



JOINT RESEARCH CENTRE
Directorate F – Health, Consumers and Reference Materials

CERTIFICATE OF ANALYSIS

ERM[®] - BF412bk

MAIZE POWDER	
Mass Fraction	
	Certified value ²⁾ [g/kg]
Bt11 maize ¹⁾	> 970 ³⁾

1) Genetically modified maize with the unique identifier SYN-BTØ11-1.
2) This certified reference material has been produced from genetically modified Bt11 maize seeds. The certified value is based on the genetic purity of the maize seed powder with regard to Bt11. The certified value is traceable to the International System of Units (SI).
3) In total 209 seeds were tested individually for the presence of the Bt11 maize event of which 207 seeds tested positive. With 95 % confidence, the true Bt11 maize mass fraction of the material is above 970 g/kg.

This certificate is valid for one year after purchase.

Sales date:

The minimum amount of sample to be used is 200 mg.

Geel, February 2018

Signed: 

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DESCRIPTION OF THE MATERIAL

ERM-BF412bk is one of the five Bt11 maize powder certified reference materials (CRMs) containing different mass fractions of this genetically modified maize. ERM-BF412bk has been produced from whole seeds of genetically modified Bt11 maize, supplied by Syngenta Crop Protection LLC (North Carolina, US). According to the information provided by Syngenta Crop Protection LLC, the genetically modified maize seeds used to prepare ERM-BF412k were hemizygous and the donor for the Bt11 maize event was the male parent. In accordance with Commission Regulation (EC) No 65/2004, the unique identifier code SYN-BTØ11-1 was assigned to the Bt11 maize event. The CRM is supplied in amber glass bottles containing at least 1 g maize powder under argon atmosphere.

ANALYTICAL METHODS USED FOR CERTIFICATION

Event-specific quantitative polymerase chain reaction (PCR)

PARTICIPANTS

European Commission's Joint Research Centre, accredited to ISO Guide 34 (BELAC No. 268-RM) and to ISO/IEC 17025 (BELAC No. 268-TEST).

SAFETY INFORMATION

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

INSTRUCTIONS FOR USE AND INTENDED USE

ERM-BF412bk is intended to be used for calibration or quality control of methods for the identification and quantification of genetically modified Bt11 maize in food and feed. When setting up a calibration curve the estimated genetic purity for the GM powder of 990 g/kg should be used. For quality control it has to be noted that 970 g/kg is the lower limit of the 95 % confidence interval of the certified value.

The dry CRM powder is hygroscopic. Users are therefore advised to close bottles immediately after taking a sample.

STORAGE

Bottles should be stored dry and in the dark at 4 ± 3 °C.

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

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NOTE

A detailed certification report is available at <https://crm.jrc.ec.europa.eu/>.

A paper copy is obtainable from the Joint Research Centre, Directorate F – Health, Consumers and Reference Materials on request.



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