

Commission Regulation (EC) No 152/2009 of 27 January 2009 laying down the methods of sampling and analysis for the official control of feed (Text with EEA relevance)

*Changes to legislation: There are currently no known outstanding effects for the Commission Regulation (EC) No 152/2009, Division 2.1.2.. (See end of Document for details)*

## [<sup>F1</sup>ANNEX VI

### METHODS OF ANALYSIS FOR THE DETERMINATION OF CONSTITUENTS OF ANIMAL ORIGIN FOR THE OFFICIAL CONTROL OF FEED

#### Textual Amendments

**F1** Substituted by [Commission Regulation \(EU\) No 51/2013 of 16 January 2013 amending Regulation \(EC\) No 152/2009 as regards the methods of analysis for the determination of constituents of animal origin for the official control of feed \(Text with EEA relevance\).](#)

## 2. METHODS

### 2.1. Light microscopy

#### 2.1.2. Reagents and equipment

##### 2.1.2.1. Reagents

##### 2.1.2.1.1. Concentrating agent

2.1.2.1.1.1. Tetrachloroethylene (specific gravity 1,62)

##### 2.1.2.1.2. Staining reagent

2.1.2.1.2. Alizarin Red solution (dilute 2,5 ml 1M hydrochloric acid in 100 ml water and add 200 mg Alizarin Red to this solution)

##### 2.1.2.1.3. Mounting media

2.1.2.1.3. Lye (NaOH 2,5 % w/v or KOH 2,5 % w/v)

2.1.2.1.3.<sup>F2</sup> Glycerol (undiluted, viscosity: 1 490 cP) or a mounting medium with equivalent properties for non-permanent slide preparation]

#### Textual Amendments

**F2** Substituted by [Commission Implementing Regulation \(EU\) 2020/1560 of 26 October 2020 amending Annex VI to Regulation \(EC\) No 152/2009 laying down the methods of analysis for the determination of constituents of animal origin for the official control of feed \(Text with EEA relevance\).](#)

2.1.2.1.3. Norland ® Optical Adhesive 65 (viscosity: 1 200 cP) or a resin with equivalent properties for permanent slide preparation

##### 2.1.2.1.4. Mounting media with staining properties

2.1.2.1.4. Lugol solution (dissolve 2 g potassium iodide in 100 ml water and add 1 g iodine while frequently shaking)

2.1.2.1.4. Cystine reagent (2 g lead acetate, 10 g NaOH/100 ml water)

2.1.2.1.4. Fehling's reagent (prepared before use from equal parts (1/1) of two stock solutions A and B. Solution A: dissolve 6,9 g copper (II) sulphate pentahydrate in 100 ml water. Solution B: dissolve 34,6 g potassium sodium tartrate tetrahydrate and 12 g NaOH in 100 ml water)

2.1.2.1.4. ~~T~~etramethylbenzidine/Hydrogen peroxide. (dissolve 1 g 3,3',5,5' tetramethylbenzidine (TMB) in 100 ml glacial acetic acid and 150 ml water. Before use, mix 4 parts of this TMB solution with 1 part 3 % hydrogen peroxide)

2.1.2.1.5. Rinsing agents

2.1.2.1.5. Ethanol  $\geq$  96 % (technical grade)

2.1.2.1.5. Acetone (technical grade)

2.1.2.1.6. Bleaching reagent

2.1.2.1.6. Commercial sodium hypochlorite solution (9 - 14 % active chlorine)

2.1.2.2. Equipment

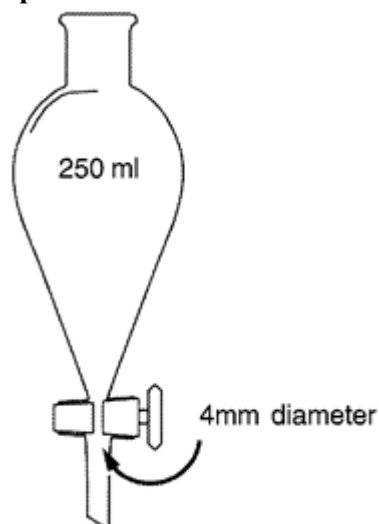
2.1.2.2.1. Analytical balance with an accuracy of 0,001 g

2.1.2.2.2. <sup>[F2]</sup>Grinding equipment: knife or rotor mill. If a rotor mill is used, mill sieves  $\leq$  0,5 mm shall be prohibited]

2.1.2.2.3. <sup>[F2]</sup>Sieves with square meshes of 0,25 mm and 1 mm width. With the exception of sample pre-sieving, the diameter of the sieves should not exceed 10 cm to avoid loss of materials. Calibration of sieves is not required]

2.1.2.2.4. Conical glass separation funnel with a content of 250 ml with Teflon or ground glass stopcock at the base of the cone. Stopcock opening diameter shall be  $\geq$  4mm. Alternatively, a conical bottomed settling beaker may be used provided the laboratory has demonstrated that detection levels are equivalent to that obtained using the conical glass separation funnel.

#### Separation funnel



2.1.2.2.5. Stereomicroscope covering at least a 6,5 $\times$  to 40 $\times$  final magnification range

2.1.2.2.6. Compound microscope covering at least a 100 $\times$  to 400 $\times$  final magnification range with transmitted light bright field. Polarised light and differential interferential contrast can additionally be used

2.1.2.2.7. Standard laboratory glassware

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2.1.2.2.8. Equipment for slide preparation: classical microscope slides, hollow slides, coverslips (20 × 20 mm), tweezers, fine spatula

[<sup>F3</sup>2.1.2.2.9. Laboratory oven

**Textual Amendments**

**F3** Inserted by [Commission Implementing Regulation \(EU\) 2020/1560 of 26 October 2020 amending Annex VI to Regulation \(EC\) No 152/2009 laying down the methods of analysis for the determination of constituents of animal origin for the official control of feed \(Text with EEA relevance\)](#).

2.1.2.2.10. Centrifuge

2.1.2.2.11. Filter paper: qualitative cellulose filter (pore size 4-11 µm)]

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