SCHEDULE 4

Regulations 2(1), 7, 10 and Schedule 13

REQUIREMENTS FOR SAMPLING AND ANALYSIS OF AFLATOXINS IN NUTS, NUT PRODUCTS, DRIED FIGS AND DRIED FIG PRODUCTS

1. In respect of the products listed to column 1 the minimum number and size of samples to be taden shall be those shown corresponding to each such product in, respectively, columns 2 and 3 of the table below:—

Column 1	Column 2	Column 3
Product	Minimum no. of sample units	Minimum sample size (kg)
Peanut Butter Smooth	24	5
Peanut Butter Crunchy	24	5
Peanuts shelled raw	30	10
Peanuts shelled roasted	30	10
Peanuts in shell	30	20^*
Cashews	20	3
Brazil nuts shelled	20	3
Brazil nuts in shell	20	6*
Pistachios shelled	20	1.5
Pistachios in shell	20	3*
Hazelnuts shelled	20	3
Hazelnuts in shell	20	6*
Almonds shelled	20	3
Almonds in shell	20	6*
Almonds paste	20	3
Other nuts	20	3
Other nut products	20	3
Figs dried whole	20	20
Figs dried paste	20	5
Other dried fig products	20	5
* weight of nuts in shell		

^{2.} Samples shall be taken as randomly as possible from throughout the consignment.

Preparation of samples

- **3.** Each sample taken shall be ground finely and mixed thoroughly using a process that has been demonstrated to achieve complete homogenisation, and samples of nuts that are "in shell" may include the shell in the final homogenate. In the case of the foods listed in sub-paragraphs (a) to (c) below the sampling regime described in the respective sub-paragraph shall apply:
 - (a) Pistachio nuts in shell: the sample shall be

- (i) passed through a meat mincer fitted with a 20 mm serrated cutting disc,
- (ii) sieved through a 2 mm screen, and
- (iii) tumble mixed for a minimum of 60 minutes.
- (b) Whole figs: the sample shall be either—
 - (i) (aa) minced and passed through a 9 mm screen opening, and
 - (bb) transferred to a bowl mixer and slurry mixed with water (in the proportion 5 parts commodity to 3 parts water) for 60 minutes, or
 - (ii) slurried and mixed using a vertical cutter mixer.
- (c) Peanut Butter: water shall be added to the sample (in the proportion 5 parts commodity to 4 parts water) and the sample mixed for 60 minutes using a laboratory mixer emulsifier.

The formal samples for enforcement, trade (defence) and referee purposes shall be taken from the homogenised material. In the case of the enforcement samples at least three independent sub-samples (each of a minimum weight of 50g) shall be removed from the thoroughly mixed slurry sample for analysis and the size of the formal sample shall be sufficient to allow for this.

Reporting of results

4. The result shall be taken to be the mean of the determination of the independent sub-samples.

For the purposes of calculating the level of aflatoxins in a nut product or a dried fig product the total aflatoxin level shall relate to the whole product.

Performance parameters for analytical tests for aflatoxins

5. Public analysts and food analysts may employ any method to test for aflatoxins provided it meets the following performance parameters:

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Statutory limit	4 μg/kg	$10 \mu g/kg$
Detection limit	$< or = 2\mu g/kg$	$< or = 5 \mu g/kg$
Repeatability coefficient of variation\	< or $= 40%$	< or = 30%
Reproducibility coefficient of variation\	< or $= 60%$	< or $= 50%$
Recovery	> or = 70%	> or = 70%

For the purposes of this paragraph

"repeatability" means the closeness of agreement between mutually independent test results obtained by using the same method on identical test material in the same laboratory by the same operator using the same equipment within short intervals of time, and

"reproducibility" means the closeness of agreement between test results obtained by using the same method on identical test material in different laboratories by different operators using different equipment.