

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

# CERTIFICATE OF ANALYSIS

## ERM<sup>®</sup> - BF410bp

SOYA BEAN POWDER	
	Mass fraction
	Certified value <sup>2)</sup> [g/kg]
GTS 40-3-2 soya bean <sup>1)</sup>	> 985 <sup>3)</sup>
<p>1) Genetically modified soya bean with the unique identifier MON-Ø4Ø32-6.</p> <p>2) This certified reference material has been produced from genetically modified MON-Ø4Ø32-6 soya bean seeds. The certified value is based on the genetic purity of the soya bean seed powder with regard to MON-Ø4Ø32-6. The certified value is traceable to the International System of Units (SI).</p> <p>3) In total 201 seeds from the whole batch were grown and tested individually for the presence of the MON-Ø4Ø32-6 genetic modification. All seeds tested positive. With 95 % confidence, the true MON-Ø4Ø32-6 soya bean mass fraction of the material is above 985 g/kg.</p>	

This certificate is valid for one year after purchase.

Sales date:

The minimum amount of soya bean powder to be used is 200 mg.

### NOTE

European Reference Material ERM<sup>®</sup>-BF410bp was produced and certified under the responsibility of the European Commission's Joint Research Centre according to the principles laid down in the technical guidelines of the European Reference Materials<sup>®</sup> co-operation agreement between BAM-JRC-LGC. Information on these guidelines is available on the internet (<http://www.erm-crm.org>).

Accepted as an ERM<sup>®</sup>, Geel, June 2017

Signed: 

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## DESCRIPTION OF THE MATERIAL

ERM-BF410bp is one of the five MON-Ø4Ø32-6 soya bean powder certified reference materials (CRMs) containing different mass fractions of this genetically modified soya bean. ERM-BF410bp has been produced from whole seeds of genetically modified MON-Ø4Ø32-6 soya bean, supplied by Monsanto, US. In accordance with Commission Regulation (EC) No 65/2004, the unique identifier code MON-Ø4Ø32-6 was assigned to the GTS 40-3-2 soya bean event. The CRM is supplied in amber glass bottles containing at least 1 g soya bean powder under argon atmosphere.

The five CRMs (ERM-BF410ap, ERM-BF410bp, ERM-BF410cp, ERM-BF410dp and ERM-BF410ep) were prepared and certified under the responsibility of the European Commission's Joint Research Centre.

## ANALYTICAL METHODS USED FOR CERTIFICATION

Event-specific real-time polymerase chain reaction (PCR) for ERM-BF410ap and bp.

Gravimetry, verified by event-specific real-time PCR, for ERM-BF410cp, dp and ep.

## 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-BF410bp is intended to be used for calibration or quality control of methods for the identification and quantification of genetically modified MON-Ø4Ø32-6 soya bean in food and feed.

When setting up a calibration curve the estimated genetic purity for the GM powder of 1000 g/kg should be used. For quality control it has to be noted that 985 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  $4 \pm 3$  °C.

Please note that the European Commission cannot be held responsible for changes that happen during storage of the material at the customer's premises.

## LEGAL NOTICE

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(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 the European Commission's Joint Research Centre.

## NOTE

A detailed technical report is available on <http://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.