

Near Infrared Spectroscopy

Authors:

Per Lidén

Nadja Eremina

PerkinElmer, Inc.
Stockholm, Sweden

Analysis of Dairy Powders Using the DA 7250 NIR

Introduction

Analysis of dairy powders is of great importance to production plants producing them and to those using them as ingredients. By accurately controlling many constituents, the producer can experience significant savings by optimizing production to meet specifications. The dairy powder user can avoid mistaken deliveries as well as formulate products to meet functional and compositional requirements.

The Near Infrared Reflectance (NIR) technique is particularly suited for measurement of dairy powders, but past instrument limitations have not allowed users to reap the full benefits of NIR. Which made analyses slow, laborious, time consuming and error-prone.



DA 7250 NIR Analyzer

The PerkinElmer DA 7250™ is a proven NIR instrument designed for use in the food industry. Using novel diode array technology it performs a multi-component analysis in less than ten seconds with no sample preparation required. During this time a large number of full spectra are collected and averaged. As the sample is analyzed in an open dish, the problems associated with sample cups are avoided and operator influence on results is minimal. The DA 7250 is IP65 rated and available in a sanitary design version, making it suitable for use in the lab as well as in production environments.

