

APPENDIX 11: ALLOWABLE MAXIMUM RESIDUAL LIMIT (MRL)

This is not an exhaustive list. MRL not in the list but available in MRL list of Codex alimentarius, EMA, Canada, USFDA, Japan NDA & Australia is allowed. Product containing ingredient not listed in MRL list from the countries mentioned will not be considered to be registered.

A) MAXIMUM PERMITTED PROPORTION OF DRUG RESIDUES IN FOOD

The food specified in column (2) of the Table below shall not contain the drug specified in column (1) thereof in proportions greater than the maximum permitted proportions specified opposite and in relation to that food in column (3) thereof.

Substance	Drug Definition of residues in which MRL was set	Food	Maximum Residue Limits (MRLs) in food µg/kg
Albendazole	2-Aminosulfone metabolite	Muscle, fat (cattle and other species), milk (cattle)	100
		Liver, kidney (cattle and other species)	5000
Amoxicillin	Amoxicillin	Milk (cattle)	4
		Muscle, liver, kidney, fat (all food producing species)	50
Ampicillin	Ampicillin	Milk (cattle)	4
		Muscle, liver, kidney, fat (all food producing species)	50
Amprolium	1-4 amino-2-n-propyl-5-(pyrimidinylmethyl)-2-picolinium chloride hydrochloride	Muscle (chicken, turkey, pheasant and calf), liver (calf), kidney (calf)	500
		Liver (chicken, turkey and pheasant), kidney (chicken and turkey)	1000
		Fat (calf)	2000
		Egg (chicken and turkey)	4000
Azaperone	Sum of azaperone and azaperol	Muscle, fat (pig)	60
		Liver, kidney (pig)	100
Benzylpenicillin	Benzylpenicillin	Milk (cattle)	4
		Liver, kidney, muscle (cattle and pig)	50
Carazolol	Carazolol	Muscle, fat (pig)	5
		Liver, kidney (pig)	25
Carprofen	Carprofen	Muscle (horse)	50
		Fat (horse)	100
		Muscle, fat (cattle)	500
		Liver, kidney (cattle and horse)	1000

Substance	Drug Definition of residues in which MRL was set	Food	Maximum Residue Limits (MRLs) in food µg/kg
Cefquinome	Cefquinome	Milk (cattle)	20
		Muscle, fat (cattle)	50
		Liver (cattle)	100
		Kidney (cattle)	200
Ceftiofur sodium	Desfuroylceftiofur	Milk (cattle)	100
		Muscle (pig and cattle)	200
		Fat (pig and cattle)	600
		Liver (pig and cattle)	2000
Clorsulon	Clorsulon	Muscle (cattle)	100
		Liver (cattle)	200
		Kidney (cattle)	300
		Fat (cattle)	400
Closantel	Closantel	Muscle, liver (cattle)	1000
		Muscle, liver (sheep)	1500
		Fat (sheep)	2000
		Kidney, fat (cattle)	3000
		Kidney (sheep)	5000
Cloxacillin	Cloxacillin	Milk (cattle)	30
		Muscle, liver, kidney, fat (all food producing species)	300
Colistin	Colistin	Milk (cattle)	50
		Muscle, liver, fat (cattle, chicken, pig, rabbit and sheep)	150
		Kidney (cattle, chicken, pig, rabbit and sheep)	200
		Egg (chicken)	300
Danofloxacin	Danofloxacin	Fat (cattle)	200
		Muscle (cattle and chicken)	300
		Kidney (cattle)	500
		Fat (chicken)	600
		Liver (cattle)	900
		Liver, kidney (chicken)	1200
Decoquinatate	Decoquinatate	Muscle, liver, kidney, fat (cattle and sheep)	500
Dexamethasone	Dexamethasone	Milk (cattle)	0.3
		Muscle, kidney (cattle, horse and pig)	0.5
		Liver (cattle and pig)	2.5

