# Aquaculture Atlantic Salmon residue testing annual datasets 2016–17

National Residue Survey, Department of Agriculture and Water Resources

## Dataset abbreviations

**LOR** Limit of reporting.

**MRL** Maximum Residue Limit.

**no limit** No Australian Standard applicable for the contaminant. The ‘as low as reasonably achievable’ principle applies. Detections at low levels are allowable.

**not defined** Standards are not defined in inedible matrixes (urine and faeces).

**not set** No Australian Standard has been set for the chemical in the edible matrix and any detection is a contravention of the Australia New Zealand Food Standards Code.

## Disclaimer

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Table 1 Additives

| Chemical | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to ≤ ½ MRL | > ½ MRL to ≤ MRL | > MRL |
| --- | --- | --- | --- | --- | --- | --- | --- |
| brilliant green | Flesh | 0.00022 | not set | 5 | 0 | 0 | 0 |
| crystal violet | Flesh | 0.00014 | not set | 5 | 0 | 0 | 1 |
| leucocrystal violet | Flesh | 0.00058 | not set | 5 | 0 | 0 | 0 |
| leucomalachite green | Flesh | 0.00044 | not set | 5 | 0 | 0 | 0 |
| malachite green | Flesh | 0.00025 | not set | 5 | 0 | 0 | 0 |
| methylene blue | Flesh | 0.0011 | not set | 5 | 0 | 0 | 0 |
| victoria blue B | Flesh | 0.00066 | not set | 5 | 0 | 0 | 0 |
| victoria blue R | Flesh | 0.00025 | not set | 5 | 0 | 0 | 0 |
| victoria pure blue BO | Flesh | 0.0011 | not set | 5 | 0 | 0 | 0 |

Table 2 Anthelmintics

| Chemical | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to ≤ ½ MRL | > ½ MRL to ≤ MRL | > MRL |
| --- | --- | --- | --- | --- | --- | --- | --- |
| abamectin | Flesh | 0.005 | not set | 6 | 0 | 0 | 0 |
| derquantel | Flesh | 0.005 | not set | 6 | 0 | 0 | 0 |
| doramectin | Flesh | 0.005 | not set | 6 | 0 | 0 | 0 |
| emamectin | Flesh | 0.002 | not set | 6 | 0 | 0 | 0 |
| eprinomectin B1a | Flesh | 0.005 | not set | 6 | 0 | 0 | 0 |
| ivermectin H2B1a | Flesh | 0.005 | not set | 6 | 0 | 0 | 0 |
| milbemectin | Flesh | 0.05 | not set | 6 | 0 | 0 | 0 |
| monepantel sulphone | Flesh | 0.005 | not set | 6 | 0 | 0 | 0 |
| moxidectin | Flesh | 0.005 | not set | 6 | 0 | 0 | 0 |
| praziquantel | Flesh | 0.005 | not set | 6 | 0 | 0 | 0 |

