

Application Note # AN-211E

FT-NIR Analysis of Butter

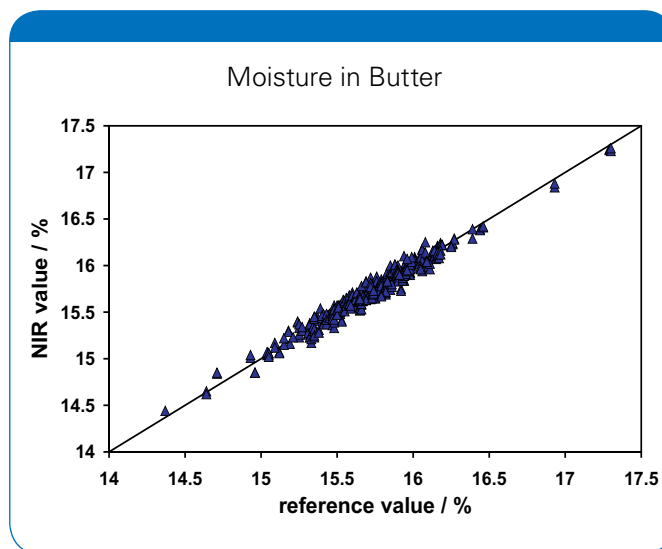
For butter it is important to stay as close as possible to the target concentration of the fat component, i.e. to maximize the moisture content without going out of specification. Moisture in butter can easily be measured using FT-NIR spectroscopy.

A Bruker Optics MPA FT-NIR spectrometer was used, equipped with a Si-diode detector. The butter samples were filled in disposable polystyrene Petri dishes and placed onto the spectrometer. A sample rotator was used in order to maximise the amount of scanned sample during the transmission measurement

There are two main types of butter produced for the domestic and export markets, salted and unsalted. This application applies to unsalted butter although salted has been tested successfully with similar results.

Calibration Results:

- Moisture 14.4 - 17.3 ± 0.07 %



Bruker Optics can look back on 30 years of experience in developing and producing optical spectrometers. Our experience is your benefit:

Application Support

Bruker Optics is staffed by scientists and engineers that have an in-depth knowledge of instrumentation and applications. Our product specialists are available to assist you with method development either remotely or in your lab. FT-NIR application scientists will assist you in the selection and use of sampling accessories, choice of optical components and software operation. We offer customized instruction and support packages to fit your needs.



Service and Maintenance

Bruker spectrometers are intended to provide years of trouble-free operation, but should a problem occur a network of Bruker companies and representatives around the world are ready to respond to your needs. Professional installations and a high standard of post-delivery service are commitments Bruker makes to each of its customers.



Training

Customer training courses are held on a regular basis for the benefit of the FT-NIR instrument users. Both technical and software (e.g. OPUS/IR, IDENT, QUANT) practice seminars are offered. Customized on-site training is also available from our staff of FT-NIR specialists.



www.brukeroptics.com



Bruker Optics Inc.

Billerica, MA · USA
Phone +1 (978) 439-9899
Fax +1 (978) 667-5993
info@brukeroptics.com

Bruker Optik GmbH

Ettingen · Germany
Phone +49 (7243) 504-2000
Fax +49 (7243) 504-2050
info@brukeroptics.de

Bruker Optik Asia Pacific Ltd.

Hong Kong
Phone +852 2796-6100
Fax +852 2796-6109
asiapacific@brukeroptics.com.hk