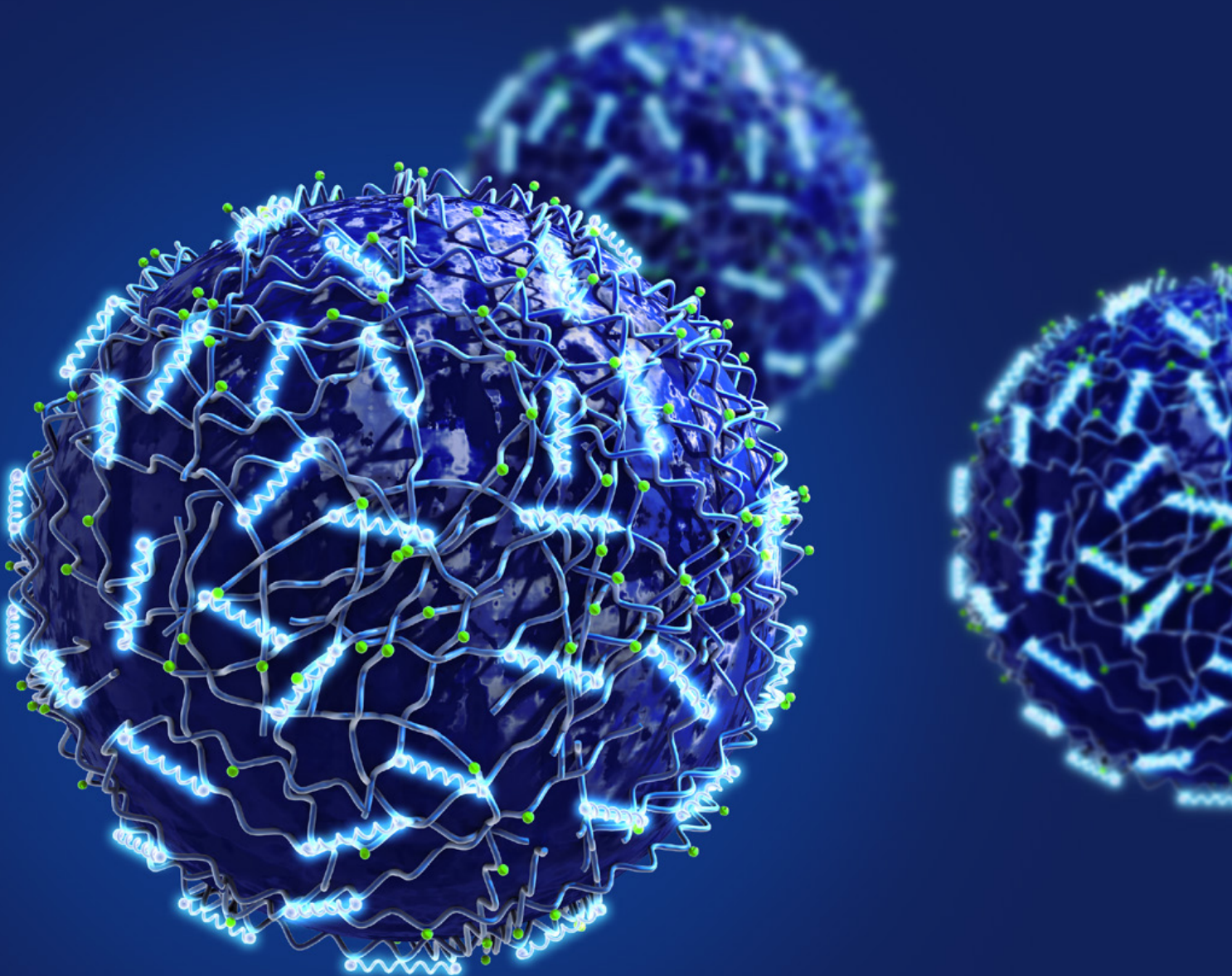


Aqueous inkjet pigment dispersions with RxD technology



Take your ink design to the next level

Fujifilm's high quality aqueous pigment dispersions enable the creation of high performance inkjet inks for a wide range of applications.

They are engineered with Fujifilm's proprietary RxD technology to give the ink formulator flexibility in their development process to meet demanding specifications for jetting and application performance.

Fujifilm dispersions deliver efficiencies for the ink formulator through the development process.



