

Technical Data Sheet

AIC-WHITE S701

A white self-dispersed TiO2 pigment dispersion for inkjet ink formulation, with high hiding power and high whiteness.

Typical properties

TiO2 content	60%
Surface chemistry	Carboxylic / phosphoric acid functional groups; anionic
Particle size D50	Approximately 280 nm
Particle size D90	Approximately 330-350 nm
Particle size D99	Approximately 380 nm
Viscosity	9.5-12 mPa·s
Electrical conductivity	0.2-0.3 mS/cm
Surface tension	60-70 mN/m
pH	7.5-8.5
Shelf life	12 months, subject to agreed storage conditions
Accelerated aging	60 °C for 7 days
Surface tension change after aging	≤5%
Viscosity change after aging	≤5%
Conductivity change after aging	≤5%

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

DTF and DTG white inks, powder-shake-free GTF transfer printing, and corrugated digital printing. Confirm opacity, whiteness, circulation and printhead suitability in the finished ink.

Data interpretation

Values are product-level technical information, not batch-specific results. Aging changes compare initial and day-7 values as |day 7 - initial| / initial × 100%. Confirm the particle-size distribution basis, aging container and post-aging equilibration for direct comparison; request the batch COA for qualification.