

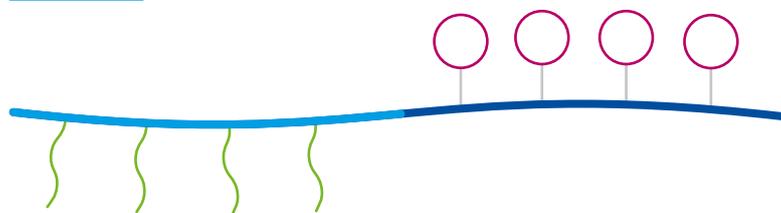
BYKJET-9175

Next-generation wetting and dispersing additive for perfect stabilization of organic pigments and disperse dyes in aqueous inkjet inks

Modern inkjet inks are continuing to develop unabatedly – be that through new binder systems and the subsequently adapted formulations, or through the general evolution of technology from solvent-borne systems towards aqueous systems. Increasing customer demand for quality and environmental properties, paired with new regulatory requirements, are the driving forces behind the new innovations and advances. Today, BYK is presenting a new, unique additive – BYKJET-9175.

BYKJET-9175 is a modern additive based on a new generation of the controlled polymerization technology for aqueous systems and features broad compatibility with many pigments. It therefore represents the latest generation of wetting and dispersing additives for inkjet inks. In addition to efficient dispersion and outstanding viscosity, the additive exhibits excellent resolubility of the inkjet inks. BYKJET-9175 is VOC-free and meets the current standards for indirect contact with food.*¹

BYKJET-9175 – a modern additive based on a new generation of the controlled polymerization technology for aqueous systems



A Block/resin-compatible block

B Block/pigment-affinic block

Hydrophilic side chains with good water compatibility

Neutralized pigment-affinic group with **high affinity to organic pigment surfaces**

Technical properties

- Chemical composition: aqueous solution of a salted methacrylate block copolymer
- Density (20 °C): 1.08 g/ml
- Non-volatile matter (20 min., 150 °C): 40 %
- Solvents: water
- Acid value: 27 mg KOH/g
- Amine value: 22 mg KOH/g

Benefits

- Disperses and stabilizes a broad range of disperse dyes and organic pigments, and ensures long-term stability of inks and millbases
- An extremely versatile product: During a large series of tests, BYKJET-9175 performed more effectively on 19 out of 24 pigments than all internal standard products
- Shortened dispersion times lead to energy savings
- Highly efficient grinding process and smaller particles
- Ensures perfect resolubility of the ink
- Outstanding viscosity reduction with Newtonian flow behavior even with higher pigment load
- Strong color strength and transparency of the finished inkjet inks
- Especially recommended for resin-free pigment grinds
- Compatibility with let-down resins should be tested
- Supplied as an aqueous solution, making it free from VOC and other emissions
- Complies with the Swiss Ordinance (A list) and Nestlé Guidance Note on Packaging inks*¹

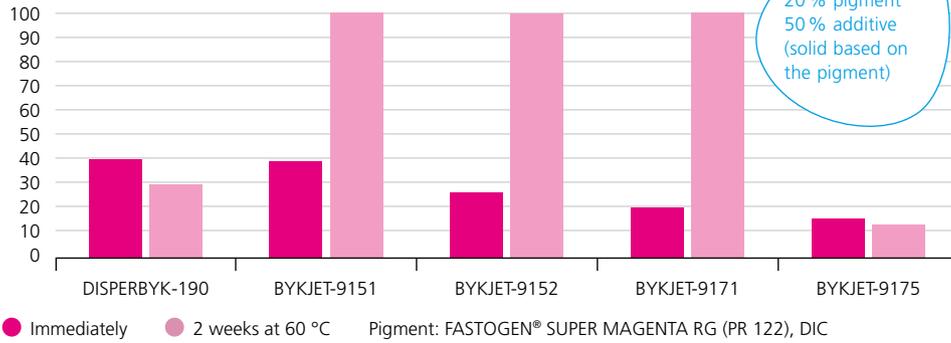
*¹ This information is correct as of December 2022. The current status can be found at <https://www.byk.com/en/service/regulatory-affairs/food-contact>

Excellent viscosity reduction before and after storage

*2 For better clarity, only the range up to 100 mPa-s is shown.

