ClingZ® Versaliner Offset – Design and Printing Guidelines

ClingZ® Versaliner Offset is an adhesive-free, statically charged graphic media, composed of a 2 mil. polypropylene (PP) film and a 10 pt. printable, full contact paper backer. This product is suitable for conventional and UV offset, as well as UV-curable wide format print systems. ClingZ® Versaliner Offset is ideal for temporary signage and marketing applications, and it clings up to 6 months on any dry indoor surface, except fabric or very porous materials. This product is available in both white and clear.

**Conventional Offset**: Keep water levels low to eliminate ink emulsification and facilitate drying. Alcohol at 5% may be used in the fountain solution in place of an alcohol substitute. Do not use IR dryers. The heat from standard drying systems and IR dryers reduces the electrical charge and swells the film. In-stack temperature should not exceed 90°F (32°C). Plan to let the product dry for 24-48 hours. Use a minimum of 50 micron coated spray powder to help facilitate drying and reduce offsetting. Offsetting can occur if lifts are too large or if there is not enough airflow in the load. We recommend the following inks:

- Great Western, Challenger Ink Series (Black, Cyan, Magenta, Yellow)
- INX International, Low VOC CZ Hardri Inks (B: 1321454, C: 1321584, M:1321638, Y: 1321689)
- Sun Chemical, Sun Tec Super Dry Inks (B: SF1K10002, C: SF2C10002, M: SF3M10002, Y: SF4Y10002, W: MN 14940)
- Superior Printing Inks, 100% Solid Inks (B: AE-1658, C: MBE-8718, M: DRE-1481, Y: YC-3897, W: W-1674)
- Toyo Ink, TSP Low Tack Version Inks (B: TSG-CT, C: TSP-400, M: TSP-400, Y: TSP-400, W: TSP-400)

**UV Offset**: Use UV inks low in VOC's that cure at reduced lamp settings. Ink drawdowns are recommended prior to running as some UV inks will cause swelling or ripples in the film. Run with lamps in the delivery section only and set to the lowest setting possible. 4-6 hours are required to fully cure the ink. Use a minimal amount of dampening solution. Do not use fountain-drying stimulators with UV inks.

**General Printing and Designing Notes**: Design for finished sizes of at least 3”x5” (8x12 cm). Convert any PMS spot colors to CMYK process-ink builds. Stay within a total area coverage (TAC) of 220% in color build with a line screen of 150-175, and reduce screen values by using UCR or GCR. Avoid heavy deposits of ink near the edge to avoid curling. Right reading or reserve printing is possible. A 1” (2.5 cm), unprinted border will enhance the performance of the application. Add no more than 2 hits of opaque white before 4-color process when printing on clear film. Add white after 4-color process if printing reverse. This product is not suitable for screen printing or any type of coating, including varnishes or aqueous and UV coatings.

Position feeder air blowers to separate sheets and minimize blocking; position side air blowers towards the rear of the stack to separate the first 5-10 sheets. Run at press speeds of 7,000-8,000 impressions per hour. The appearance of lightning bolts is inherent in ClingZ® Versaliner Offset as a result of the charging process, with a 3-5% incidence overall. Conventional inks will print over them, UV inks will not. Use ClingZ® approved inks to prevent charge loss and swelling of the film.
Turn off static eliminators on press. Test the production setup and suitability of ClingZ® Versaliner Offset for the application prior to each print run.

**Finishing** ClingZ® Versaliner Offset can be die cut, kiss cut, perforated, perf-scored, and folded. Avoid long, thin pieces and sharp angles to reduce risk of tearing. Die cut with hard ejection black rubber. Perforate with 12-14 teeth/inch knives. Use a minimum of 1/64” (0.4 mm) round die for inner corner cuts. The materials can be easily tiled for large coverage graphics.

**Storing**

- Store in the original packaging at room temperature 65°-80° F (18°-27° C) with relative humidity of 25-50%.
- Acclimate the material to press room temperature for 24 hours prior to printing.
- Remove material from plastic bag just prior to loading press.
- Reseal unused materials in the original plastic bag.
- Paper backer is moisture sensitive and can curl if improperly stored.
- Unprinted ClingZ® Versaliner Offset can be stored for up to one year.

**Packing and Shipping**

- We recommend archive-safe poly bags for packing.
- Avoid anti-stats or volatile organic compounds (VOCs) in packing materials.
- Fresh corrugated cardboard or other newly printed materials can contain VOCs that may affect the charge ClingZ® film.
- No heat-activated shrink wrapping.
- Material must be rolled print side out.

**Recycling**

- ClingZ® Versaliner Offset is recyclable as #5 plastic.
- The backer can be recycled with regular paper.

Contact the Nekoosa technical team at (715) 886-1207 or tech@ncpedge.com if you have any questions regarding ClingZ® Versaliner Standard.