

Designing and Testing Performance of Effervescent Products

How to Ensure Your Product Gets a Fizz

DIRECTED BY

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ACCREDITED
COURSE

Course Topics Include:

- Performance Targets
- Test Methods
- Ingredient Selection
- Troubleshooting

about the course

Effervescent tablets have been used as products in the pharmaceutical and dietary industries for over two centuries. Rising demand for maintaining a healthier lifestyle is primarily responsible for driving the global effervescent products market. This is mainly due to the fact that effervescent products form a key ingredient of various dietary supplements, probiotics, and other commodities that can help a person attain a healthier lifestyle.

In addition, Effervescent Tablets are becoming increasingly popular in a variety of sectors due to the ease in which they can be consumed. These properties have transferred into the product development considerations in areas such as pharmaceutical, nutritional, beverages, dental care products, laundry detergents, and sanitizers.

This 4-hour accredited training is divided into four 60-minute segments and will aid in understanding effervescent product design. This allows for product design, creation and formulation, processing, and final packaging control in obtaining the desired design performance. Participants will gain an understanding of the protective principle required to meet performance goals from a materials, formulation, and manufacturing design point of view.

who should attend

This course is intended for professionals in the Pharmaceutical, Nutritional, Diagnostics, Detergents, Sanitizer, Beverage, Personal Care, and Homecare Industries.

Personnel involved in Research, Quality, Validation, Analytical, Product Support, Marketing Support, and Technology Transfer will benefit greatly as well as Directors, Managers, Scientists, Developers, Specialists, Project Managers, and Team Leaders. Senior management should attend in order to realize the challenges R&D, formulators and developers may face while attempting to optimize an effervescent product performance.

learning objectives

Upon completion of this course, you will be able to:

- Develop and test product performance targets for product design control
- Use test methods to troubleshoot performance and resolve stability issues
- Describe protective concepts and strategies to prevent unwanted Pre-fizzing
- Select ingredients, formulate and setup processes and environmental conditions to meet performance objectives

course outline

Review of Learning Objectives

Module 1: Product Performance

- Development of test product performance targets for product design control
- Isolation and classification of performance criteria and application of test methods to evaluate performance
- Measuring moisture and temperature levels for ingredients, mixtures, and final products to prevent pre-fizzing
- Application of performance tests in formulation, process, and product development, and controls

Module 2: Preventing Pre-fizzing

- Developing and implementing protective strategies in four key areas:
 - Design of protective ingredients
 - Formulation
 - Manufacturing
 - Environmental strategies

Module 3: Formulating and Ingredient Selection

- Ingredient selection and formulation to meet performance objectives
- Choosing from formulating options for compression, lubrication, and to prevent pre-fizz
- Setup of environmental controls for the manufacturing space

Module 4: Process, Equipment, and Environmental Controls

- Choosing between Mixing, Roll Compaction, Wet Granulation, Fusion Methods
- Selecting equipment and process conditions
- Manufacturing strategies at proof of concept level and large scale
- Selecting the manufacturing process

Assessment Opportunity

course instructor

Dr. Cecil W. Propst is Managing Director at Propst Consulting Services, a formulation, and engineering support LLC located in Norton Shores MI. He was Director of R&D (Grand Haven site) at SPI Pharma until 2015. He served as Director of Quality Assurance and Technical Services at Fleming and Company, and before that, President of Manufacturing Chemists. His duties included system design, product and process development and regulatory affairs.

Dr. Propst has developed effervescent products (Analgesics and Dentifrices) for Lewis Howe (Now Glaxo) and developed EfferSoda for Beacon Speciality Ingredients and supported Effervescent product development for SPI Pharma.

Previously, he served as cGMP Facilities Director for the University of Maryland at Baltimore, in connection with the University's SUPAC contract with the FDA. Dr. Propst also served as Director of Technical Development for Stellar Manufacturing; Director of Quality Compliance for SmithKline Beecham; Director, Quality Assurance for Norcliff Thayer (a Revlon Company); and Group Leader/Product Development and Manager/Quality Control for Lewis Howe Company. He serves as a consultant in the area of product development and process investigations.

Accreditations



International Accreditors for Continuing Education and Training (IACET)

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