

## Pro-Jet™ Blue APD1000

### ▶ Aqueous pigment dispersions for high performance ink-jet inks

Using the unique capabilities offered by FUJIFILM Imaging Colorants' proprietary Reactive Dispersant (RxD™) technology, Pro-Jet™ Blue APD1000 provides outstanding pigment dispersion performance for the aqueous ink formulator, combining:

- ▶ Excellent optical density across a range of media
- ▶ Outstanding print durability – reducing the need for additional binders
- ▶ Superior stability in aqueous based ink formulations
- ▶ Broad printhead compatibility

Initially designed for exceptional performance on plain and pre-coated papers, Pro-Jet™ Blue APD1000's attributes mean it can also be used in many non-paper based applications.

#### Dispersion Attributes

Pigment	C.I. Pigment Blue 60
Appearance	Blue Liquid
Pigment Solids Content / wt%	10.5%
pH	8.8
Viscosity @25°C / mPa.s	3.7
Particle Size ( $Z_{ave}$ ) / nm	83
Storage Stability (ambient conditions)	stable
Conductivity / mScm <sup>-1</sup> @25°C	2.3

#### Superior on-substrate durability and print quality with ink formulation flexibility

Pro-Jet™ Blue APD1000's proprietary dispersion technology provides excellent compatibility with ink components and acceptance of higher concentrations of co-solvents. The polymer stabilisation technology provides greater flexibility for aqueous ink formulation and excellent print quality and durability (highlighter, scratch and rub resistance).

Excellent colloidal stability has been shown in inks containing a wide variety of ink solvents including:

- ▶ 2-butoxyethanol
- ▶ 1,2-hexanediol
- ▶ Diethylene glycol
- ▶ 2-propanol
- ▶ Ethylhydroxypropanediol
- ▶ 1,4-butanediol
- ▶ Ethylene glycol
- ▶ Polyethylene glycol
- ▶ Butanone
- ▶ Di- and Tri-ethyleneglycol monobutylether

## Print Quality and Durability

Substrate <sup>1</sup>	ROD	Chroma	Hue
Canon GF500	1.15	43	284
HP All in One	1.2	51	287
Xerox 4200	1.12	45	284
Fuji EGEB	2.09	82	292

<sup>1</sup> results shown at 4% strength in resin-free ink formulation

Print Durability	Pass / Fail <sup>2</sup>
Rub fastness – Wet	Pass
Rub fastness – Dry	Pass
Highlighter fastness	Pass

<sup>2</sup> internal test protocol, resin-free ink formulations

## Reactive Dispersant Technology



FUJIFILM Imaging Colorants' Reactive Dispersant technology involves the covalent linking of unique polymeric dispersants when on the pigment surface, entrapping the pigment in a robust layer of dispersant. As the dispersant cross linking involves a chemical reaction, its displacement from the pigment surface by ink components is eliminated, thereby providing superior dispersion stability.

Through combining this approach with application specific polymeric dispersant design, FFIC has been able to develop highly robust pigment dispersions offering excellent print durability and high optical density on many substrates, whilst also enabling greater formulation scope to allow the design of sustainable and highly reliable ink-jet inks.

**For further information on the Pro-Jet™ APD range please contact:**

### EUROPE

FUJIFILM Imaging Colorants Ltd.  
Earls Road  
Grangemouth  
Stirlingshire  
FK3 8XG  
Scotland  
Tel: +44 (0) 1324 468468  
Fax: +44 (0) 1324 483537

### USA

FUJIFILM Imaging Colorants Inc.  
233 Cherry Lane  
New Castle  
DE 19720  
USA  
Tel: +1 800 552 1609  
Fax: +1 302 477 8025

### JAPAN

Fine Chemical Division  
FUJIFILM Global Graphic System Co., Ltd.  
2-26-30 Nishiazabu, Minato-ku  
Tokyo 106-0031, JAPAN  
Tel: +81-3-6419-0523  
Fax: +81-3-6419-9840

Email: [projet@fujifilmic.com](mailto:projet@fujifilmic.com)

[www.fujifilmimagingcolorants.com](http://www.fujifilmimagingcolorants.com)

The information contained in this publication is based upon in-house testing by FUJIFILM Imaging Colorants and is accurate to the best of our knowledge, information and belief at the date of publication. Nothing herein is to be construed as a warranty, express or otherwise. In all cases, it is the responsibility of the user to determine applicability of such information or the suitability of any products for their own particular purpose and their freedom to operate with respect to patents.

Supply of this product is subject to FFIC's standard terms and conditions.

Pro-Jet™ and RxD™ are trademarks of FUJIFILM Imaging Colorants Limited.  
The FUJIFILM name and logo are trademarks owned by FUJIFILM Corporation.

innovatingenablingcoloring