Substance	Drug Definition of residues in which MRL was set	Food	Maximum Residue Limits (MRLs) in food µg/kg
Dicloxacillin	Dicloxacillin	Milk (cattle)	30
		Muscle, liver, kidney, fat (all food producing species)	300
Dihydrostreptomycin	Dihydrostreptomycin	Milk (cattle)	200
		Muscle, liver, fat (cattle, chicken, pig and sheep)	500
		Kidney (cattle, chicken, pig and sheep)	1000
Diminazene	Diminazene	Milk (cattle)	150
		Muscle ('cattle)	500
		Kidney (cattle)	6000
		Liver (cattle)	12000
Doramectin	Doramectin	Muscle (cattle)	10
		Kidney (cattle)	30
		Liver (cattle)	100
		Fat (cattle)	150
Doxycycline	Doxycycline	Muscle (cattle, pig and poultry)	100
		Liver (cattle, pig and poultry), fat (pig and poultry)	300
		Kidney (cattle, pig and poultry)	600
Enrofloxacin	Sum of enrofloxacin and ciprofloxacin	Muscle, liver, kidney (cattle, chicken and pig)	30
Erythromycin	Erythromycin	Milk (mammalian)	40
		Edible offal, muscle, egg (mammalian and poultry)	300
Estradiol-17β	Estradiol-17β	Food of bovine origin	GAHP*
Ethopabate	Ethopabate	Muscle (chicken)	500
		Liver, kidney (chicken)	1500
Febantel	Sum of febendazole, oxfendazole and oxfendazole sulfone	Milk (cattle) muscle, kidney, fat (cattle, pig and sheep)	100
		Liver (cattle, pig and sheep)	500
Fenbendazole	Sum of febendazole, oxfendazole and oxfendazole sulfone	Milk (cattle), muscle, kidney, fat (cattle, pig and sheep)	100
		Liver (cattle, pig and sheep)	500
Florfenicol	Sum of florfenicol and its metabolites	Muscle (cattle)	200
		Kidney (cattle)	300

Substance	Drug Definition of residues in which MRL was set	Food	Maximum Residue Limits (MRLs) in food µg/kg
	measured as florfenicol-amine	Liver (cattle)	3000
Flubendazole	Flubendazole	Muscle, liver (pig)	10
		Fat (pig)	20
		Fat (cattle)	40
		Liver (cattle)	100
		Muscle (poultry)	200
		Egg (poultry)	400
		Liver (poultry)	500
Flumequine	Flumequine	Muscle, fat (cattle, pig, poultry and sheep)	50
		Liver (cattle, pig, poultry and sheep)	100
		Kidney (cattle, pig, poultry and sheep)	300
Flumethrin	Flumethrin	Edible offal, muscle and milk (cattle)	50
Gentamicin	Gentamicin	Milk (cattle), muscle, fat (cattle and pig)	100
		Liver (cattle and pig)	200
		Kidney (cattle and pig)	1000
Isometamidium	Isometamidium	Muscle, fat, milk (cattle)	100
		Liver (cattle)	500
		Kidney (cattle)	1000
Ivermectin	22, 23 Dihydroavermectin B1a	Liver (pig and sheep)	15
		Fat (pig and sheep)	20
		Fat (cattle)	40
		Liver (cattle)	100
Levamisole	Levamisole	Muscle, kidney ,fat (cattle, pig, poultry and sheep)	10
		Liver (poultry)	100
Lincomycin	Lincomycin	Edible tissue (pig)	100
Maduramicin	Maduramicin	Edible tissue, muscle, (chicken)	240
		Fat (chicken)	480
		Liver (chicken)	720
Moxidectin	Moxidectin	Muscle (deer), liver (cattle)	20
		Liver (sheep), kidney (deer), fat (cattle and sheep)	50