Table 3 Antibiotics

| Chemical | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to ≤ ½ MRL | > ½ MRL to ≤ MRL | > MRL |
| --- | --- | --- | --- | --- | --- | --- | --- |
| AHD | Flesh | 0.0004 | not set | 5 | 0 | 0 | 0 |
| amoxicillin | Flesh | 0.01 | not set | 7 | 0 | 0 | 0 |
| AMOZ | Flesh | 0.000077 | not set | 5 | 0 | 0 | 0 |
| ampicillin | Flesh | 0.01 | not set | 7 | 0 | 0 | 0 |
| AOZ | Flesh | 0.000072 | not set | 5 | 0 | 0 | 0 |
| apramycin | Flesh | 0.25 | not set | 7 | 0 | 0 | 0 |
| avilamycin | Flesh | 0.1 | not set | 7 | 0 | 0 | 0 |
| benzyl G penicillin | Flesh | 0.01 | not set | 7 | 0 | 0 | 0 |
| ceftiofur  | Flesh | 0.2 | not set | 7 | 0 | 0 | 0 |
| cefuroxime | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| cephalonium | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| chloramphenicol | Flesh | 0.00027 | not set | 5 | 0 | 0 | 0 |
| chlortetracycline | Flesh | 0.01 | not set | 7 | 0 | 0 | 0 |
| ciprofloxacin | Flesh | 0.002 | not set | 7 | 0 | 0 | 0 |
| cloxacillin | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| danofloxacin | Flesh | 0.002 | not set | 7 | 0 | 0 | 0 |
| dihydrostreptomycin | Flesh | 0.1 | not set | 7 | 0 | 0 | 0 |
| dimetridazole | Flesh | 0.000035 | not set | 5 | 0 | 0 | 0 |
| doxycycline | Flesh | 0.01 | not set | 7 | 0 | 0 | 0 |
| enrofloxacin | Flesh | 0.002 | not set | 7 | 0 | 0 | 0 |
| erythromycin | Flesh | 0.1 | not set | 7 | 0 | 0 | 0 |
| florfenicol | Flesh | 0.0043 | 0.5 | 5 | 0 | 0 | 0 |
| flumequine | Flesh | 0.002 | not set | 7 | 0 | 0 | 0 |
| gatifloxacin | Flesh | 0.002 | not set | 7 | 0 | 0 | 0 |
| gentamycin | Flesh | 0.1 | not set | 7 | 0 | 0 | 0 |
| levofloxacin | Flesh | 0.002 | not set | 7 | 0 | 0 | 0 |
| lincomycin | Flesh | 0.1 | not set | 7 | 0 | 0 | 0 |
| lomefloxacin | Flesh | 0.002 | not set | 7 | 0 | 0 | 0 |
| marbofloxacin | Flesh | 0.002 | not set | 7 | 0 | 0 | 0 |
| metronidazole | Flesh | 0.000046 | not set | 5 | 0 | 0 | 0 |
| moxifloxacin | Flesh | 0.002 | not set | 7 | 0 | 0 | 0 |
| nalidixic acid | Flesh | 0.002 | not set | 7 | 0 | 0 | 0 |
| neomycin | Flesh | 0.1 | not set | 7 | 0 | 0 | 0 |
| norfloxacin | Flesh | 0.002 | not set | 7 | 0 | 0 | 0 |
| oleandomycin | Flesh | 0.2 | not set | 7 | 0 | 0 | 0 |
| oxytetracycline | Flesh | 0.01 | 0.2 | 7 | 0 | 0 | 0 |
| ronidazole | Flesh | 0.000055 | not set | 5 | 0 | 0 | 0 |
| sarafloxacin | Flesh | 0.002 | not set | 7 | 0 | 0 | 0 |
| SEM | Flesh | 0.00041 | not set | 5 | 0 | 0 | 0 |
| streptomycin | Flesh | 0.1 | not set | 7 | 0 | 0 | 0 |
| sulfachloropyridazine | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| sulfadiazine | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| sulfadimethoxine | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| sulfadimidine  | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| sulfadoxine | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| sulfafurazole  | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| sulfamerazine | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| sulfamethoxazole | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| sulfamethoxydiazine | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| sulfamethoxypyridazine | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| sulfapyridine | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| sulfaquinoxaline | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| sulfathiazole | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| sulfatroxazole | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| tetracycline | Flesh | 0.01 | not set | 7 | 0 | 0 | 0 |
| thiamphenicol | Flesh | 0.0029 | not set | 5 | 0 | 0 | 0 |
| tilmicosin | Flesh | 0.2 | not set | 7 | 0 | 0 | 0 |
| trimethoprim | Flesh | 0.05 | not set | 7 | 0 | 0 | 0 |
| tulathromycin | Flesh | 0.3 | not set | 7 | 0 | 0 | 0 |
| tylosin | Flesh | 0.1 | 0.002 | 7 | 0 | 0 | 0 |
| virginiamycin | Flesh | 0.2 | not set | 7 | 0 | 0 | 0 |

