



CERTIFICATE OF ANALYSIS

ERM®-BF411e

DRIED MAIZE POWDER		
	Mass fraction	
	Certified value ²⁾ [g / kg]	Uncertainty 3) [g / kg]
Bt-176 maize 1)	20.0	1.1

- 1) The Bt-716 maize is genetically modified and corresponds to the unique identifier SYN-EV176-9.
- 2) The certified value is based on the mass fraction of dried non-GMO powder and dried GMO powder mixed and corrected for the water content. The value is traceable to the International System of Units (SI).
- 3) Estimated expanded uncertainty *U* with a coverage factor *k* = 2, corresponding to a level of confidence of about 95 %, as defined in the Guide to the Expression of Uncertainty in Measurement (GUM), ISO, 1995. Uncertainty contributions arising from characterisation as well as from homogeneity and stability assessment were taken into consideration.

This certificate is valid for one year after purchase.

Sales date:

The minimum sample intake is 100 mg.

NOTE

European Reference Material ERM®-BF411e was originally certified as IRMM-411R-4. It was produced and certified under the responsibility of the IRMM according to the principles laid down in the technical guidelines of the European Reference Materials® co-operation agreement between BAM-IRMM-LGC. Information on these guidelines is available on the Internet (http://www.erm-crm.org).

Accepted as an ERM[®], Geel, April 2004 Latest revision: July 2011

Signed:

Prof. Dr. Hendrik Emons
European Commission
Joint Research Centre
Institute for Reference Materials and Measurements
Retieseweg 111

B-2440 Geel, Belgium



DESCRIPTION OF THE SAMPLE

ERM®-BF411e is supplied in amber glass vials containing approximately 1 g maize powder closed under argon atmosphere. ERM®-BF411e is part of a set of CRMs of dried maize powder with different mass fractions of dried powder from genetically modified Bt-176 maize. According to Commission Regulation (EC) No 65/2004 the Bt-176 maize received the unique identifier code SYN-EV176-9. Users are informed that this reference material has been produced from whole seeds of a non-modified maize (seed variety Bahia) and genetically modified seeds (event variety Garona Bt176) delivered by Syngenta Seeds S.A.S, Néarc, France. According to the information provided by Syngenta the genetically modified donor for the heterozygous Bt-176 maize was the male parent.

ANALYTICAL METHOD USED FOR CERTIFICATION

Gravimetric preparation verified by real-time Polymerase Chain Reaction

PARTICIPANTS

European Commission, Joint Research Centre, Institute for Reference Materials and Measurements (EC-JRC-IRMM), Geel, BE (BELAC, 268-TEST)*

European Commission, Joint Research Centre, Institute for Health and Consumer Protection (EC-JRC-IHCP), Ispra, IT

SAFETY INFORMATION

The usual laboratory safety precautions apply. The CRM does not contain viable seeds.

INSTRUCTIONS FOR USE

This CRM is intended to be used for the calibration or quality control of GMO detection methods. The dry CRM powder is hygroscopic. Users are therefore advised to close vials immediately after taking a sample.

STORAGE

ERM®-BF411e should be stored at + 4 °C in the dark. However, the European Commission cannot be held responsible for changes that happen during storage of the material at the customer's premises, especially of opened samples.

LEGAL NOTICE

Neither IRMM, its contractors nor any person acting on their behalf:

- (a) make any warranty or representation, express or implied, that the use of any information, material, apparatus, method or process disclosed in this document does not infringe any privately owned intellectual property rights; or
- (b) assume any liability with respect to, or for damages resulting from, the use of any information, material, apparatus, method or process disclosed in this document save for loss or damage arising solely and directly from the negligence of IRMM.

NOTE

A detailed technical report is available on www.irmm.jrc.be. A paper copy can be obtained from IRMM on request.

European Commission – Joint Research Centre Institute for Reference Materials and Measurements (IRMM) Retieseweg 111, B - 2440 Geel (Belgium) Telephone: +32-14-571.722 - Telefax: +32-14-590.406

^{*} Measurements within the scope of accreditation to ISO/IEC 17025.