

## Plant protection products in hops production in Slovenia - 2023; April 2023

The plant protection products in hops in 2023 has produced a list of registered plant protection products in Slovenia (21 April 2023) and Germany (November 2022) and maximum residue levels of pesticides on the hops in the EU, USA, Japan, China, Korea and Great Britain.

**\*Remark: At the moment, the Chinese are establishing their own MRL system. So far, they care about MRLs of established active ingredients (a.i.) only. For others a.i. seems that China unofficially adheres to Codex MRLs, but this is not yet published.**

**Table 1: Downy mildew (*Pseudoperonospora humuli*) – primary infection**

Product	Active ingredient	Maximum residue level (ppm)					
		EU	USA	Japan	China*	Korea	Great Britain
Aliette flash	Fosetyl-Al	2000	<b>45</b>	1440	-	<b>50</b>	2000
Fonganil gold	Metalaxyl-M	15	20	10	10	10	15
Profiler	Fosetyl-Al + fluopicolide	2000 + <b>0.15</b>	<b>45 +</b> 15	1440 + 0.7 import tolerance	-	<b>50 +</b> 15 import tolerance	2000 + <b>0.15</b>

**Table 2: Downy mildew (*Pseudoperonospora humuli*) – secondary infection**

Product	Active ingredient	Maximum residue level (ppm)					
		EU	USA	Japan	China*	Korea	Great Britain
Aliette flash	Fosetyl-Al	2000	<b>45</b>	1440	-	<b>50</b>	2000
Cuprablau Z 35 WP	copper oxychloride	1000	exempt	exempt	-	exempt	1000
Badge WG	copper hydroxide + copper oxychloride	1000	exempt	exempt	-	exempt	1000
Folpan 80 WDG	folpet	400	120	120	-	<b>0.01 default</b>	400
Mirador 250 SC	azoxystrobin	30	20	30	30	30 import tolerance	30
Ortiva	azoxystrobin	30	20	30	30	30 import tolerance	30
Polyversum	<i>Pythium oligandrum</i>	exempt	exempt	exempt	exempt	exempt	exempt
Zaftra AZT 250 SC	azoxystrobin	30	20	30	30	30 import tolerance	30
Revus	mandiropamid	90	50	90	90	90 import tolerance	90

**Table 3: Powdery mildew (*Podosphaera macularis*)**

Product	Active ingredient	Maximum residue level (ppm)					
		EU	USA	Japan	China*	Korea	Great Britain
Cosan	sulfur	exempt	exempt	exempt	-	exempt	exempt
Kumulus DF	sulfur	exempt	exempt	exempt	-	exempt	exempt
Microthiol SC	sulfur	exempt	exempt	exempt	-	exempt	exempt
Pepelin	sulfur	exempt	exempt	exempt	-	exempt	exempt
Vindex 80 WG	sulfur	exempt	exempt	exempt	-	exempt	exempt
Karbicare	potassium bicarbonate	exempt	exempt	0.01 default	-	exempt	exempt
Vitisan	potassium bicarbonate	exempt	exempt	0.01 default	-	exempt	exempt
Vivando	metrafenone	80	70	70	- proposed 70	70 import tolerance	80

**Table 4: *Phoma exigua***

Product	Active ingredient	Maximum residue level (ppm)					
		EU	USA	Japan	China*	Korea	Great Britain
Mirador 250 SC	azoxystrobin	30	20	30	30	30 import tolerance	30
Ortiva	azoxystrobin	30	20	30	30	30 import tolerance	30
Zaftra AZT 250 SC	azoxystrobin	30	20	30	30	30 import tolerance	30

**Table 5: *Cercospora cantuariensis***

Product	Active ingredient	Maximum residue level (ppm)					
		EU	USA	Japan	China*	Korea	Great Britain
Zato 50 WG	trifloxystrobin	40	11	40	40	40 import tolerance	40

**Table 6: Hop damson aphids (*Phorodon humuli*)**

Product	Active ingredient	Maximum residue level (ppm)					
		EU	USA	Japan	China*	Korea	Great Britain
Teppeki	flonicamid	3	20	20	20	20 import tolerance	3
Afinto	flonicamid	3	20	20	20	20 import tolerance	3
Karate Zeon 5 CS	lambda-cyhalotrin	10	10	10	-	0.7	10

Movento SC 100	spirotetramat	15	10	15	15	<b>4</b> import tolerance	15
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**Table 7: Hop flea beetle (*Psylliodes attenuatus*)**

Product	Active ingredient	Maximum residue level (ppm)					
		EU	USA	Japan	China*	Korea	Great Britain
Exirel	cyantraniliprole	0.05	-	0.01 default	-	0.01 default	0.05
Karate Zeon 5 CS	lambda- cyhalotrin	10	10	10	-	<b>0.7</b>	10

**Table 8: European corn borer (*Ostrinia nubilalis*)**

Product	Active ingredient	Maximum residue level (ppm)					
		EU	USA	Japan	China*	Korea	Great Britain
Agree WG	<i>Bacillus Thuringiensis</i> var. <i>Aizawai</i>	0.01 default	exempt	0.01 default	exempt	0.01 default	0.01 default
Lepinox plus	<i>Bacillus Thuringiensis</i> var. <i>Kurstaki</i>	0.01 default	exempt	0.01 default	- exempt	0.01 default	0.01 default
Karate Zeon 5 CS	lambda- cyhalotrin	10	10	10	-	<b>0.7</b>	10

**Table 9: Cabbage moth (*Mamestra brassicae*) and potato stem borer/rosy rustic moth (*Hydraecia micacea*)**

Product	Active ingredient	Maximum residue level (ppm)					
		EU	USA	Japan	China*	Korea	Great Britain
Agree WG	<i>Bacillus Thuringiensis</i> var. <i>Aizawai</i>	0.01 default	exempt	0.01 default	exempt	0.01 default	0.01 default

**Table 10: Two-spotted spider mite (*Tetranychus urticae*)**

Product	Active ingredient	Maximum residue level (ppm)					
		EU	USA	Japan	China*	Korea	Great Britain
Nissorun 10 WP	hexythiazox	3	20	25	3	20 import tolerance	20
Nissorun 250 SC	hexythiazox	3	20	25	3	20 import tolerance	20
Vertimec PRO	abamectin	0.1	0.2	0.2	0.1	0.15 import tolerance	0.1
Milbeknock	milbemectin	0.2	-	0.1	-	0.2 import tolerance	0.2
Kanemite SC	acequinocyl	20	15	15	<b>0.01</b>	15 import tolerance	15

