



MANUFACTURING AND PRODUCTION

Paint and Coatings Manufacturing

3 day course

Classroom, online or in-house

Course overview

Paint is judged on how it goes on and how long it lasts, and both are decided by pigment dispersion, which is the one step in manufacture that cannot be corrected afterwards. This course concentrates there. Delegates work through the four components, binder, pigment, solvent and additives, and what each contributes to the film. Binder chemistry is covered across alkyd, acrylic, epoxy and polyurethane systems with their service properties. Pigment and extender selection follow, including opacity, colour strength and cost. Dispersion is treated in detail: wetting, grinding, the mill types used and the fineness of grind that determines gloss and stability. Let down and viscosity adjustment are covered. Colour matching is addressed, including tinting systems and measurement. Testing follows across viscosity, density, opacity, adhesion, drying time and accelerated weathering. Solvent handling and flammable area requirements are covered. The course closes on batch reproducibility, on settling and on investigating a field failure.

What you will learn

- Explain what binder, pigment, solvent and additives each contribute
- Select binder chemistry for the service the coating must give
- Choose pigments and extenders for opacity, strength and cost
- Disperse pigment to the fineness of grind the product requires
- Adjust let down and viscosity consistently
- Match colour using tinting systems and measurement
- Test coatings, handle solvents safely and investigate field failures

Who should attend

- Paint production supervisors and operators
- Formulation chemists in coatings
- Quality control staff in paint manufacture
- Technical sales staff supporting coating customers
- Entrepreneurs manufacturing decorative or industrial paint

Course outline

- 01 Dispersion cannot be corrected later
- 02 Binder, pigment, solvent and additives
- 03 Alkyd, acrylic, epoxy and polyurethane binders
- 04 Pigment and extender selection
- 05 Wetting, grinding and mill types
- 06 Fineness of grind, gloss and stability
- 07 Let down, viscosity and colour matching
- 08 Testing, solvent safety, settling and failure investigation

Upcoming dates

Dates	Venue	Format	Fee per delegate
28 to 30 December 2026	Windhoek, Namibia	Classroom	R14,950
1 to 3 February 2027	Online	Online	R6,500
3 to 5 March 2027	Maputo, Mozambique	Classroom	USD 995



Fees and how to register

This 3 day course is **R6,500** per delegate online, **R14,950** in the classroom in South Africa, Botswana, Namibia, Lesotho and Eswatini, and **USD 995** in the classroom elsewhere in Africa. In-house training is quotation on request. Book 2 or more delegates on this course and save 10%.

To register or request an in-house proposal, visit www.afrisciencegroup.com, email info@afriScience.co.za, or WhatsApp us on **+27 63 479 1136**.

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