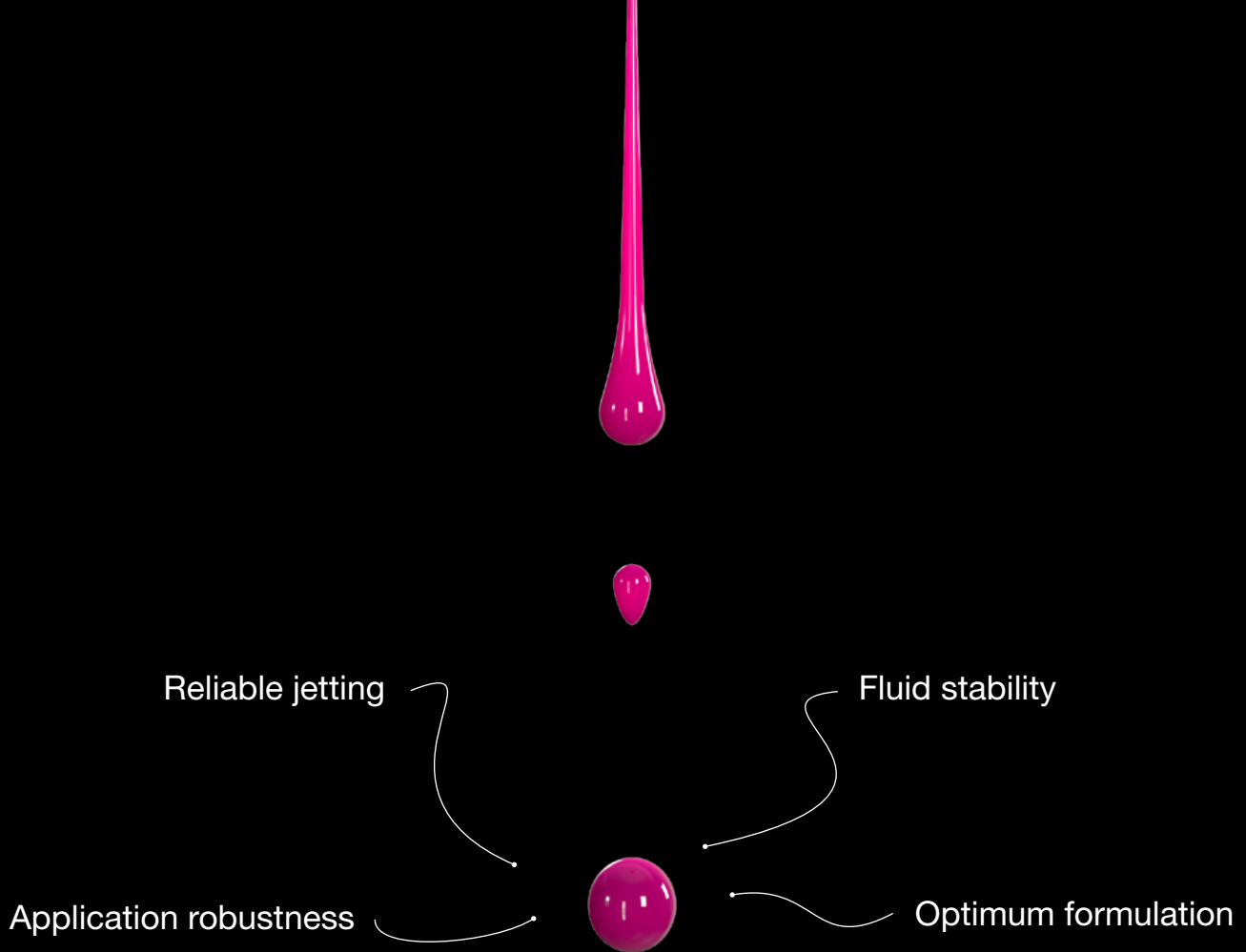
Pigment selection

High strength dispersions available in popular colour indexes.



Formulation

Engineered for stability and formulation flexibility.

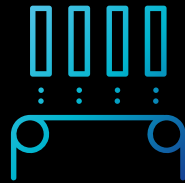


Create high performance inkjet inks that meet demanding specifications.



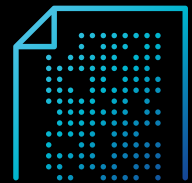
Jetting

High tolerance manufacture enabling excellent fluid stability and optimal jetting.



Print system

Create high quality inks that enable reliable printer performance.



Application

Produce inks for a wide range of substrates and applications.