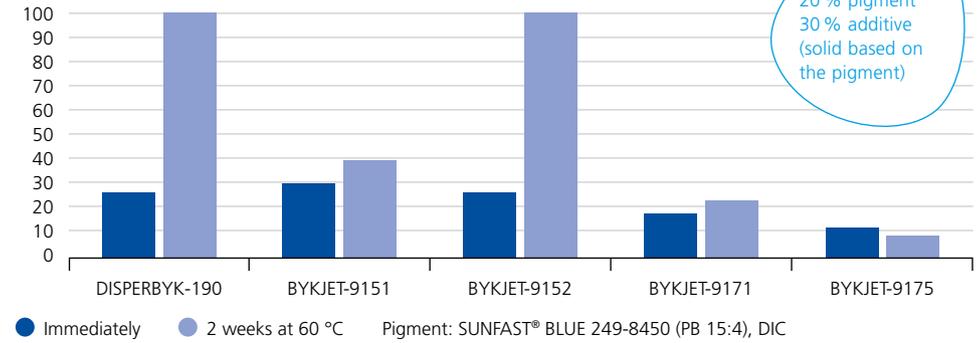
Magenta pigment

Viscosity (mPa-s)*2

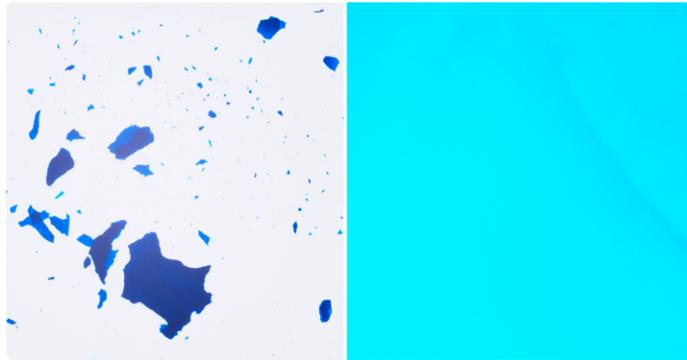


Phthalocyanine blue pigment

Viscosity (mPa-s)*2



Outstanding resolubility of the inkjet ink

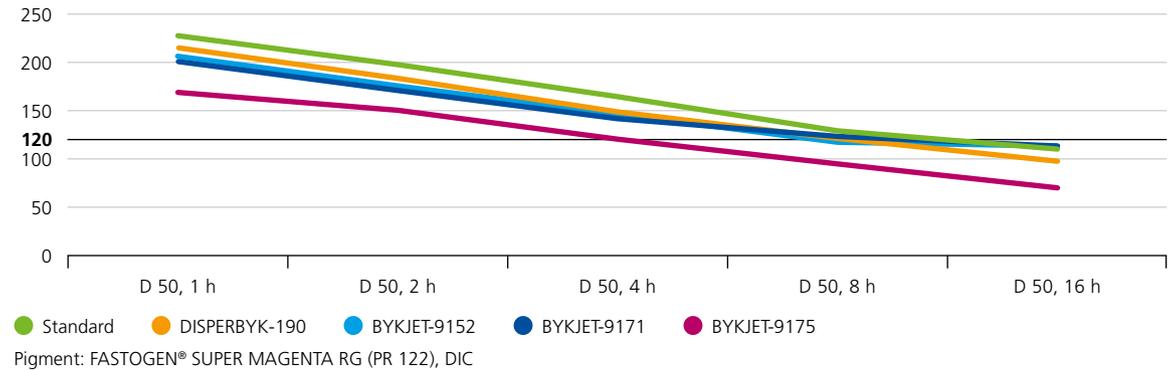


Standard

BYKJET-9175

Highly efficient grinding and small particle sizes

Particle size (nm)



Pigment: FASTOGEN® SUPER MAGENTA RG (PR 122), DIC

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This issue replaces all previous versions.

