



# ClingZ® & ClingZ® VersaLiner II

by ClingZ, Inc.

## Design, Production, Storage & Handling Guidelines

*For best results, follow these guidelines for design, production, handling and storage of ClingZ® & ClingZ® VersaLiner II*

*Properly conditioning and fully testing the product prior to the actual production run will guarantee the best possible results.*

### Design & Production Recommendations

- **Ink Usage:** Always use inks that are suitable for printing on thin polypropylene substrates. Perform ink draw down to test surfaces before printing. Minimize amount of alcohol (7 to 10%) in fountain solution. Adding drying stimulators to fountain solution is not recommended. Keep water levels low to eliminate ink emulsification and drying issues. Maximum total ink density of 220% in the color build with a line screen of 150-175 are recommended. Low tack inks are recommended. Process ink builds are preferred over PMS ink for large coverage.
- **Recommended Conventional Offset Inks:**
  - Great Western:** 800-735-3381 (Hi-tech soy based inks): Black - tack 12, Cyan - tack 10, Magenta - tack 11, Yellow - tack 9
  - Inx International:** 877-267-0303 (Low Voc CZ Hardri Inks): 1321454-1310 OSF Pro. Black, 1321584-1310 OSF Pro. Cyan, 1321638-1310 OSF Pro. Magenta, 1321689-1310 OSF Pro. Yellow
  - Ink Systems:** 323-720-4000 (S/F ClingZ Process Inks): Black SK-16054, Cyan SB-16053, Magenta SR-16052, Yellow – SY-16051
  - Superior Printing Ink Co.:** 630-543-9770: Black AE-1658, Blue MBE-8718, Red DRE-1481, Yellow YC-3897, White W-1674
  - Sun Chemical/Kohl & Madden:** 866-786-2251 (Super Dry Inks): Super-Dry Process Black 90989737, Super-Dry Process Cyan 90989780, Super-Dry FR Process Magenta 90989781, Super-Dry FR Process Yellow 90989735, Opaque White O/S CY 8411
  - Toyo Ink:** 866-969-8696 (TSP 400 Low Tack Version): Black TSP 400, Cyan TSP 400, Magenta TSP 400, Yellow TSP 400, White TSP 400
  - Western Printing Ink:** 916-325-1890 (Plastic Series): K=XB-443 tack 14, C=X-6532 tack 12, M=X01284 tack 11, Y=X-24-52 tack 9
- **ClingZ®:** ClingZ® is a 2 mil polypropylene film tipped onto a 10pt. paper backer. Run at press speeds of 7000-8000 IPH.
- **ClingZ® Glue Lines:** ClingZ® has a solid glue line on the gripper edge and an intermittent glue line on the opposite edge. Load the solid glue line to the gripper when feeding. Trimming glue lines prior to printing is not recommended.
- **ClingZ® VersaLiner II:** ClingZ® with VersaLiner has a full contact 8pt. C1S board backed liner. The liner is fully printable on the back side. Run at press speeds of 7000-8000 IPH.
- **UV Inks & UV Coatings:** UV inks and UV coatings are not recommended and may cause loss of charge or curling. Contact GPA for more information on how UV inks and coatings may affect ClingZ® and ClingZ® VersaLiner II.
- **Aqueous Coatings:** Aqueous coatings are not recommended and may cause loss of charge or curling. Contact GPA for more information on how aqueous coatings may effect ClingZ® and ClingZ® VersaLiner II.





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### Design, Production, Storage & Handling Guidelines – continued

- **Volatile Organic Chemicals (VOC's):** The off-gassing of VOC's will cause wrinkling and charge loss in the material. Exposing ClingZ® and ClingZ® VersaLiner II to any type of VOC's (i.e. fresh packaging, freshly painted material, fountain solutions, etc.) is not recommended.
- **Spray Powder:** Spray powders can be used. Larger grain sizes are recommended (a minimum of 50 micron for ClingZ®, and a minimum of 60 micron for ClingZ® VersaLiner II).
- **Lift Height:** On the delivery end of the press, always tray loads in small lifts (250 sheets or less). Smaller lifts will help to reduce offsetting and maximize airflow through the load to accommodate drying of the printed material. Use last unit (before delivery) as blanking unit with no print, use of a light impression setting will help sheets deliver flatter.
- **Air Flow:** Increase air flow, if needed, to separate sheets in the load at the feed end of the press.
- **Static Eliminators:** Do not use static eliminators or static control devices (bars, sprays, tinsel, etc.). Avoid exposure in all printing & packaging processes.
- **Heat:** Heat and IR's on the press should be turned off. The inks recommended by ClingZ are oxidizing inks. Avoid heat exposure in all printing and packaging processes. Do not exceed 90 degrees F in stack temperature. **Do not shrinkwrap final pieces!**
- **Lightening Bolts:** The appearance of lightening bolts is inherent in ClingZ® and ClingZ® VersaLiner II due to the charging process, with an incident of 3-5% overall. Conventional inks will print over them.

### Handling, Storage & Stacking

- Treat skids and cartons with care. Aggressive inventory handling, dropping, accidental striking with a forklift or other mishandling can result in damage.
- Keep product flat and horizontal.
- **To achieve best results, break bands on the skids 24 hours before press run. Leave ClingZ® & ClingZ® VersaLiner II sealed in their original boxes until ready to print.**
- Once you open the skid or carton, place remaining sheets in the moisture barrier bag.
- Product will wrinkle if stored improperly.

### Acclimating & Climate Control

- **Warning:** This product is moisture sensitive! Store inside at room temperature.
- Most environments with air conditioning systems provide the proper mix of temperature and humidity. The ideal environment for storing this product is 65-80° F with 25% to 50% relative humidity.
- High humidity causes damp edges and wavy paper.
- Low humidity dries paper edges, making it contract and become tight.
- Do not unwrap product until it is at the press room temperature. For best results, condition ClingZ® & ClingZ® VersaLiner II for three to seven days prior to production run.

**All products are sold with the understanding that the purchaser has independently determined the suitability of the product and its application prior to purchase and use.**

