

JOINT RESEARCH CENTRE
Directorate F – Health and Food

REFERENCE MATERIAL CERTIFICATE

ERM[®]-BF447e MAIZE SEED POWDER

Certified Values		
	Mass Fraction ²⁾ [g/kg]	Uncertainty ³⁾ [g/kg]
DP915635 ¹⁾	99	± 5
1) Genetically modified maize with the unique identifier DP915635-4. 2) Certified values are values that fulfil the highest standards of accuracy. The certified value and its uncertainty are traceable to the International System of Units (SI). The certified value is based on the masses of mixed and dried genetically modified DP915635 maize seed powder and of mixed and dried non-genetically modified maize seed powder, taking into account their respective genetic purity with regard to DP915635 maize and their respective water content. 3) The uncertainty of the certified value is the expanded uncertainty with a coverage factor $k = 2$ corresponding to a level of confidence of 95 %, estimated in accordance with ISO 17034:2016 and ISO Guide 35:2017.		

This certificate is valid for one year after purchase.

Sales date:

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

Geel, December 2023

INFORMATION ONLY

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DESCRIPTION OF THE MATERIAL

ERM-BF447e is one of five DP915635 maize seed powder certified reference materials (CRMs) containing different mass fractions of this genetically modified maize. ERM-BF447e has been produced from whole seeds of non-genetically modified maize and genetically modified DP915635 maize both supplied by Pioneer Hi-Bred International, Inc. Corteva Agriscience (Johnston, IA, US). According to the information provided by Pioneer Hi-Bred International, the DP915635 maize seeds are hemizygous and the DP915635 maize event was inherited from the male parent. In accordance with Commission Regulation (EC) No 65/2004, the unique identifier code DP-915635-4 was assigned to the DP915635 maize event. The CRM is supplied in amber glass vials containing at least 1 g of maize seed powder under argon atmosphere.

ANALYTICAL METHODS USED FOR CHARACTERISATION

Gravimetry.

Event-specific quantitative polymerase chain reaction (qPCR).

PARTICIPANTS

The following laboratories performed measurements in the scope of the homogeneity, stability and or characterisation study.

European Commission, Joint Research Centre, Directorate F – Health and Food (Geel, BE) (ISO/IEC 17025:2017 accreditation, BELAC No. 268-TEST) *

Pioneer Hi-Bred International, Inc. Corteva Agriscience (Johnston, IA, US)

Eurofins Genescan GmbH (Freiburg, DE) (ISO/IEC 17025:2017 accreditation, DAkkS No. D-PL-17111-01-00) *

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

SAFETY INFORMATION

The usual laboratory safety precautions apply.

INTENDED USE

ERM-BF447e shall only be used for calibration or quality control of methods for the identification and quantification of genetically modified DP915635 maize in food and feed. As with any reference material, it can be used for establishing control charts or validation studies.

INSTRUCTIONS FOR USE

Care should be taken to avoid moisture uptake once the units are opened, as the material is hygroscopic. The user should close the vial immediately after taking a sample. Please note that repeated sampling or use has not been tested and occurs under the responsibility of the user. For more information about the use of GMO CRMs, please see ERM-Application Note 4: Use of Certified Reference Materials for the Quantification of GMO in Food and Feed, and for general information on handling of reference materials, please see ERM Application Note 6, both available on <https://crm.jrc.ec.europa.eu/e/132/User-support-Application-Notes>. Dispose of in accordance with good laboratory practice.

STORAGE

The materials should be stored at $(4 \pm 3) ^\circ\text{C}$ in the dark. For more information regarding the shelf life of reference materials please see ERM Application Note 7, available on <https://crm.jrc.ec.europa.eu/e/132/User-support-Application-Notes>. Please note that the stability of samples after opening has not been tested. The European Commission cannot be held responsible for changes that happen to samples after opening or when the material is stored differently from the stated storage conditions at the customer's premises.

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NOTE

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



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