SCHEDULE 2

PART I

Entries to be substituted or added in Chapter A of Schedule 5 to the Feeding Stuffs (Scotland) Regulations 2005

Column 1: Undesirable substances	Column 2: Products intended for animal feed	Column 3: Maximum content in mg/kg of feeding stuffs referred to a moisture content of 12%
Cadmium ⁽¹⁾	Feed materials of vegetable origin	1
	Feed materials of animal origin	2
	Feed materials of mineral origin	2
	except:	
	– phosphates	10
	Additives belonging to the functional group of compounds of trace elements	10
	except:	
	 copper oxide, manganous oxide, zinc oxide and manganous sulphate monohydrate 	30
	Additives belonging to the functional groups of binders and anti-caking agents	2
	Premixtures	15
	Mineral feeding stuffs:	
	containing less than 7% phosphorus	5
	containing 7% or more phosphorus	0.75 per 1% phosphorus, subject to a maximum of 7.5
	Complementary feeding stuffs for pet animals	2
	Other complementary feeding stuffs	0.5
	Complete feeding stuffs for cattle, sheep and goats and feeding stuffs for fish	1

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Column 1: Undesirable substances	Column 2: Products intended for animal feed	Column 3: Maximum content in mg/kg of feeding stuffs referred to a moisture content of 12%
	complete feeding stuffs for pet animals	2
	 complete feeding stuffs for calves, lambs and kids, and other complete feeding stuffs 	0.5
Dioxins (sum of polychlorinated dibenzo-paradioxins (PCDDs) and polychlorinated dibenzofurans (PCDFs)) expressed in World Health Organisation (WHO) toxic equivalents, using the WHO-TEFs (toxic equivalency factors) 1997 ⁽²⁾⁽³⁾	Feed materials of plant origin with the exception of vegetable oils and their by-products	0.75 ng WHO-PCDD/F-TEQ/kg
	Vegetable oils and their by- products	0.75 ng WHO-PCDD/F-TEQ/kg
	Feed materials of mineral origin	1.0 ng WHO-PCDD/F-TEQ/kg
	Animal fat, including milk fat and egg fat	2.0 ng WHO-PCDD/F-TEQ/kg
	Other land animal products, including milk and milk products and eggs and egg products	0.75 ng WHO-PCDD/F-TEQ/kg
	Fish oil	6.0 ng WHO-PCDD/F-TEQ/kg
	Fish, other aquatic animals, their products and by-products, with the exception of fish oil and fish protein hydrolysates containing more than 20% fat ⁽⁴⁾	1.25 ng WHO-PCDD/F-TEQ/kg
	Fish protein hydrolysates containing more than 20% fat	2.25 ng WHO-PCDD/F-TEQ/kg
	The additives kaolinitic clay, calcium sulphate dihydrate, vermiculite, natrolite-phonolite, synthetic calcium aluminates and clinoptilolite of sedimentary origin belonging to the functional groups of binders and anti-caking agents	0.75 ng WHO-PCDD/F-TEQ/kg

Column 1: Undesirable substances	Column 2: Products intended for animal feed	Column 3: Maximum content in mg/kg of feeding stuffs referred to a moisture content of 12%
	Additives belonging to the functional group of compounds of trace elements	1.0 ng WHO-PCDD/F-TEQ/kg
	Premixtures	1.0 ng WHO-PCDD/F-TEQ/kg
	Compound feeding stuffs, with the exception of feed for fur- producing animals, pet foods and feed for fish	0.75 ng WHO-PCDD/F-TEQ/kg
	Feed for fish; pet foods	2.25 ng WHO-PCDD/F-TEQ/kg
		Note in respect of all entries in respect of dioxins in column 3: upper bound concentrations are calculated on the assumption that all values of the different congeners below the limit of quantification are equal to the limit of quantification.
Sum of dioxins and dioxin-like PCBs (sum of polychlorinated dibenzo-para-dioxins (PCDDs), polychlorinated dibenzofurans (PCDFs) and polychlorinated biphenyls (PCBs)) expressed in World Health Organisation (WHO) toxic equivalents, using the WHO-TEFs (toxic equivalency factors) 1997 ⁽²⁾	Feed materials of plant origin with the exception of vegetable oils and their by-products	1.25 ng WHO-PCDD/F-PCB-TEQ/kg
	Vegetable oils and their by- products	1.5 ng WHO-PCDD/F-PCB-TEQ/kg
	Feed materials of mineral origin	1.5 ng WHO-PCDD/F-PCB- TEQ/kg
	Animal fat, including milk fat and egg fat	3.0 ng WHO-PCDD/F-PCB- TEQ/kg
	Other land animal products, including milk and milk products and eggs and egg products	1.25 ng WHO-PCDD/F-PCB-TEQ/kg
	Fish oil	24.0 ng WHO-PCDD/F-PCB-TEQ/kg

