



# CERTIFIED REFERENCE MATERIAL BCR<sup>®</sup> – 599

## CERTIFICATE OF ANALYSIS

EWES' AND GOATS' CURD	
	Certified value <sup>1)</sup> [%]
Probability of correct identifications of cows' milk	> 97.8
1) The certified value is the lower limit of the one-sided 95 % confidence interval calculated for the correct identification of the adulterated cheeses, made from ewes' and goats' milk and mixtures thereof, with cows' milk. The lower limit is based on the results of 10 laboratories. It is calculated from 139 unknown and randomly distributed samples of 0 % and 1 % (mass fraction) cows' milk, using the EU reference method (Regulation (EC) No 1081/96) and BCR-599. The certified value is traceable to this reference method.	

This certificate is valid for one year after purchase.

Sales date:

The minimum amount of sample to be used is 5 g.

### DESCRIPTION OF THE SAMPLE

BCR-599 consists of 2 materials of a ca. 50/50 mixture of ewes'/goats' curds with 0 and 1 % (mass fraction) cows' milk. BCR-599 is available in brown glass bottles containing about 15 g of lyophilised curd powder under argon atmosphere. The residual moisture content is 1.2 to 1.5 % (mass fraction).

### NOTE

This material has been certified by BCR (Community Bureau of Reference, the former reference materials programme of the European Commission). The certificate has been revised under the responsibility of IRMM.

Brussels, June 1996  
Latest revision: September 2013

Signed: \_\_\_\_\_

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## **ANALYTICAL METHOD USED FOR CERTIFICATION**

Reference method (Regulation (EC) No 1081/96) implies the detection of cows' milk and caseinate by isoelectric focusing of  $\gamma$ -caseins after plasminolysis.

The certified value is based on the results of 10 laboratories who analysed 139 unknown and randomly distributed samples of 0 % and 1 % (mass fraction) cows' milk using the EU reference method (Regulation (EC) No 1081/96).

Sensitivity of the reference method expressed in terms of adulterated samples positive in test / all adulterated samples = 100.0 %.

Specificity of the reference method expressed in terms of non adulterated samples negative in test / all non adulterated samples = 100.0 %.

Efficiency of the reference method expressed in terms of percentage of correct identifications = 100.0 %.

## **PARTICIPANTS**

- Forschungszentrum für Milch und Lebensmittel Weihenstephan (FML), Freising (DE)
- Institut Technique des Produits Laitiers Caprins (ITPLC), Surgères (FR)
- Instituto de Fermentaciones Industriales (CSIC), Madrid (ES)
- Instituto de Protecção da Produção Agro-Alimentar, Lisboa (PT)
- Istituto Sperimentale Lattiero-Caseario, Lodi (IT)
- European Commission, Joint Research Centre, Institute for Environment and Sustainability (IES), Ispra (IT)
- European Commission, Joint Research Centre, Institute for Reference Materials and Measurements (IRMM), Geel (BE)
- Laboratoire Interrégional de la Repression des Fraudes, Montpellier (FR)
- Laboratoire National d'Essais (LNE), Paris (FR)
- Laboratorio Agroalimentario de Santander, Santander (ES)
- Milchwirtschaftliche Untersuchungs- und Versuchsanstalt (MUVA), Kempten (DE)
- Société des Caves et Producteurs Réunis de Roquefort, Recherche-Développement, Roquefort (FR)
- Università degli Studi di Napoli Federico II, Dipartimento di Scienza degli Alimenti, Portici (IT)

## **SAFETY INFORMATION**

The usual laboratory safety precautions apply.

## **INSTRUCTIONS FOR USE**

The material is intended to be used to apply the reference method (Regulation (EC) No 1081/96) for the detection of adulteration of cheeses made from ewes' and goats' milk and mixtures thereof by cows' milk casein. In any case the casein fraction has to be isolated from the lyophilised curd as indicated in the reference method.

Dispose in accordance with good laboratory practice.

## **STORAGE**

The material shall be stored at - 20 °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 technical report on the production of BCR-599 is available on the internet (<http://www.irmm.jrc.be>). A paper copy can be obtained from IRMM on request.