



MANUFACTURING AND PRODUCTION

Soap and Detergent Manufacturing

3 day course

Classroom, online or in-house

Course overview

Detergent is a commodity sold on perceived performance, which means a manufacturer competes on cost per wash while the customer judges foam, smell and how white the shirt looks. This course covers both sides of that. Delegates work through surfactant chemistry in usable terms: anionic, non ionic and cationic types, what each contributes and where they cannot be combined. Soap making follows through saponification, both the kettle and continuous routes, with neat soap quality and finishing by drying, milling and stamping. Detergent powder production is covered across spray drying and dry blending, with bulk density and flow. Liquid detergent and dishwashing formulation follow, including viscosity building and phase stability. Builders, enzymes, optical brighteners and perfume are addressed for what each actually does. Water hardness and its effect on performance are covered. Quality testing follows. The course closes on cost per wash formulation and on stability and shelf life testing.

What you will learn

- Select anionic, non ionic and cationic surfactants and avoid incompatibilities
- Produce soap by kettle or continuous saponification and finish it
- Make detergent powder by spray drying or dry blending with correct density
- Formulate liquid detergents for viscosity and phase stability
- Use builders, enzymes, brighteners and perfume purposefully
- Allow for water hardness in formulation
- Test quality, cost a formulation per wash and prove shelf life

Who should attend

- Production supervisors in soap and detergent plants
- Formulation chemists and technologists
- Quality control staff in home care manufacturing
- Product developers in consumer goods
- Entrepreneurs manufacturing cleaning products

Course outline

- 01 Cost per wash against perceived performance
- 02 Surfactant types and incompatibilities
- 03 Saponification, kettle and continuous routes
- 04 Soap finishing, drying, milling and stamping
- 05 Powder production and bulk density
- 06 Liquid detergent viscosity and stability
- 07 Builders, enzymes, brighteners and perfume
- 08 Water hardness, testing, costing and shelf life

Upcoming dates



Dates	Venue	Format	Fee per delegate
12 to 14 October 2026	Mbabane, Eswatini	Classroom	R14,950
4 to 6 November 2026	Pretoria, South Africa	Classroom	R14,950
2 to 4 December 2026	Kampala, Uganda	Classroom	USD 995
11 to 13 January 2027	Addis Ababa, Ethiopia	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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