Features

Proprietary RxD dispersion technology

High pigment concentration

High fluid stability

Long shelf-life

High purity

Narrow particle size distribution

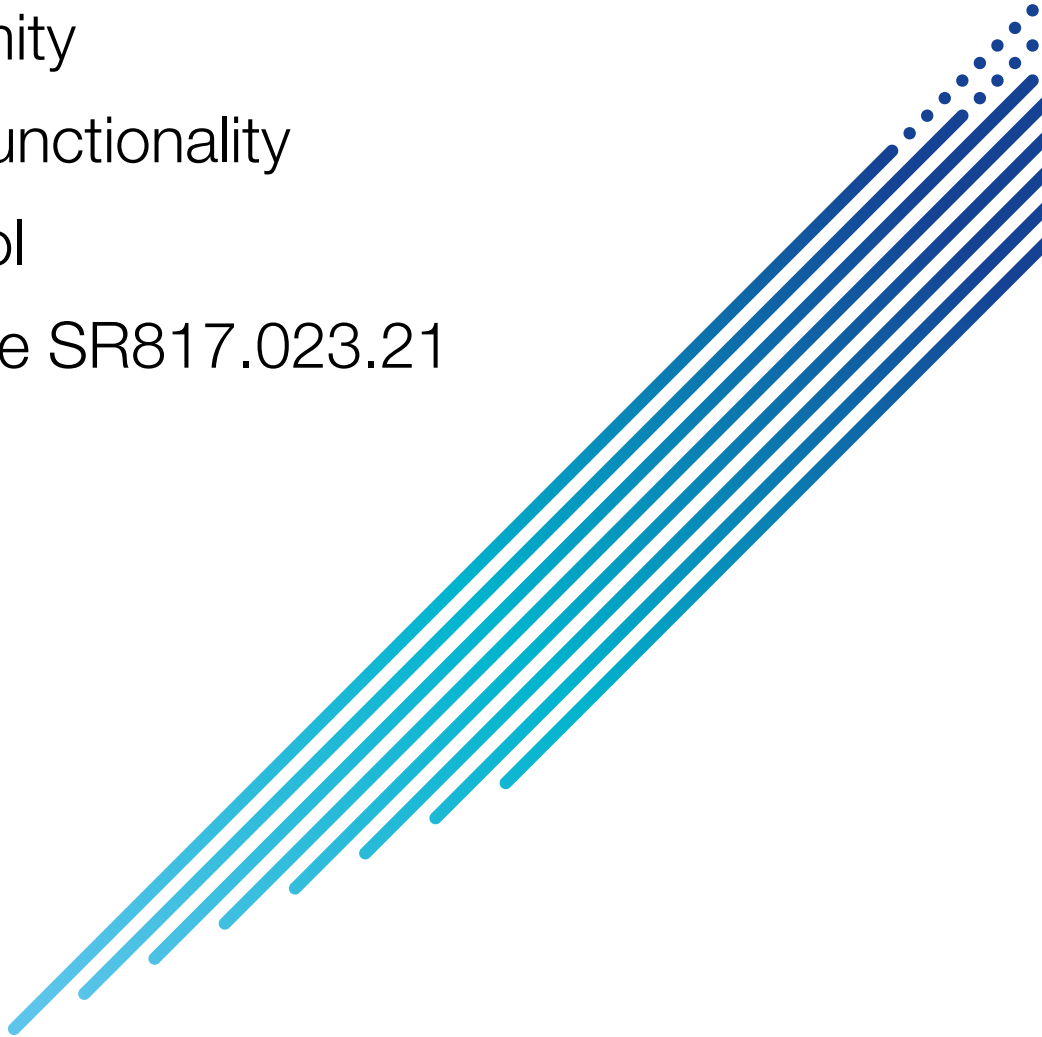
Low oversize particle count

Polymer uniformity

Built-in binder functionality

Strict bio-control

Swiss Ordinance SR817.023.21
pigments*



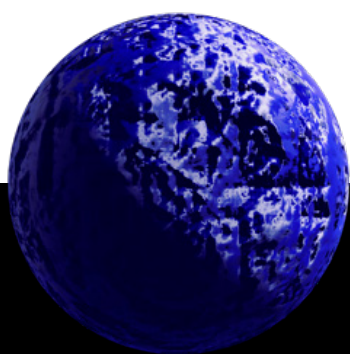
* Does not apply to all products.
Please refer to technical data sheets.

