. It is considered "dirty" by recyclers as it contains two totally different materials — in many cases a paper label on a polyethylene mailer. Our PolyE 4000D label eliminates this environmentally damaging problem. When direct thermal, polyethylene labels are utilized on packaging, it enables consumers to simply throw the entire package in the recycle bin with the label on it instead of crowding our landfills by throwing common packaging in the garbage.

No Label Removal Needed

Zebra's PolyE 4000D saves time by eliminating the need for label removal. In order to recycle a majority of the packaging utilized today, consumers need to use scissors to cut the label off. The PolyE 4000D is recyclable, without any label removal needed, saving you time and frustration.

Ensure Long-Term Adhesion

With a permanent acrylic adhesive that offers excellent adhesion on polyethylene packaging and resistance to chemicals, PolyE 4000D labels are ideal to meet your shipping applications while keeping your sustainability efforts in mind.

Specifications

Material Construction		
Facestock	3.2 mil direct thermal polyethylene	
Adhesive	Permanent acrylic	
Liner	40 lb paper liner	
Total Thickness (+/- 10%)	6.3 mil	
Environment	Indoor use	
Temperature Performance		
Minimum Application Temperature	29° F/ -29° C	
Service Temperature Range	-65° F to 131° F/-54° C to 55° C	
Recommended Printers and Ribbons		
Printers	All Zebra thermal printers	
Ribbons	N/A	
Adhesive Strength		
Corrugate	5 minute dwell time: 15 oz/in 24 hour dwell time: 21 oz/in	
Steel	5 minute dwell time: ** 24 hour dwell time: **	
Polycarbonate	5 minute dwell time: 30 oz/in 24 hour dwell time: 58 oz/in	
Polyethylene	5 minute dwell time: 25 oz/in 24 hour dwell time: 37 oz/in	
Chemical Resistance		
Weak Chemicals		
Blood	Test in your application	
Body Fluid	Test in your application	
Salt Water	Test in your application	
Water	Test in your application	
Window Cleaner	Not Recommended	
Moderate Chemicals		
Alcohol	Not Recommended	
Ammonia	Not Recommended	
Bleach	Not Recommended	
IPA	Not Recommended	
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Harsh Chemicals	
Gasoline	Not Recommended
Grease	Not Recommended
Extreme Chemicals	
Acetone	Not Recommended
IR Reflow	Not Recommended
MEK	Not Recommended
TCE	Not Recommended
Xylene	Not Recommended
Product Performance & Suitability	
Recommended storage Conditions	One year duration, when stored at 72° F /22° C at 50% RH
Expected Life Span in Application	Indoor use, for 1 year

Material Testing in End Application

The information contained in this document is to be used for guidance only and is not intended for use in setting specifications. All purchasers of Zebra products shall be solely responsible for independently determining if the product conforms to all requirements of their unique application. All products should be pre-tested to ensure they meet all intended requirements of specific end-use applications.

Footnotes

- * Pitney Bowes Parcel Shipping Index (https://www.pitneybowes.com/us/shipping-index).
- ** Indicates that attraction between adhesive and surface is so great that the facestock rips. Tests performed at room temperature.

Markets and Applications

Transportation & Logistics

Shipping and receiving

