# VATERBASED

# ZODIAC<sup>®</sup> ecocentric inks

**PRODUCT INFORMATION BULLETIN** 

# Aquarius<sup>™</sup> Digital Hybrid System

### **RECOMMENDED PARAMETERS**

#### **Fabric Types**

Tension: 18-35n/cm3

Mesh

100% Cotton, blends or synthetic fabrics.

Count: 230-280T/in (90-110T/cm) for

Clear, 110-160T/in (43-64T/cm) for White

## HIGHLIGHTS

Used in conjunction with a hybrid digital machine

excellent wash performance.

- Excellent color yield and print definition
- Stays open in the screen

# **PRINTING TIPS**

Squeegee Durometer: 60-90-60 Profile: sharp, square Stroke: x1 stroke, medium speed Angle: 10-15%



Stencil Water Resistant Emulsion Off Contact: 1/16" (2mm) Emulsion Over Mesh: 15-20%



# Flash & Cure

Flash: 2-4 sec. at 200-230°F (93-110°C) Cure: \*At 330°F (Cotton) and 305°F (Polyester) for 120 sec.

### **Pigment Loading**

Not recommended



#### Storage

Store in sealed containers 12 months from manufacture >40°F (5°C) <77°F(25°C)



**Clean Up** Water & mild detergent

### **Health & Safety**

www.avient.com/resources/safetydata-sheets or contact your local CSR Hybrid printing is achieved by the layering of screen printed products before and after the digital print. Aquarius Migration Stop may be used as a first-down base to prevent dye from the garment from influencing the digital print. After the optional Migration Stop, the first white layer would be in your next screen followed by a screen with a mixture of Digital White and Digital Matte Clear as described below. The hybrid print would occur next and an optional Aquarius Digital Matte Clear layer may be used to "seal" the hybrid print

Aquarius<sup>™</sup> Digital Hybrid ink System consists of a high opacity Digital White and

Digital Matte Clear. Designed to provide maximum opacity and an excellent surface to receive a digitally printed image. Resulting prints will be soft hand and flexible with

- Use Digital White as first layer, 110-160T/in (43-64T/cm) mesh. If fabric is prone to bleed, a layer of Aquarius Migration Stop is required first, recommended mesh count: 86-110t/in (34-43t/cm)
- Before the digital squeegee print a mixture of Digital White and Digital Matte Clear (80/20) to receive the digital ink, 160-195 T/in (64-77 T/cm) mesh
- A final layer of Digital Matte Clear is optional to protect digital ink application, 230-280T/in (90-110T/ cm) mesh
- Print with 1/16" or 2mm off contact
- Keep platens cool to avoid white ink aging (130-140°F / 54-60°C). Clean the stencil area when stopped to prevent screen blockages
- (\*) Cotton prints should be cured at 330°F/165°C, Polyester prints at 305°F/151°C for 120 secondsTest all prints for print durability before starting the production run
- Test all prints for print durability before starting the production run

## COMPLIANCE

- Water based, non PVC, non phthalate
- Visit www.avient.com/products/screen-printing-inks/zodiac-aquarius for more information

# PRECAUTIONS

The information above is given in good faith and does not release you from testing inks and fabrics to confirm suitability of substrate and application process to meet your customer standards and specifications

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Aquarius<sup>™</sup> Additives

Aquarius<sup>™</sup> Retarder 1-3% (white only)