



# Apple residue testing annual datasets 2018–19

National Residue Survey, Department of Agriculture

## 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 Fungicides**

Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	No. of samples tested	> ½ MRL to ≤ MRL	> MRL
2-phenylphenol	whole	0.05	not set	243	–	0
azoxystrobin	whole	0.01	not set	243	–	0
benalaxyl	whole	0.01	not set	243	–	0
bitertanol	whole	0.01	not set	243	–	0
boscalid	whole	0.01	2	243	0	0
bupirimate	whole	0.01	1	243	0	0
captafol	whole	0.05	not set	243	–	0
captan	whole	0.05	10	243	0	0
carbendazim	whole	0.01	not set	243	–	0
chlorothalonil	whole	0.01	not set	243	–	0
cyproconazole	whole	0.01	not set	243	–	0
cyprodinil	whole	0.01	0.05	243	0	0
difenoconazole	whole	0.01	0.3	243	0	0

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Chemical	Matrix	LOR (mg/kg)	MRL (mg/kg)	No. of samples tested	> ½ MRL to ≤ MRL	> MRL
dimethomorph (sum of E and Z isomers)	whole	0.01	not set	243	–	0
dithianon	whole	0.01	2	243	0	0
dithiocarbamates	whole	0.2	3	243	1	2
dodine	whole	0.01	5	243	0	0
epoxiconazole	whole	0.01	not set	243	–	0
etridiazole	whole	0.01	not set	243	–	0
fenarimol	whole	0.01	not set	243	–	0
fenbuconazole	whole	0.01	not set	243	–	0
fenhexamid	whole	0.01	not set	243	–	0
fluazinam	whole	0.01	0.01	243	0	0
fludioxonil	whole	0.01	5	243	0	0
fluopyram	whole	0.01	1	243	0	0
fluquinconazole	whole	0.01	0.3	243	0	0
flusilazole	whole	0.01	0.2	243	0	0
flutriafol	whole	0.01	0.5	243	0	0
hexaconazole	whole	0.01	0.1	243	0	0
imazalil	whole	0.01	5	243	0	0
iprodione	whole	0.05	3	243	4	1
kresoxim-methyl	whole	0.01	0.1	243	0	0
mandestrobin	whole	0.01	not set	243	–	0
metalaxyl	whole	0.01	0.2	243	0	0
metrafenone	whole	0.01	not set	243	–	0
myclobutanil	whole	0.01	0.5	243	0	0
oxadixyl	whole	0.01	not set	243	–	0
paclobutrazol	whole	0.01	1	243	0	0
penconazole	whole	0.01	0.1	243	0	0
penthiopyrad	whole	0.01	0.5	243	0	0
prochloraz	whole	0.01	not set	243	–	0
procymidone	whole	0.01	1	243	0	0
propiconazole	whole	0.01	not set	243	–	0
prothioconazole	whole	0.05	not set	243	–	0
pyraclostrobin	whole	0.01	1	243	0	0
thiabendazole-P	whole	0.01	10	243	1	0
tolclofos methyl	whole	0.01	not set	243	–	0
triadimefon	whole	0.01	1	243	0	0
triadimenol	whole	0.01	not set	243	–	0
trifloxystrobin	whole	0.01	0.7	243	0	0
vinclozolin	whole	0.01	not set	243	–	0

**Table 2 Herbicides**

Chemical	Matrix	LOR (mg/kg)	Australian standard (mg/kg)	No. of samples tested	> ½ MRL to ≤ MRL	> MRL
2,2-DPA (2,2-dichloropropionic acid)	whole	0.05	0.1	243	0	0
2,4-D	whole	0.01	not set	243	–	0
atrazine	whole	0.01	not set	243	–	0
bromacil	whole	0.01	not set	243	–	0
bromoxynil	whole	0.01	not set	243	–	0
carfentrazone-ethyl	whole	0.01	0.05	243	0	0
chlorsulfuron	whole	0.01	not set	243	–	0
chlorthal-dimethyl	whole	0.01	not set	243	–	0
clethodim (parent only)	whole	0.01	not set	243	–	0
clodinafop-propargyl	whole	0.01	not set	243	–	0
clopyralid	whole	0.05	not set	243	–	0
cyanazine	whole	0.01	0.02	243	0	0
dicamba	whole	0.01	not set	243	–	0
dichlobenil	whole	0.01	0.1	243	0	0
dichlorprop-P	whole	0.01	not set	243	–	0
diflufenican	whole	0.01	not set	243	–	0
diuron	whole	0.01	not set	243	–	0
ethofumesate	whole	0.01	not set	243	–	0
flumioxazin	whole	0.02	0.02	243	0	0
iodosulfuron-methyl	whole	0.01	not set	243	–	0
ioxynil	whole	0.01	not set	243	–	0
isoxaben	whole	0.01	0.01	243	0	0
linuron	whole	0.05	not set	243	–	0
MCPA	whole	0.01	not set	243	–	0
methabenzthiazuron	whole	0.01	not set	243	–	0
metolachlor	whole	0.01	not set	243	–	0
metosulam	whole	0.01	not set	243	–	0
metribuzin	whole	0.01	not set	243	–	0
metsulfuron-methyl	whole	0.01	not set	243	–	0
napropamide	whole	0.01	not set	243	–	0
norflurazon	whole	0.01	0.2	243	0	0
oryzalin	whole	0.01	0.1	243	0	0
oxyfluorfen	whole	0.01	0.05	243	0	0
pendimethalin	whole	0.01	0.05	243	0	0
picloram	whole	0.01	not set	243	–	0
propachlor	whole	0.01	not set	243	–	0
propyzamide	whole	0.01	not set	243	–	0
quizalofop-ethyl	whole	0.01	not set	243	–	0

