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CERTIFICATION REPORT

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Certified Reference Materials
ERM®-BF436a, ERM®-BF436b, ERM®-BF436c,
ERM®-BF436d and ERM®-BF436e
Abstract:
This report describes the production of a set of Certified Reference Materials (CRMs) ERM BF436a, b, c, d and e, certified for their DAS-44406-6 mass fractions. The material was produced following ISO Guide 34:2009. Genetically modified (GM) seeds of the soya event DAS-44406-6 and of a non-GM soya variety were milled to obtain GM and non-GM powders. Gravimetric mixtures of non-GM and GM soya powder were prepared by dry-mixing. Between-unit homogeneity was quantified and stability during dispatch and storage were assessed in accordance with ISO Guide 35:2006. The certified value was obtained from the gravimetric preparations, taking into account the purity of the base materials and their water mass fraction. The certified values were confirmed by event-specific real-time PCR as independent verification method (measurements within the scope of accreditation to ISO/IEC 17025:2005). Uncertainties of the certified values were calculated in compliance with the Guide to the Expression of Uncertainty in Measurement (GUM) and include uncertainties related to possible inhomogeneity (Section 4), instability (Section 5) and characterisation (Section 6). The materials are intended for the calibration or quality control of methods. As any reference material, they can be used for establishing control charts or validation studies. The CRMs are available in glass vials containing at least 1 g of dried soya seed powder and closed under argon atmosphere. The minimum amount of sample to be used is 200 mg. The CRMs were accepted as European Reference Material (ERM®) after peer evaluation by the partners of the European Reference Materials consortium.

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