



## Application Note AN # 247E FT-NIR Quality control of Ice cream

FT-NIR spectroscopy is a fast and accurate solution for the quality control of milk and dairy products. Bruker Optics offers solutions for the analysis of solid, semi-solid and liquid samples in the laboratory as well as in the process

When running a large-scale ice cream plant, it is crucial to know the exact composition of the products at all manufacturing stages. Only then, an optimized and cost effective use of ingredients and power is possible. Bruker Optics offers solutions for the laboratory, at-line or on-line control of the product. The essential parameters fat and dry matter can be determined within seconds: in the laboratory by pumping the liquid ice cream through a flow cell or on-line with a probe installed inside the process.

- Easy to operate
- Multiple parameters with one measurement
- Results in less than 30 seconds
- No use of solvents or consumables
- Operator-independent results



### Calibration Results:

- Fat 3.4 - 20.0 ± 0.20 %
- Dry Matter 29.0 - 47.5 ± 0.33 %

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](http://www.brukeroptics.com)

● **Bruker Optics Inc.**

Billerica, MA · USA  
Phone +1 (978) 439-9899  
Fax +1 (978) 663-9177  
[info@brukeroptics.com](mailto:info@brukeroptics.com)

**Bruker Optik GmbH**

Ettlingen · Germany  
Phone +49 (7243) 504-2000  
Fax +49 (7243) 504-2050  
[info@brukeroptics.de](mailto:info@brukeroptics.de)

**Bruker Optik Asia Pacific Ltd.**

Hong Kong  
Phone +852 2796-6100  
Fax +852 2796-6109  
[asiapacific@brukeroptics.com.hk](mailto:asiapacific@brukeroptics.com.hk)