Converting Hammerlock™ and TL2 Products

Hammerlock™ and TL2 are highly aggressive, permanent, rubber-based adhesive formulations designed specifically for difficult-to-label surfaces. The recommended format for pressure-sensitive constructions made with these adhesives is butt cut labels that are intended to be hand applied.

Die cutting and matrix stripping is not recommended or warranted for constructions made with these adhesives. Their inherently higher liner release and cold flow characteristics cause frequent matrix breaks and adhesive build-up on tooling and press rollers. Finished labels made with Hammerlock™ and TL2 adhesives might ooze around the die cut edges, resulting in labels that might stick together. Also, adhesive could transfer onto label application equipment or inside of secondary printing equipment which can cause permanent damage.

If the convertor or end user elects to assume all liability associated with the manufacture and use of die cut labels made from these adhesives, the following suggestions are offered without guarantee:

- Unconverted rolls should be stored in a cool, dry, dark environment and maintained under these conditions 48 hours prior to converting. The rolls should be stored upright to avoid the edge damage that can occur when the slit edges become tacky and bond to a flat surface, like the floor or a pallet.
- Tooling should be sharp and well maintained to ensure a clean and complete die cut.
- The blueprinting method should be used to evaluate die cut quality by removing a full repeat of labels from the liner and staining the silicone side. The stain should make visible a light, even impression on the liner for every cavity in the die, but the mark made by the die blade should not be so deep that the stain bleeds through the silicone coating and into the paper liner.
- Keep press drying temperatures and UV power settings as low as possible while still maintaining ink cure to avoid softening of the adhesive from heat exposure. Keep web tensions and nip pressures low to avoid squeezing the adhesive out from under the facestock.
- The use of chilled press rollers can help keep the web cool, which makes the adhesive more firm and results in a cleaner die cut. Similarly, refrigeration of slit rolls prior to converting can help improve die cutting success.
- Matrix stripping should be accomplished as close to the die cutting process as possible to prevent the adhesive from flowing back together.
- Watch for “legging” of the adhesive during matrix stripping, which indicates the adhesive was not completely cut or is flowing back together. Legging is seen as small strings of adhesive which form a web between the waste matrix and the die cut edge of the label at the point of stripping. These strings can snap back onto the facestock when they break, resulting in labels that stick to the back side of the liner in roll or sheet form or labels that stick to each other when being fan-folded.
- If legging cannot be avoided using the previously described methods, try “dispensing the matrix.” This technique is accomplished by pulling the matrix horizontally out of the die while pulling the liner with labels attached downward, away from the matrix, at a very slight angle. By making the process very gradual, it helps keep the adhesive strings at the label edges and also improves the probability of them being pulled away with the matrix instead of whipping up and landing on the facestock.
- If all other stripping methods fail, the application of heat while running the press very slowly has, on occasion, proven successful. When doing this, combine it with the “dispensing the matrix” technique.
- Matrix stripped rolls of labels should be wound loosely and stored on their sides, like a pancake, to avoid ooze caused by the downward weight of the roll on the labels. Finishing should be done immediately after printing.
- If fan-folding, avoid making excessively high label stacks. Three- to four-inch stacks are acceptable for most applications. Stacks need to be packaged in a box that prevents the stack from sliding side-to-side during transport. It also should be sturdy and slightly underfilled to prevent the labels from being compressed when stacked under the weight of other boxes.
- Make certain to keep converted labels stored away from heat and direct sunlight.

Visit www.label.averydennison.com for our warranty statement and terms and conditions.

1835, 04/14, PDF

AVERY DENNISON

Label and
Packaging Materials

Asia Pacific
32/F., Skyline Tower
39 Wang Kwong Road
Kowloon Bay,
Kowloon, Hong Kong
+852 2802-9618

Europe
Lammenschansweg 140
2321 JX Leiden
The Netherlands
+31 71/579-4100

Latin America
Rodovia Vinhedo-
Viracopos, KM 77
CEP 13280-000
Vinhedo - SP, Brazil
+55 19 3876-7600

North America
8080 Norton Parkway
Mentor, OH 44060
800.944.8511