Engineered with proprietary RxD technology for exceptional stability

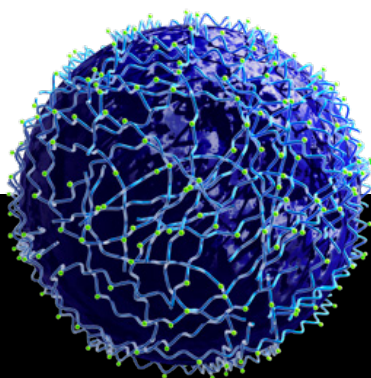
RxD: Reactive dispersant cross-linking technology.

RxD is the enabling technology in Fujifilm's high quality aqueous pigment dispersions. It is a precision stabilisation process that locks the pigment particles in a robust cage of cross-linked polymer. The cross-linking reaction is independent of the pigment and prevents polymer disengagement in the presence of solvents.

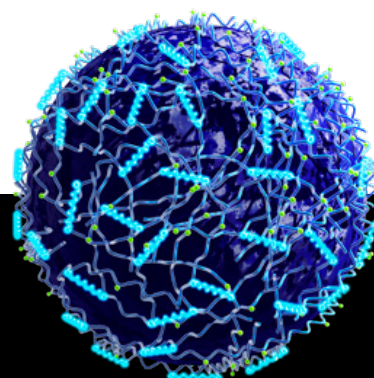
RxD technology creates three modes of stabilisation, producing exceptional stability in the dispersion. This enables compatibility with a wide range of ink components and higher concentrations of co-solvents. It also means high pigment strength dispersions can be created without compromising stability.



Pigment is ground to a controlled particle size.



A polymer layer is built on the pigment surface.



The polymer network is locked in place by a cross-linker.



RxD: three modes of stabilisation

1 The dispersant is a polymer with multiple ionisable hydrophilic groups generating electrostatic stabilisation.

2 Protruding polymer chain segments provide steric stabilisation.

3 Cross-linking locks the polymer chains together via covalent bonds to form a secure network, preventing desorption.

Precision manufactured for purity and consistency

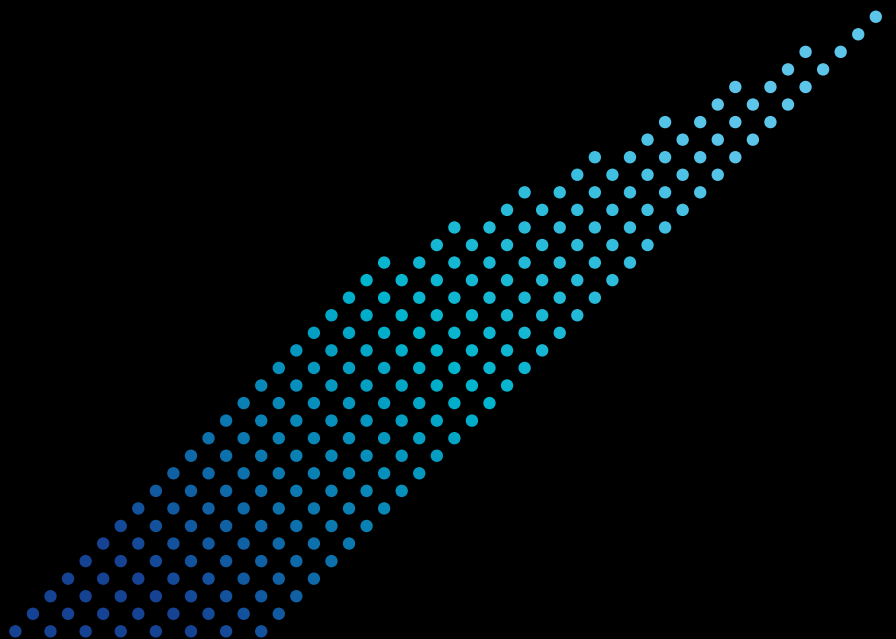
Fujifilm is renowned for pursuing the highest quality standards in multiple high-tech fields such as healthcare, highly-functional materials and imaging.

