

Technical Data Sheet

AIC-Yellow 5GX09

Carboxylic Series self-dispersed water-based inkjet pigment dispersion. Yellow / C.I. PY 74.

Typical properties

Model	AIC-Yellow 5GX09
Colour Index	PY 74
Surface chemistry	Carboxylic functional groups
Nominal solids	11% (catalogue value)
Particle size D50	≤150 nm
Viscosity	≤3 mPa·s
Electrical conductivity	≤2,000 µS/cm
Surface tension	40-80 mN/m
pH	7.5-9.5
Accelerated aging	60 °C for 7 days
Surface tension change after aging	≤10%
Viscosity change after aging	≤10%
Conductivity change after aging	≤10%

Selected QC method references

Viscosity: rotational viscometry, ASTM D7867-13(2025)e1. Static surface tension: Wilhelmy plate, ASTM D1331-20(2024), Method C. pH: glass-membrane sensor, ISO 19396-1:2025. These methods are selected for future QC alignment; the typical values above have not been retrospectively certified as measured under these methods.

Application guidance

Desktop pigment ink. Confirm final ink and printhead suitability in the finished formulation.

Data interpretation

Values are product-level technical targets, not batch-specific results. Aging changes compare initial and day-7 values as |day 7 - initial| / initial × 100%. Particle-size instrument/model, distribution basis, sample preparation, measurement temperature, aging container and post-aging equilibration should be confirmed for direct comparison. Request the batch COA for qualification.

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