Substance	Drug Definition of residues in which MRL was set	Food	Maximum Residue Limits (MRLs) in food µg/kg
		Liver (deer), kidney (cattle and sheep)	100
		Fat (deer), milk (cattle and sheep)	500
Neomycin	Neomycin	Muscle, liver, fat (chicken, turkey, duck, cattle, goat, sheep and pig), egg (chicken), milk (cattle)	500
		Kidney (chicken, turkey, duck, cattle, goat, sheep and pig)	1000
Nicarbazin	Nicarbazin	Muscle, liver, kidney (chicken)	4000
Nystatin	Nystatin	Edible tissue (pig and poultry), egg (poultry)	0
Oxacillin	Oxacillin	Milk (all food producing species)	30
		Muscle, liver, kidney, fat (all food producing Species)	300
Oxfendazole	Sum of fenbendazole, oxfendazole and oxfendazole sulfone	Muscle, kidney, fat (cattle, pig and sheep), milk (cattle)	100
		Liver (cattle, pig and sheep)	500
Oxibendazole	Oxibendazole	Milk (cattle and sheep)	50
		Muscle, liver, kidney, fat (cattle, horse, pig and sheep)	100
Oxytetracycline	Oxytetracycline	Fat (cattle, sheep, pig, chicken and turkey)	10
		Milk (cattle), muscle (cattle, sheep, pig, chicken and turkey)	100
		Egg (chicken)	200
		Liver (cattle, sheep, pig, chicken and turkey)	300
		Kidney (cattle, sheep, pig, chicken and turkey)	600
Penicillin	Penicillin	Edible tissue (chicken, quail, pig and sheep), egg (chicken and quail), milk (cattle)	0
		Edible tissue (turkey)	10
		Edible tissue (cattle)	50

Substance	Drug Definition of residues in which MRL was set	Food	Maximum Residue Limits (MRLs) in food µg/kg
Phoxim	Phoxim	Edible offal, muscle (pig)	10
		Fat (pig)	50
Progesterone	Progesterone	Food of bovine origin	GAHP*
Ractopamine	Ractopamine	Muscle (pig)	10
		Fat (pig)	10
		Liver (pig)	40
		Kidney (pig)	90
Robenidine hydrochloride	Robenidine Hydrochloride	Edible tissue (poultry)	100
		Fat (poultry)	200
Salinomycin	Salinomycin	Egg (poultry)	20
		Muscle (cattle)	50
		Edible offal (pig), muscle (pig and poultry)	100
		Edible offal (cattle and poultry)	500
Sarafloxacin	Sarafloxacin	Fat (chicken)	10
		Liver (chicken)	100
Spectinomycin	Spectinomycin	Milk (cattle)	200
		Muscle (cattle, chicken and pig)	300
		Fat (cattle, chicken and pig)	500
		Liver (cattle, chicken and pig)	2000
		Kidney (cattle, chicken and pig)	5000
Spiramycin	Expressed as spiramycin equivalents antimicrobially active residues Sum of spiramycin and neospiramycin	Muscle (pig)	200
		Kidney, fat (pig)	300
		Liver (pig)	600
		Muscle (cattle and chicken), milk (cattle)	200
		Kidney (cattle), fat (cattle and chicken)	300
		Liver (cattle and chicken)	600
		Kidney (chicken)	800
Streptomycin	Streptomycin	Milk (cattle)	200
		Muscle, liver, fat (cattle, chicken, pig and sheep)	500
		Kidney (cattle, chicken, pig and sheep)	1000

Substance	Drug Definition of residues in which MRL was set	Food	Maximum Residue Limits (MRLs) in food µg/kg
Sulphadiazine	Sulphadiazine	Edible offal (mammalian), muscle (mammalian), milk (cattle)	100
Sulphadimethoxine	Suiphadimethoxine	Milk (cattle)	10
		Edible offal, muscle (cattle and chicken)	100
Sulphadimidine	Sulphadimidine	Milk (cattle)	25
		Edible offal (chicken and mammalian), muscle (chicken and mammalian), liver, kidney, fat (cattle)	100
Sulphamethazine	Sulphamethazine	Edible tissue (cattle, turkey, chicken and pig)	100
Sulphaquinoxaline	Sulphaquinoxaline	Edible offal, muscle (poultry)	100
Sulphonamide	Sulphonamide	Muscle, liver, kidney, fat (all food producing species), milk (cattle)	100
Testosterone	Testosterone	Food of bovine origin	GAHP*
Tetracycline	Sum of parent drug and its 4-epimer	Muscle (cattle, poultry, pig and sheep), milk (cattle)	100
		Egg (poultry)	200
		Liver (cattle, poultry, pig and sheep)	300
		Kidney (cattle, poultry, pig and sheep)	600
Thiabendazole	Sum of thiabendazole and 5-hydroxy- thiabendazole	Muscle, liver, kidney and fat (cattle, pig, goat and sheep), milk (cattle and goat)	100
Tiamulin	8-alpha- hydroxymutilin	Muscle (pig)	3600
		Liver (pig)	10800
		Kidney, fat (pig)	14400
Tilmicosin	Tilmicosin	Milk (sheep)	50
		Muscle, fat (cattle, poultry, pig and sheep)	100
		Kidney (cattle and sheep)	300
		Liver (cattle and sheep),	1000
		Kidney (pig)	1000
		Liver (pig)	1500
Trenbolone acetate	β-Trenbolone α-Trenbolone	Muscle (cattle)	2
		Liver (cattle)	10