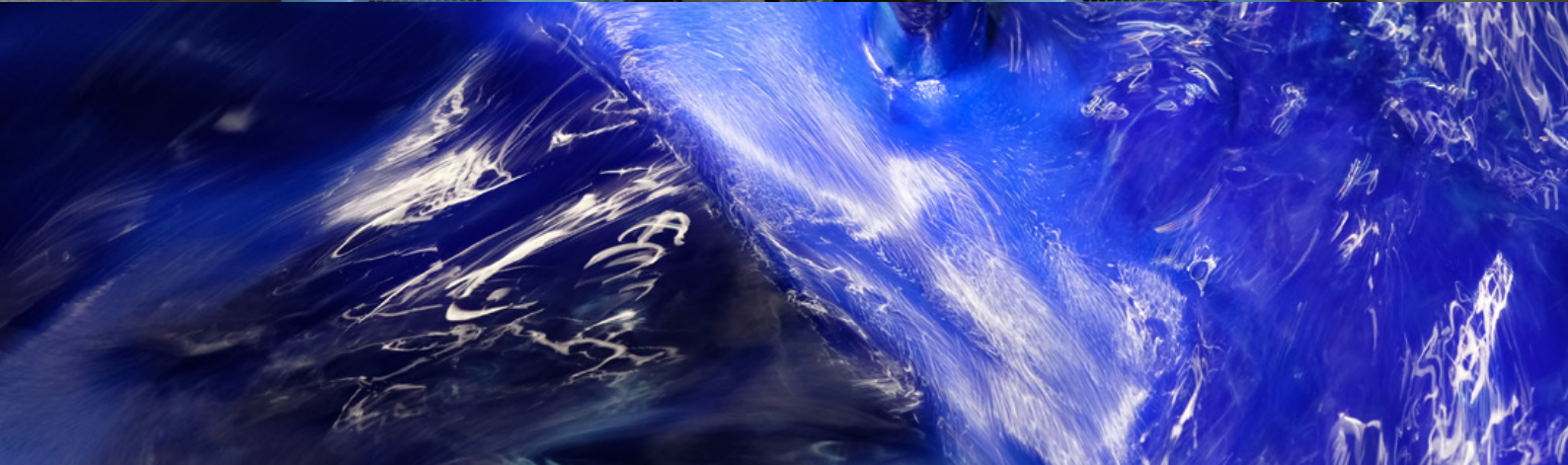
The Fujifilm philosophy of continuous investment in research and development and manufacturing excellence ensures we maintain and grow our first-class development and production capabilities for inkjet dispersions.

We have leveraged our extensive experience, technology and manufacturing capability in producing clean solution thermal inkjet inks to create high purity pigment dispersions. This ensures high tolerance on particle size, low levels of polyvalent ions and trace organics.

Strict process and quality control ensure our dispersions consistently meet their specification. There is no significant variation in our dispersion batches, which is critical for the consistency of your inks.

Multi-hurdle bio-control is built into the manufacturing process, with the addition of a preventative biocide to the final dispersion ensuring ongoing protection.





Designed for the development of high performance ink



Stable foundation

RxD technology creates a very robust dispersion. As the dispersion is the heart of your formulation, build your ink on a stable foundation.

- Create inks with excellent stability and long shelf-life.
- Fujifilm dispersions are high purity and low in polyvalent ions with no microbial activity.

Flexibility and control

Excellent stability and chemical compatibility with ink components means greater flexibility in your formulation:

- Use challenging solvents and aggressive surfactants to achieve high image quality and ink functionality.
- A high pigment concentration gives headroom in achieving the perfect formulation.
- Use a wide range of soluble and emulsive binders and latexes for optimum endurance.
- Flexibility to design inks for a wide range of printheads.



Optimal jetting performance

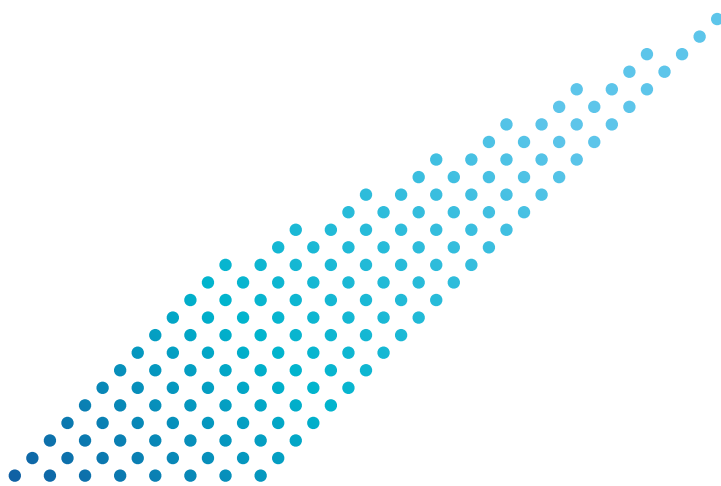
High specification, ultra high purity dispersions enable you to create inks for the most demanding inkjet systems, minimising risk of printer downtime due to nozzle blockages or printhead damage.

