

# Technical specifications for the stability testing of BCR-187 and BCR-188 (Pesticides in milk powder)

The following determinations shall be performed in the scope of stability monitoring of certified reference materials:

## **BCR-187 (pesticides in natural milk powder):**

12 replicate measurements of HCB and p,p'-DDE shall be performed under repeatability conditions, i.e. in one analytical series. The measurements shall be equally distributed over 4 units, i.e. three measurements of each unit coming from independent sample preparations.

The minimum of sample to be used is 2 g.

The analytical sequence shall be communicated with the sample dispatch

One dry mass determination from each unit shall be performed, i.e. in total 4 dry mass determinations. To determine dry mass, accurately weigh an aliquot of at +/- 2 g on an analytical balance and dry the sample in an oven at atmospheric pressure, at  $102\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ , until constant mass is attained. Weighing of the samples for dry mass determination and weighing for the analysis shall be done at the same time to avoid differences due to possible take up of moisture by the material

## **BCR-188 (pesticides in spiked milk powder) :**

12 replicate measurements of HCB, beta-HCH, beta-HEPO, p,p'-DDE, Dieldrin, Endrin and p,p'-DDT shall be performed under repeatability conditions, i.e. in one analytical series. The measurements shall be equally distributed over 4 units, i.e. three measurements of each unit coming from independent sample preparations.

The analytical sequence shall be communicated with the sample dispatch

The minimum of sample to be used is 2 g.

One dry mass determination from each unit shall be performed, i.e. in total 4 dry mass determinations. To determine dry mass, accurately weigh an aliquot of at +/- 2 g on an analytical balance and dry the sample in an oven at atmospheric pressure, at  $102\text{ }^{\circ}\text{C} \pm 1\text{ }^{\circ}\text{C}$ , until constant mass is attained. Weighing of the samples for dry mass determination and weighing for the analysis shall be done at the same time to avoid differences due to possible take up of moisture by the material

The deadline for delivery of result is one month after sample dispatch.

The measurements shall be performed preferably in 2019 with the dispatch date to be agreed upon.

## 1 Report

The report(s) shall comprise:

- a brief description of the method(s),
- calibration(s) and calibrators traceability
- brief description of the QA measures: quality charts, repeatability, expanded uncertainty.
- For each material/analyte 12 individual results expressed with their expanded uncertainty in  $\mu\text{g}/\text{kg}$  corrected to dry mass. All results must be traceable to the sample identification number and to the date of the analyses
- the results of the dry mass determinations,

The materials can be analysed with other materials without impeding the independence of results for the individual materials.

The signed pdf report might be sent by email to [JRC-RM-STABILITY@ec.europa.eu](mailto:JRC-RM-STABILITY@ec.europa.eu).

Alternatively a signed report in paper can be sent to European Commission  
Directorate General Joint Research Centre  
For the attention of: Mrs Francine Vanderveken  
Unit F.6 Reference Materials  
Retieseweg 111  
2440 Geel  
Belgium

**To be specified together with the quotation:**

<b>Analyte (target concentration)</b>	<b>Method</b>	<b>LOQ (<math>\mu\text{g}/\text{kg}</math>)</b>	<b>Average Repeatability (%)</b>	<b>Average expanded uncertainty* (%)</b>
HCB (1-40 $\mu\text{g}/\text{kg}$ )	Xxxx	Xxxx	Xxxx	Xxxx
p,p'-DDE (6-50 $\mu\text{g}/\text{kg}$ )	Xxxx	Xxxx	Xxxx	Xxxx
beta-HCH (12 $\mu\text{g}/\text{kg}$ )	Xxxx	Xxxx	Xxxx	Xxxx
beta-HEPO (32 $\mu\text{g}/\text{kg}$ )	Xxxx	Xxxx	Xxxx	Xxxx
Dieldrin (36 $\mu\text{g}/\text{kg}$ )	Xxxx	Xxxx	Xxxx	Xxxx
Endrin (6 $\mu\text{g}/\text{kg}$ )	Xxxx	Xxxx	Xxxx	Xxxx
p,p'-DDT (69 $\mu\text{g}/\text{kg}$ )	Xxxx	Xxxx	Xxxx	Xxxx

\* Expanded uncertainty for an average of 6 results

**Is the laboratory accredited or registered for a QM scheme? (Y/N)? YES**

**also for this type of measurement (Y/N) YES**