Chemical	Matrix	LOR (mg/kg)	Australian standard (mg/kg)	No. of samples tested	> ½ MRL to ≤ MRL	> MRL
quizalofop-P-tefuryl	whole	0.01	not set	243	–	0
saflufenacil	whole	0.01	0.03	243	0	0
sethoxydim	whole	0.01	not set	243	–	0
simazine	whole	0.01	0.1	243	0	0
tralkoxydim	whole	0.01	not set	243	–	0
triasulfuron	whole	0.01	not set	243	–	0
triclopyr	whole	0.01	not set	243	–	0
trifluralin	whole	0.01	0.05	243	0	0

**Table 3 Insecticides**

Chemical	Matrix	LOR (mg/kg)	Australian standard (mg/kg)	No. of samples tested	> ½ MRL to ≤ MRL	> MRL
abamectin	whole	0.01	0.01	243	0	0
acephate	whole	0.05	not set	243	–	0
acetamiprid-P	whole	0.01	0.2	243	0	0
aldicarb	whole	0.01	not set	243	–	0
amitraz	whole	0.01	not set	243	–	0
azamethiphos	whole	0.01	not set	243	–	0
azinphos-methyl	whole	0.01	1	243	0	0
bifenazate	whole	0.01	2	243	0	0
bifenthrin	whole	0.01	0.05	243	0	1
bioresmethrin	whole	0.01	not set	243	–	0
buprofezin	whole	0.01	not set	243	–	0
cadusafos	whole	0.005	not set	243	–	0
carbaryl	whole	0.01	0.2	243	0	0
carbofuran	whole	0.005	not set	243	–	0
chlorantraniliprole	whole	0.01	0.3	243	2	0
chlorfenapyr	whole	0.01	0.5	243	0	0
chlorfenvinphos (sum of isomers)	whole	0.01	not set	243	–	0
chlorpyrifos	whole	0.01	0.5	243	0	0
chlorpyrifos-methyl	whole	0.01	not set	243	–	0
clofentezine	whole	0.01	0.1	243	0	0
clothianidin	whole	0.01	2	243	0	0
cyantraniliprole	whole	0.01	0.05	243	0	0
cyfluthrin (sum of isomers)	whole	0.01	not set	243	–	0
cyhalothrin (sum of isomers)	whole	0.01	not set	243	–	0
cypermethrin (sum of isomers)	whole	0.01	1	243	0	0

