

Helping customers select labels for Eastman Tritan™ copolyester

We recommend customers use labels with films manufactured from PET (Mylar®), polystyrene, polyethylene, polypropylene, or paper. We do not recommend customers use labels manufactured from polyvinyl chloride film, commonly referred to as vinyl or PVC. Additional considerations and discussions with the label supplier are recommended for specialized labels (e.g., repositionable labels) to ensure the correct combination of properties.

Eastman does not recommend specific labels given the large number of labels and label suppliers in the market. However, general guidelines are discussed in this white paper. Note this technology is very mature and the customer's current label supplier should be able to help select an appropriate label for Eastman Tritan™ copolyesters.

Customers should be prepared to discuss the following information with their adhesive supplier to help them select a label:

- 1. The customer should determine whether the label needs to be:
 - a. Semipermanent (standard), removable (removed cleanly), repositionable, tamperproof or "static cling"
 - b. Clear or opaque
- 2. The customer should request the following types of face stock (AKA film backing):
 - a. PET (Mylar)
 - b. Polyethylene
 - c. Polypropylene
 - d. Paper
 - e. Not PVC
- 3. The substrate is plastic (Tritan).
- 4. Whether the customer prints their own labels.
- 5. For permanent labels, the "sticky" pressure sensitive adhesive (PSA) does not need to be specified. However, specialized labels (e.g., removable, repositionable, static cling) not designed to semipermanently adhere to the substrate have unique performance requirements which should be discussed with the label supplier.

The type of face stock is critical for all adhesive labels. We recommend the customer use labels with films manufactured from PET (Mylar), polyethylene, polypropylene, or paper. We do not recommend the customer use labels manufactured from polyvinyl chloride, commonly referred to as vinyl or PVC. PVC-based labels can contain plasticizers which are aggressive to a range of thermoplastics, copolyesters, and specifically Tritan being no exception.

The actual pressure sensitive adhesive, either a hot-melt adhesive, solventborne acrylic, or waterborne acrylic is not critical for semipermanent labels. In contrast, the adhesive is very important for specialized labels. For example, a repositionable label must not adhere too strongly so that it can be removed easily while also not leaving any adhesive residue. A tamperproof label must adhere strongly to damage the label during removal. Note that static cling labels appear to not have adhesive; however, there is a very thin layer of adhesive.

If the customer prints the label graphics themselves on a desktop printer, inkjet printers are used in combination with vinyl face stock and laser printers are used in combination with polyester face stock. Typically, inkjet printers are used where more vivid color graphics are required or for weather resistance.

We cannot recommend specific products because there are numerous label suppliers. However, the aforementioned technology is very common and the customer's supplier will be readily able to help them select a label. Note that vinyl labels tend to be slightly more expensive than PET (Mylar), polyethylene, polypropylene, or paper labels. Also of interest are environmental friendly labels manufactured from polylactic acid (PLA) and postconsumer waste.

For specific recommendations, contact Applications
Development (AD) or work through the label suppliers using the aforementioned specifics.



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