Table 4 Contaminants

| Chemical | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to ≤ ½ MRL | > ½ MRL to ≤ MRL | > MRL |
| --- | --- | --- | --- | --- | --- | --- | --- |
| aldrin and dieldrin  | Flesh | 0.02 | 0.1 | 2 | 0 | 0 | 0 |
| arochlor 1254 | Flesh | 0.03 | 0.5 | 2 | 0 | 0 | 0 |
| arochlor 1260 | Flesh | 0.03 | 0.5 | 2 | 0 | 0 | 0 |
| chlordane | Flesh | 0.02 | 0.05 | 2 | 0 | 0 | 0 |
| DDT | Flesh | 0.02 | 1 | 2 | 0 | 0 | 0 |
| endrin | Flesh | 0.01 | not set | 2 | 0 | 0 | 0 |
| HCB  | Flesh | 0.02 | 0.1 | 2 | 0 | 0 | 0 |
| HCH  | Flesh | 0.02 | not set | 2 | 0 | 0 | 0 |
| heptachlor | Flesh | 0.02 | 0.05 | 2 | 0 | 0 | 0 |
| lindane  | Flesh | 0.02 | 1 | 2 | 0 | 0 | 0 |
| mirex | Flesh | 0.05 | not set | 2 | 0 | 0 | 0 |
| toxaphene | Flesh | 0.03 | not set | 2 | 0 | 0 | 0 |

Table 5 Hormones

| Chemical | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to ≤ ½ MRL | > ½ MRL to ≤ MRL | > MRL |
| --- | --- | --- | --- | --- | --- | --- | --- |
| boldenone 17-alpha | Flesh | 0.00036 | not set | 3 | 0 | 0 | 0 |
| boldenone 17-beta | Flesh | 0.00036 | not set | 3 | 0 | 0 | 0 |
| dienoestrol | Flesh | 0.00009 | not set | 3 | 0 | 0 | 0 |
| diethylstilboestrol | Flesh | 0.00009 | not set | 3 | 0 | 0 | 0 |
| hexoestrol | Flesh | 0.00006 | not set | 3 | 0 | 0 | 0 |
| nortestosterone 17-alpha | Flesh | 0.00036 | not set | 3 | 0 | 0 | 0 |
| nortestosterone 17-beta | Flesh | 0.00036 | not set | 3 | 0 | 0 | 0 |
| trenbolone | Flesh | 0.00075 | not set | 3 | 0 | 0 | 0 |

Table 6 Insecticides

| Chemical | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to ≤ ½ MRL | > ½ MRL to ≤ MRL | > MRL |
| --- | --- | --- | --- | --- | --- | --- | --- |
| spinetoram | Flesh | 0.005 | not et | 6 | 0 | 0 | 0 |
| spinosad | Flesh | 0.005 | not set | 6 | 0 | 0 | 0 |

Table 7 Metals

| Chemical | Matrix | LOR (mg/kg) | MRL (mg/kg) | No. of samples tested | > LOR to ≤ ½ MRL | > ½ MRL to ≤ MRL | > MRL |
| --- | --- | --- | --- | --- | --- | --- | --- |
| antimony | Flesh | 0.01 | no limit | 5 | 0 | 0 | 0 |
| arsenic (inorganic) | Flesh | 0.05 | 2 | 1 | 0 | 0 | 0 |
| arsenic (total) | Flesh | 0.05 | no limit | 5 | 5 | 0 | 0 |
| cadmium | Flesh | 0.01 | no limit | 5 | 0 | 0 | 0 |
| chromium | Flesh | 0.05 | no limit | 5 | 2 | 0 | 0 |
| lead | Flesh | 0.01 | 0.5 | 5 | 0 | 0 | 0 |
| mercury (total) | Flesh | 0.01 | 0.5 | 5 | 4 | 0 | 0 |