

# PixJet® SFZ5

## Inkjettable Formulation

### Target Applications

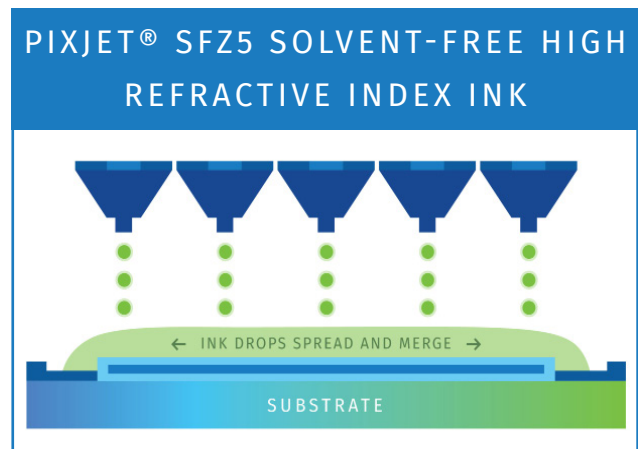
- » Display Planarizing Layers
- » Microlens Structures for OLED Display
- » MicroLEDs
- » High Refractive Index Thin Film

### Benefits of PixClear® Enabled HRI Nanoimprintable Product

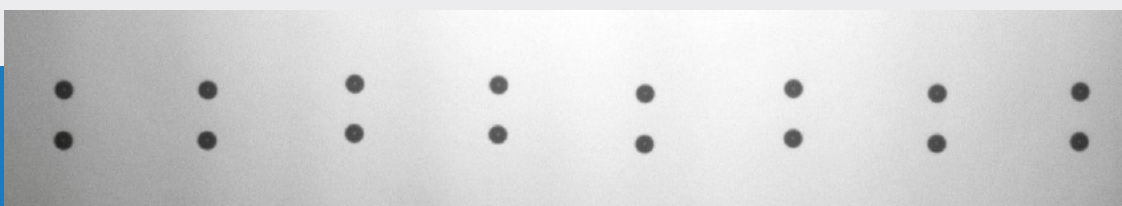
- » Refractive index (RI) of > 1.65
- » Highest transparency across all visible wavelengths
- » Lowest haze
- » Excellent film thickness uniformity
- » Excellent wetting on glass
- » Extended printing time
- » Compatible with leading inkjet heads and inkjet systems
- » Frequency stability of 12kHz
- » Cost effective and scalable process with nanoimprinting

### PixJet Process

INKJET PRINTING	PERFORMANCE
Nozzle Plate Wetting	None
Printhead Heating	OK, up to 45°C
Inkjet Tool Compatibility	Dimatix (DMP-2831), JetXpert Inkjet Dropwatcher, KM1024i Printheads
Modulus	Tunable
Frequency stability	12kHz



### PIXJET® SFZ5 DROPLETS

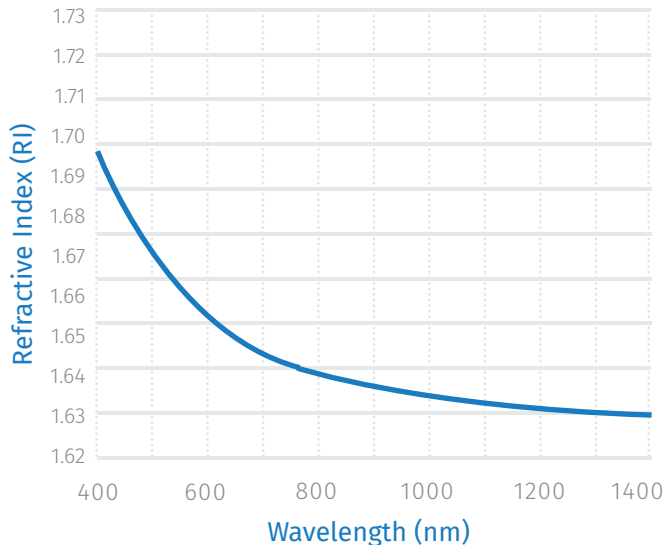


Scale: Droplet size is 35µm in diameter

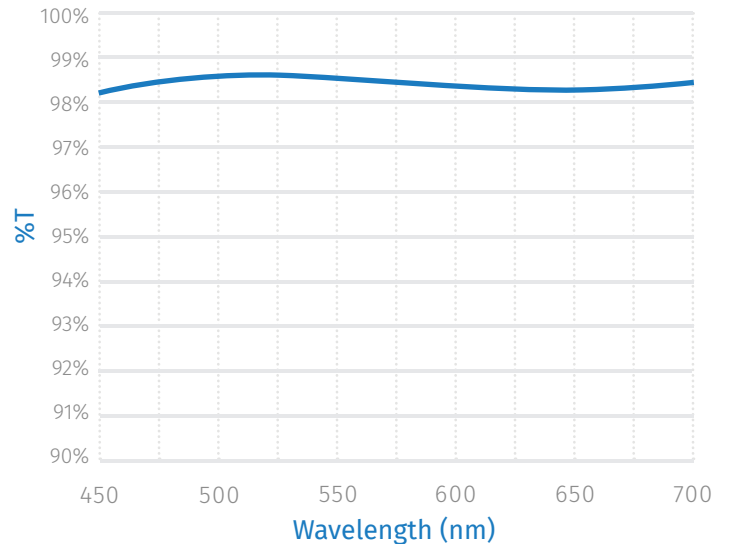
# Technical Data

PIXJET® SFZ5 FORMULATION

## Refractive Index



## % Transmission



## Specification

PROPERTIES	Active Components	Solvent-Free PixClear® ZrO <sub>2</sub> nanocrystals (10nm) in Acrylic Monomers
	Viscosity (cP)	<25 at 25°C
	Surface Tension (dynes/cm)	20-35, tunable
CURING	UV Condition	2 J/cm <sup>2</sup> 385 nm UV under Air (N <sub>2</sub> Preferred)
FILM PROPERTIES	Refractive Index	>1.65 at 589nm (Ellipsometer)
	Film Thickness	10-30 μm
	%T on 1.52 RI Glass Substrate	>97% between 400-800 nm
	Film Modulus (GPa)	1.2
	Haze%	<0.01

PixJet® enabled high RI products have the **lowest haze** across all visible wavelengths and are compatible with **leading inkjet heads and inkjet systems**.

PixJet products have **excellent film thickness uniformity** and **wetting on glass**.

## About Pixelligent

Pixelligent is a developer of industry-leading PixJet®, PixNIL®, and PixClear® Designer Compounds®. We create and manufacture advanced nanomaterials that deliver the highest refractive index, robust mechanical properties, and near-perfect transparency for next-generation displays, XR devices, and sensors.

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