Substance	Drug Definition of residues in which MRL was set	Food	Maximum Residue Limits (MRLs) in food µg/kg
Triclabendazole	5-chloro-6-(2',3'- dichloro-phenoxy) benzimidazole-2-one	Fat (cattle and sheep)	100
Trimethoprim	Trimethoprim	Edible offal, muscle (mammalian and chicken), egg (chicken), milk (cattle)	50
Tylosin	Tylosin	Milk (cattle)	50
		Muscle, liver, kidney (chicken and cattle), edible tissue (cattle), fat (chicken), egg (chicken)	200
Virginiamycin	Virginiamycin	Muscle, liver, kidney, fat (cattle)	0
		Muscle (pig and poultry)	100
		Fat (poultry)	200
		Liver (pig and poultry)	300
		Kidney, fat (pig)	400
		Kidney (poultry)	500
Zeranol	Zeranol	Muscle (cattle)	2
		Liver (cattle)	10

* Good animal husbandry practice

Reference: Adopted list from Fifteenth A Schedule, [Regulation 40], Food Act 1985

B) MAXIMUM PERMITTED PROPORTION OF DRUG RESIDUES IN AQUACULTURE AND ALLOWABLE WITHDRAWAL PERIOD

BIL	PHARMACOLOGICALLY ACTIVE SUBSTANCES				MRLs µg/kg (ppb)	WITH DRAWAL PERIOD
1	Anti-infectious agents	Antibiotics	Sulfonamides	Sulfonamide	100	30 days
2			Diamino pyrimidine derivatives	Trimethoprim	50	30 days
3			Penicillin	Amoxicillin	50	30 days
4				Ampicillin	50	30 days
5				Benzylpenicillin	50	30 days
6				Cloxacillin	300	30 days
7				Dicloxacillin	300	30 days
8				Oxacillin	300	30 days
9			Quinolones	Danofloxacin	100	30 days
10				Difloxacin	300	30 days
11				Enrofloxacin	100	30 days
12				Flumequine	200	30 days
13				Oxolonic acid	100	30 days
14				Sarafloxacin	30	30 days
15			Macrolides	Erythromycin	200	30 days
16				Tilmicosin	50	30 days
17				Tylosin	1000	30 days
18			Florfenicol	Florfenicol	1000	30 days
19			Tetracyclines	Chlortetracycline	100	30 days
20				Oxytetracycline	100	30 days
21				Tetracycline	100	30 days
22			Lincosamides	Lincomycin	100	30 days
23				Neomycin (including Framycetin)	500	30 days
24				Paromomycin	500	30 days
25				Spectinomycin	300	30 days
26			Polymyxins	Colistin	150	30 days
27				Thiamphenicol	50	30 days
28	Antiparasitic agents	Agents acting against ectoparasites	Organophosphates	Deltamethrin	10	30 days

29			Pyrethroids	Cypermethrin	50	30 days
30			Benzoylurea type	Diflubenzuron	1000	30 days
31				Teflubenzuron	500	30 days
32		Agents acting against endo- and ectoparasites	Avermectins	Emamectin	100	30 days
33	Anaesthetic agents		Ester type	Benzocaine	50	30 days