Clear Recyclable SUP 400 SB

Avery Dennison Clear Recyclable SUP 400 SB is a surface printable, clear 2-ply polyethylene lamination. Corona treatment and high contact clarity allow for high quality printing and pouch converting. It's designed for pre-formed stand up pouches, but can also be used in form-fill-seal applications. This structure has been pre-qualified for the “How2Recycle” program.

Structure
Clear Recyclable SUP 400 SB (spec B1900) 150 Gauge Polyethylene / Solvent Less Adhesive/ 250 Gauge Polyethylene

Material Handling
Roll stock has minor memory compared to polyester faced laminations. Unwind tensions may need to be adjusted. Excessive tension during unwinding can lead to registration problems during processing. Driven unwinds are preferred to control tension, but are not required as long as tension is constant. Bagginess can occur if the tensions are inconsistent or not controlled.

Printing Recommendations
- Heat resistant film inks and varnishes designed for flexible packaging applications are strongly recommended.
- Printing an all polyethylene lamination can be sensitive, however, the polyethylene used in this structure displays robust dimensional stability designed to minimize the risk of registration issues due to lamination stretch.
  - Material was accelerated age tested in laboratory ovens (1400 F/6 weeks) and showed no signs of dimensional property loss or a reduction in adhesion lamination bond strength.
- This structure has been test printed using the following methods:
  - Flexographic water-based and UV
  - HP Digital, & Ebeam
  - Solvent

Overprint Varnish Considerations
- OPV must be used to protect the ink from the form-fill-seal process as well as scuffing and abrasion during distribution.
- Recommendation: CAI’s Hercubond Series—Matte/Gloss
- Use of low odor, low migration OPV is highly recommended.
- OPV should carry a surface COF that is designed to run well on packagers equipment.

Processing – Sealing
- Packaging formats and end use applications may require different machines settings relative to the form-fill-seal process.
- Like most flexible packaging structures, heat, pressure and dwell time are required with this product to create hermetic seals within the final package.
  - Temperature may vary depending upon equipment and packaging format. However, a good starting recommendation is 320°F - 325°F.
  - We recommend initial dwell be set at .5 seconds. However, depending on seal performance and line speed, adjustments may extend as far as 1 second dwell time.
  - Recommended pressure for this structure ranges between 40-60 psi.
- Material has been successfully form-filled-sealed on the following packaging equipment:
  - Pre-made Pouches: Totani, Mamata, Waterline, and B&B
  - Totani has noted that they have been running PE/PE laminations for several years and have recommendations for specific settings
  - HFFS: Campbell, Effytec, Laudenberg
  - VFFS: Matrix
Troubleshooting

- Finding the optimum balance of temperature, dwell, and pressure to achieve your desired outcome may require adjustments. This is especially true when working with PE/PE structures vs. PET/PE structures.
- Should the laminate show signs of stretch after sealing:
  - Seal temperature may be too high
  - Dwell may be too long
  - Minor tension adjustments may be necessary as well.
- Material feels soft or warm
  - This is uncommon, but may require the package to be cooled immediately after sealing.

Target Performance of Clear Recyclable SUP 400 SB

*Please note, each end use application must be certified. As with all flexible packaging applications, fit for use testing is required.