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Chemical	Matrix	LOR (mg/kg)	Australian standard (mg/kg)	No. of samples tested	> ½ MRL to ≤ MRL	> MRL
deltamethrin	whole	0.01	not set	243	–	0
diazinon	whole	0.01	0.5	243	0	0
dichlorvos	whole	0.01	0.1	243	0	0
dicofol	whole	0.01	5	243	0	0
diflubenzuron	whole	0.01	not set	243	–	0
dimethoate	whole	0.01	not set	243	–	0
disulfoton	whole	0.01	not set	243	–	0
emamectin	whole	0.005	not set	243	–	0
emamectin	whole	0.005	not set	243	–	0
esfenvalerate	whole	0.01	not set	243	–	0
ethion	whole	0.01	1	243	0	0
ethoprophos	whole	0.005	not set	243	–	0
etoxazole	whole	0.01	0.2	243	0	0
fenamiphos	whole	0.01	not set	243	–	0
fenbutatin oxide	whole	0.01	3	243	0	0
fenitrothion	whole	0.01	1	243	0	0
fenoxycarb	whole	0.01	2	243	0	0
fenpyroximate	whole	0.01	0.3	243	0	0
fenthion	whole	0.01	not set	243	–	0
fenvalerate (sum of isomers)	whole	0.01	not set	243	–	0
fipronil	whole	0.01	not set	243	–	0
flonicamid	whole	0.01	0.7	243	0	0
hexythiazox	whole	0.01	1	243	0	0
imidacloprid	whole	0.01	0.3	243	0	0
indoxacarb	whole	0.01	2	243	0	0
malathion (maldison)	whole	0.01	2	243	0	0
metaldehyde	whole	0.05	1	243	0	0
methacrifos	whole	0.01	not set	243	–	0
methamidophos	whole	0.01	not set	243	–	0
methidathion	whole	0.01	0.2	243	0	0
methiocarb	whole	0.01	0.1	243	0	0
methomyl	whole	0.01	1	243	0	0
methoprene	whole	0.01	not set	243	–	0
methoxychlor	whole	0.01	not set	243	–	0
methoxyfenozide	whole	0.01	0.5	243	0	0
mevinphos	whole	0.01	not set	243	–	0
monocrotophos	whole	0.01	not set	243	–	0
novaluron	whole	0.01	0.3	243	0	0
omethoate	whole	0.01	2	243	0	0

Chemical	Matrix	LOR (mg/kg)	Australian standard (mg/kg)	No. of samples tested	> ½ MRL to ≤ MRL	> MRL
parathion	whole	0.01	not set	243	–	0
parathion-methyl	whole	0.01	not set	243	–	0
phorate	whole	0.01	not set	243	–	0
phosmet	whole	0.01	not set	243	–	0
piperonyl butoxide	whole	0.01	8	243	0	0
pirimicarb	whole	0.01	0.5	243	0	0
pirimiphos-methyl	whole	0.01	not set	243	–	0
profenofos	whole	0.01	not set	243	–	0
propargite	whole	0.01	3	243	4	0
prothiofos	whole	0.01	not set	243	–	0
pymetrozine	whole	0.01	not set	243	–	0
pyridaben	whole	0.02	0.5	88	0	0
pyriproxyfen	whole	0.01	not set	243	–	0
spinetoram	whole	0.01	0.1	243	0	0
spinosad	whole	0.01	0.5	243	0	0
spirotetramat	whole	0.01	0.5	243	0	0
sulfoxaflor	whole	0.01	0.5	243	0	0
tebufenozide	whole	0.01	1	243	0	0
tebufenpyrad	whole	0.01	1	243	0	0
terbufos	whole	0.01	not set	243	–	0
tetradifon	whole	0.01	not set	243	–	0
thiacloprid	whole	0.01	1	243	0	0
thiamethoxam	whole	0.01	not set	243	–	0
thiodicarb	whole	0.01	not set	243	–	0
triazofos	whole	0.01	not set	243	–	0
trichlorfon	whole	0.01	0.1	243	0	0
triflumuron	whole	0.01	not set	243	–	0

**Table 4 Contaminants**

Chemical	Matrix	LOR (mg/kg)	Australian standard (mg/kg)	No. of samples tested	> ½ MRL to ≤ MRL	> MRL
aldrin and dieldrin (HHDN+HEOD)	whole	0.01	0.05	243	0	0
chlordane	whole	0.01	0.02	243	0	0
DDT	whole	0.01	1	243	0	0
endosulfan	whole	0.01	not set	243	–	0
endrin	whole	0.01	not set	243	–	0
HCB (hexachlorobenzene)	whole	0.01	not set	243	–	0
HCH (BHC)	whole	0.01	not set	243	–	0
heptachlor	whole	0.01	not set	243	–	0

Chemical	Matrix	LOR (mg/kg)	Australian standard (mg/kg)	No. of samples tested	> ½ MRL to ≤ MRL	> MRL
lindane (gamma-HCH)	whole	0.01	2	243	0	0
mirex	whole	0.01	not set	243	-	0

**Table 5 Physiological modifier**

Chemical	Matrix	LOR (mg/kg)	Australian standard (mg/kg)	No. of samples tested	> ½ MRL to ≤ MRL	> MRL
diphenylamine	whole	0.01	10	243	1	0

**Table 6 Metals**

Chemical	Matrix	LOR (mg/kg)	Australian standard (mg/kg)	No. of samples tested	> ½ MRL to ≤ MRL	> MRL
arsenic (total)	whole	0.05	no limit	111	0	0
cadmium	whole	0.01	no limit	111	0	0
copper	whole	0.05	no limit	111	0	0
lead	whole	0.01	0.1	111	0	0
mercury (total)	whole	0.01	no limit	111	0	0