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

CERTIFICATE OF ANALYSIS

ERM®-BF424b

DRIED MAIZE POWDER			
GM Event	Mass Fraction		
	Certified value [1] [g/kg]	Uncertainty [2] [g/kg]	
		Relevant below the certified value	Relevant above the certified value
59122 maize	1.0	0.2	1.2

[1] The certified value is based on the mass fraction of dried non-genetically modified powder and dried genetically modified powder separately corrected for the water content and mixed. The certified value is traceable to the SI.

[2] The certified uncertainty is the expanded uncertainty estimated in accordance with the Guide to the Expression of Uncertainty in Measurement (GUM) with a coverage factor k = 2, corresponding to a level of confidence of about 95 %. The expanded uncertainty for ERM®-BF424b covers the interval from 0.8 to 2.2 g/kg.

This certificate is valid for 1 year after purchase.

Sales date:

The minimum amount of sample to be used is 100 mg.

NOTE

European Reference Material ERM®-BF424 was produced and certified under the responsibility of the Directorate F – Health, Consumers and Reference Materials of the European Commission's Joint Research Centre 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, December 2006
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Signed:

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DESCRIPTION OF THE SAMPLE

ERM®-BF424b is part of one of four maize powder certified reference materials (CRMs) containing different mass fractions of genetically modified (GM) 59122 maize. The four CRMs (ERM®-BF424a, ERM®-BF424b, ERM®-BF424c and ERM®-BF424d) were produced and certified under the responsibility of the Directorate F – Health, Consumers and Reference Materials of the European Commission's Joint Research Centre. The materials were prepared by quantitative mixing of dried non-GM maize powder and 59122 GM dried maize powder, and subsequent homogenisation with the help of a dry-mixing technique. ERM®-BF424b is available in glass bottles containing approximately 1 g of maize powder closed under argon atmosphere. This reference material has been produced from whole kernels of non-modified maize and 59122 maize of seed quality delivered by Pioneer Hi-Bred International (Johnston, IA, USA).

According to Commission Regulation (EC) No 65/2004 the event 59122 maize corresponds to the unique identifier DAS-59122-7. According to the information provided by Pioneer the genetically modified donor for the 59122 hybrid maize was the male parent.

ANALYTICAL METHOD USED FOR CERTIFICATION

Gravimetrical preparation confirmed by real-time Polymerase Chain Reaction.

PARTICIPANTS

EC-DG JRC-IRMM, Geel, BE

SAFETY INFORMATION

Not applicable.

INSTRUCTIONS FOR USE

ERM®-BF424b is intended to be used for the quality control or calibration of methods for the detection of genetically modified food.

STORAGE

Bottles should be stored dry and in the dark at maximum 4 °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. We recommend to use samples once opened within one week.

LEGAL NOTICE

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NOTE

A detailed technical report is available on https://crm.jrc.ec.europa.eu. A paper copy can be obtained from the Joint Research Centre, Directorate F – Health, Consumers and Reference Materials on request.

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