Column 1: Undesirable substances	Column 2: Products intended for animal feed	Column 3: Maximum content in mg/kg of feeding stuffs referred to a moisture content of 12%
	Fish, other aquatic animals, their products and by-products, with the exception of fish oil and fish protein hydrolysates containing more than 20% fat ⁽⁴⁾	4.5 ng WHO-PCDD/F-PCB-TEQ/kg
	Fish protein hydrolysates containing more than 20% fat	11.0 ng WHO-PCDD/F-PCB-TEQ/kg
	Additives belonging to the functional groups of binders and anti-caking agents	1.5 ng WHO-PCDD/F-PCB- TEQ/kg
	Additives belonging to the functional group of compounds of trace elements	1.5 ng WHO-PCDD/F-PCB- TEQ/kg
	Premixtures	1.5 ng WHO-PCDD/F-PCB- TEQ/kg
	Compound feeding stuffs, with the exception of feed for fur- producing animals, pet foods and feed for fish	1.5 ng WHO-PCDD/F-PCB-TEQ/kg
	Feed for fish; pet foods	7.0 ng WHO-PCDD/F-PCB-TEQ/kg
		Note in respect of all entries in respect of sum of dioxins and dioxin like PCBs in column 3: upper bound concentrations are calculated on the assumption that all values of the different congeners below the limit of quantification are equal to the limit of quantification.
Fluorine ⁽⁵⁾	Feed materials	150
	except:	
	 feeding stuffs of animal origin other than marine crustaceans such as marine krill 	500
	 marine crustaceans such as marine krill 	3,000
	– phosphates	2,000
	 – calcium carbonate 	350

Column 1: Undesirable substances	Column 2: Products intended for animal feed	Column 3: Maximum content in mg/kg of feeding stuffs referred to a moisture content of 12%
	 magnesium oxide 	600
	 calcareous marine algae 	1,000
	Vermiculite (E 561)	3,000
	Complementary feeding stuffs	
	containing 4% phosphorus or less	500
	containing more than 4% phosphorus	125 per 1% phosphorus
	Complete feeding stuffs	150
	except:	
	 complete feeding stuffs for cattle, sheep and goats 	
	in lactation	30
	other	50
	complete feeding stuffs for pigs	100
	 complete feeding stuffs for poultry 	350
	 complete feeding stuffs for chicks 	250
Lead ⁽¹⁾	Feed materials	10
	except:	
	 green fodder (including products intended for animal feed such as hay, silage, fresh grass, etc) 	30
	 phosphates and calcareous marine algae 	15
	 calcium carbonate 	20
	– yeasts	5
	Additives belonging to the functional group of compounds of trace elements except:	100
	– zinc oxide	400
	 manganous oxide, iron carbonate, copper carbonate 	200

Column 1: Undesirable substances	Column 2: Products intended for animal feed	Column 3: Maximum content in mg/kg of feeding stuffs referred to a moisture content of 12%
	Additives belonging to the functional groups of binders and anti-caking agents	30
	except:	
	clinoptilolite of volcanic origin	60
	Premixtures	200
	Complementary feeding stuffs	10
	except:	
	- mineral feeding stuffs	15
	Complete feeding stuffs	5

- (1) Maximum levels refer to an analytical determination of this substance, whereby extraction is performed in nitric acid (5% w/w) for 30 minutes at boiling temperature. Equivalent extraction procedures can be applied where it can be demonstrated that the procedure used has an equal extraction efficiency.
- (2) WHO-TEFs for human risk assessment based on the conclusions of the World Health Organisation meeting in Stockholm, Sweden, 15–18 June 1997 (Van den Berg et al., (1998), Toxic Equivalency Factors (TEFs) for PCBs, PCDDs and PCDFs for Humans and for Wildlife, Environmental Health Perspectives, 106(12), 775).
- (3) The separate maximum level for dioxins (PCDD/F) remains applicable for a temporary period. The products intended for animal feed mentioned in column 2 have to comply both with the maximum levels for dioxins and with the maximum levels for the sum of dioxins and dioxin-like PCBs during that temporary period.
- (4) Fresh fish directly delivered and used without intermediate processing for the production of feed for fur-producing animals is not subject to the maximum levels, while maximum levels of 4.0 ng WHO-PCDD/F-TEQ/kg product and 8.0 ng WHO-PCDD/F-PCB-TEQ/kg product are applicable to fresh fish used for the direct feeding of pet animals, zoo and circus animals. The products, processed animal proteins produced from these animals (fur-producing animals, pet animals and zoo and circus animals) cannot enter the food chain and cannot be fed to farmed animals which are kept, fattened or bred for the production of food.
- (5) Maximum levels refer to an analytical determination of fluorine, whereby extraction is performed with hydrochloric acid 1 N for 20 minutes at ambient temperature. Equivalent extraction procedures can be applied where it can be demonstrated that the procedure used has an equal extraction efficiency.