- Narrow particle size distribution and low oversized particle count means they are also ideal for high density, small-drop printheads.
- Elimination of microbial activity due to robust bio-control reduces risk of nozzle deviation or blockage.

Efficient development

Working with a robust dispersion gives you the potential to achieve the correct formulation quickly and cost-effectively, streamlining development costs.

- Dispersions have a built-in binder.
- Polymer uniformity between all dispersion colours ensures consistent formulation.

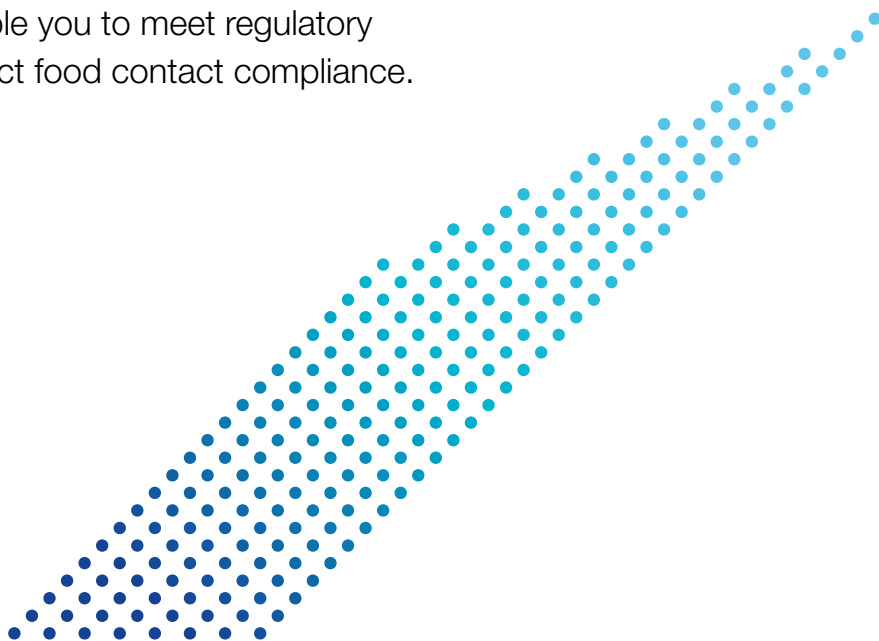


Create robust inks for demanding applications of the future

Fujifilm pigment dispersions are widely used in a broad range of established inkjet applications, including home desktop, display, commercial and folded carton printing.

They are engineered to meet the demands of tomorrow's inkjet applications too, with the potential to take you into markets such as coated packaging, textile and decorative laminates. For example:

- Tight particle size control enables you to formulate inks for use with smaller printhead architecture, higher resolutions and smaller drop sizes.
- A wide formulation window enables you to optimise ink performance and adhesion on difficult target substrates such as plastic films for packaging.
- A wide formulation window enables you to produce low-viscosity, fast drying inks for high-speed single-pass applications.
- High pigment concentration enables you to achieve a wide colour gamut to print brand colours, critical for packaging applications.
- Controlled dispersions enable you to meet regulatory requirements such as indirect food contact compliance.





Product series

All RxD dispersions are based on high quality inkjet grade pigments that provide a wide colour gamut, excellent lightfastness and image robustness.

The dispersions portfolio includes two colour sets:

APD1000

High quality dispersions with excellent stability for a broad range of applications.

APD4000

High strength dispersions designed for extended formulation flexibility.

Refer to our product overview and technical data sheets for dispersion properties.

Fujifilm certified compliance

As a global technology company and supplier of inkjet products worldwide, Fujifilm is committed to ensuring we meet legislation and regulatory requirements. Our high quality, high purity dispersions are registered in the major sales regions. Most of our pigments comply with Swiss Ordinance SR817.023.21, making indirect food contact compliant applications accessible.



Cyan
PB15:3

Magenta
PR122

Yellow
PY74

Yellow
PY155

Black
CB7

Red
PR255



fisl.inkjet@fujifilm.com

Always refer to technical data sheets.