

MAGIMAI NATHAN.P *Product Development-R & D*

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📍 chinnasalem, tamilnadu

📅 04-06-1990

🚩 Indian

💍 married

♂ male



PROFESSIONAL SUMMARY

R&D professional with 14+ years of experience in home care and detergent product development, specializing in formulation design, process optimization, scale-up, and commercialization of detergent powders, bars, liquids, dish wash liquids, and surface care products. Experienced in leading plant trials, troubleshooting manufacturing issues, and collaborating with production, quality, procurement, and marketing teams to deliver cost-effective and consumer-focused innovations.

EXPERIENCE

2024 – Present

Karaikal

Jyothy Labs, *Executive-RD -support /Product development*

- Conduct formulation trials and stability testing for detergent and home care products.
- Execute process trials and R&D on liquid and bar detergent manufacturing lines.
- Perform RCA/CAPA investigations for product quality improvements.
- Experienced in compact detergent cake manufacturing with expertise in batch processing, ingredient addition optimization and mixer operations
- supported R&D activities for yellow dish wash bar formulations
- Implemented a green and cost-effective MGDA stabilization enzyme system replacing conventional borax in enzymatic liquid detergent formulations, improving sustainability and regulatory compliance.
- Enhanced process development by modifying the acid slurry circulation system SOP to control pH and AD variation, significantly reducing batch rejection and improving plant productivity.

2022 – 2024

Hubli

Vibhava Industries,, *Product development R& D*

- Conducted formulation trials and stability evaluation for new detergent products.
- Managed raw material and finished product quality control.
- Complete Machinery installation setup for bar plant and powder plant
- Provided Key quality support for new machine commissions, implementing quality gates and procedures to ensure
- Product development from concept to competitive market
- Assist with Pilot batch support with New generation encapsulation perfume
- Knowledge of the polymers and additive used in above market formulations
- Achieved cost-effective, high-performance detergent powder production through optimized formulation development and successful large-scale powder plant setup.

2021 – 2022

Dhone, India

Vasundra industries, *Sr.RD- officer*

- Work with Marketing and R&D Management to help define product concepts and advise on technical issues relative to implementation
- Lead product formulation work and develop guidelines for mixing and stability

2015 – 2021

kodad

Laxmi chenna kesva enterprise, *RD- officer*

- Researched new ingredients and develop the home care products.
- Development of market's trending product.

- Generated test plans for finished premixes to establish minimum, target, and maximum specifications.

2012 – 2015
Pondicherry

Ponvandu soaps, *RD trainee*
Finished Product, in process, Raw Material Analyst.
Monitored the production

EDUCATION

2010 – 2012

M.Sc Chemistry, *Gandhigram Rural Institute*

2007 – 2010

B.Sc Chemistry, *Periyar E.V.R College*

Core skills

- | | | |
|--|--|---|
| • Detergent Liquid / Dishwasher Formulation & Development | • Stability Testing & Raw Material Evaluation | • Viscosity Analysis - Brookfield Viscometer-LV Dv2T |
| • UV Spectroscopy, pH Meter & conductivity meter | • SAP Data Handling & GMP Compliance | • Process Troubleshooting & Vendor Development |
| • Rheology & Viscosity control | • experienced in stoichiometric calculations and molecular weight estimation | • Dye & optical Brightener compatibility |
| • Excellent knowledge of laundry base ingredients | • Basic understanding of design of production machine | • product development from concept to commercial launch |
| • Assist with Pilot batch support with new generation encapsulated perfume | | |

Languages

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|---------|-----------|----------|---------|
| • Tamil | • English | • Telugu | • Hindi |
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KEY STRENGTHS

- Collaborated with marketing teams to convert consumer needs into effective product performance. Supported technical evaluations for new product launches and customer requirements.
- Proven expertise in end-to-end product lifecycle management (concept development → pilot → commercialization)
- Extensive experience in manufacturing scale-up, process optimization, and quality systems (RCA/CAPA, GMP, SAP)

Achivements

KEY ACHIEVEMENTS

- Improved floor cleaner formulation by eliminating phase separation issues, resulting in a **7% increase in sales**
- Enhanced washing powder process development through optimized filler addition and mesh retention control, reducing SLS needle wastage by approximately 5%.
- Improved bar die profile efficiency in coordination with the mechanical team, resulting in a 2% reduction in production waste.
- Resolved dye transfer issues in detergent bar formulations, preventing fabric staining and improving **product reliability and consumer acceptance**

- Developed and commercialized multiple detergent products (liquids, powders, bars) from **concept to market launch**
- Successfully supported **plant setup and commissioning** for detergent bar and powder production lines