



Application Note AN N214

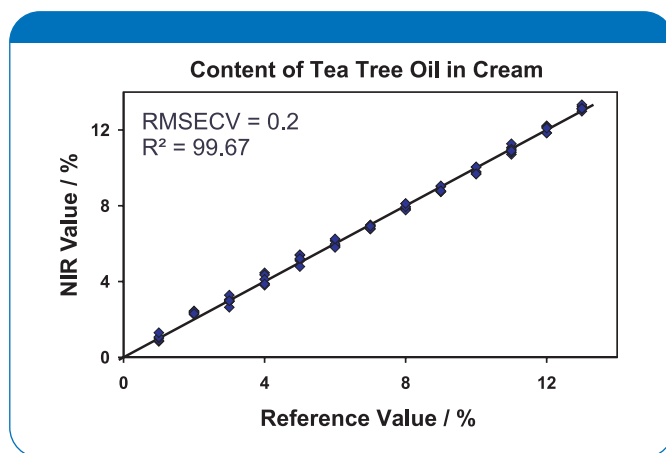
Analysis of Natural Ingredients in Cosmetics

Determination of the Tea Tree Oil Content in Cream. Tea Tree Oil is an essential oil extracted from the leaves of the *Melaleuca Alternifolia*. It has a number of properties which make it a powerful healing substance and is nowadays widely used as an active ingredient in natural cosmetics.

This application shows the feasibility of monitoring natural ingredients like Tea Tree Oil in industrially manufactured cosmetics. The cream samples were measured in diffuse reflectance with a fiber optic probe and the results were calibrated using the chemometrical software package OPUS/QUANT.

Calibration Example:

- Tea Tree Oil 0 - 13 ± 0.2 %



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.



● Bruker Scientific LLC

Billerica, MA · USA
Phone +1 (978) 439-9899
info.bopt.us@bruker.com

www.bruker.com/optics

Bruker Optics GmbH & Co. KG

Ettlingen · Germany
Phone +49 (7243) 504-2000
info.bopt.de@bruker.com

Bruker Shanghai Ltd.

Shanghai · China
Tel.: +86 21 51720-890
info.bopt.cn@bruker.com