

Product Information Bulletin

17000WHE Wilflex Oasis[™] Hydrate Express Neutral

Wilflex™ Oasis Hydrate Express Neutral Base is a high solids water-based printing ink designed to improve cure properties for increased print volume. The addition of Oasis waterbase pigments (WPC) will result in strong color development, soft hand and excellent wash and crock fastness on white and dark fabric grounds.

🛄 Highlights

- Improved cure properties allow for increased print volume.
- Offers improved productivity over Oasis Hydrate Neutral.
- Low cure temperature allowing for reduced energy consumption.
- Enhanced wash, crock and mixing properties.
- Flashes dry and fast.
- Smooth, bright surface.

Printing Tips

Hydrate Express Neutral can be used with flash as a clear underbase. Utilize a white underbase for increased opacity and bright color development on dark garments.

Use 110-160 t/in (43-62 t/cm) screen mesh for large coverage areas and non-detailed graphics. Print detailed images with 180-305 t/in (70-120 t/cm) screen mesh.

- Additions of Oasis Pigments (WPC) should not exceed 6% max by weight.
- ▶ For increased opacity, substitute Oasis Extra White PC with Oasis Hydrate HO White as pigment concentrate when mixing custom colors.
- Hydrate inks will re-wet and flow when printed a few times after a break. Keep the flood bar down and clear from the image. Flooding over the image will cause more drying, as more surface area is exposed to the air.
- ▶Keep the stencil in the unflooded position when printing stops. To avoid "drying-in" of stencil, cover the screen with a moist towel during any break lasting more than a few minutes. Avoid leaving ink in the screen for prolonged periods.

For additional print tips and recommendations, please refer to the Oasis Tips & Tools guide.

Compliance

►Non-PVC, non-phthalate.

▶ For compliance certifications, please visit www.wilflex.com/compliance.

Precautions

Completely mix pigments before any printing.

- Excess additions of Oasis additives or WPCs into Oasis inks may adversely affect ink properties.
- Screens must be prepared with water-resistant emulsion to prevent stencil breakdown on press. Some emulsions will require a hardener to further prevent the printing process from degrading the stencil.
- To avoid ink interaction in the image area, verify that the screen mesh is clean of previous ghost images. The image area must be clean and de-hazed.
- ▶ Ink cure temperature is recommended at 320°F (160°C) for 1 full minute. Check the cure temperature at the ink surface.
- Infrared dryers may affect curing times. Carefully test and monitor different heat capacities to ensure full cure of inks.
- Avoid synthetic fabrics where dye migration will occur.
- Most substrates are suitable for printing; however, fibers which possess a low surface adhesion (e.g. polypropylene, silk, polyamide or wool) will require special care during drying and cure processes. Test all fabrics for color fixation and wash fastness before starting any production runs.
- Perform fusion tests before production. Failure to cure ink properly may result in poor wash fastness, inferior adhesion and unacceptable durability. Ink flash temperatures should be measured on the ink surface using an infrared thermometer sensor. Ink cure temperatures should be measured using a Thermoprobe placed directly in the wet ink film (printed) and verified on the production run substrate(s) and production equipment. It is the responsibility of the printer to determine that the correct ink has been selected for a specific substrate and the application processes meet your customer's standards or specifications.
- Containers must maintain air-tight seal when not in use.
- NON-CONTAMINATION OF OASIS INKS: Do not add or mix non-Oasis inks, additives or extenders with Oasis inks. All buckets, palette knives, stirring apparatus, squeegees, flood bars and screens must be cleaned properly and free of phthalates and PVC containing inks. Non-phthalate emulsions and pallet adhesives must be used. Failure to follow these precautions may cause phthalate contamination in violation of consumer protection laws and regulations
- Any application not referred in this product information bulletin should be pre-tested or consultation sought with Wilflex Technical Services Department prior to printing.
- Email: techserviceswilflex@polyone.com

Recommended Parameters

Fabric Types



100% cotton, some synthetics, some blends

Mesh Counts: 110-305 t/in (43-120 t/cm) Tension: 20-35 n/cm²

Squeegee



Durometer: 60-70 shore, 60/90/60 Edge: Square, Sharp Stroke: Soft Stroke, Medium Speed Angle: Steep (15-20°) *Do not use excess squeegee pressure.



Water-Resistant Stencil

Direct: 2 over 2 Capillary/Thick Film: N/A Off Contact: 1/16" (.2cm) or lower Emulsion-over-Mesh: 15-20%



Flash & Cure Temperatures

Flash: 190-200°F (90-95°C) ink temp Cure: 1 minute @ 320°F (160°C)

Pigment Loading WPC: 6% max



*All percentages listed at % by weight.

Oasis Additives

Oasis Softener: 0.5% rate, 3% max. Oasis Retarder: 1% rate, 3% max. Oasis Thickener: 0.1% rate, 1% max *All percentages listed at % by weight.

Storage



37-104°F (3-40°C) Use within one year of manufacture date. Keep containers sealed at all times.

Clean Up



Warm Soap Water (Tap) Gentle Pressure



Health & Safety MSDS: www.polyone.com.or

WATERBASE BASE

Contact your local CSR.

PolyOne Wilflex™ inks by PolyOne.

www.wilflex.com/pib

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