



## Plant protection products in hops production in Slovenia - 2022; May 2022

The plant protection products in hops in 2022 has produced a list of registered plant protection products in Slovenia (24 February 2022) and Germany (January 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	-	<b>50</b> + 15	2000 + 0.7

**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
Delan 700 WG	dithianon	100	100	300	-	0.01 default	100
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	30
Ortiva	azoxystrobin	30	20	30	30	30	30
Polyversum	<i>Pythium oligandrum</i>	exempt	exempt	exempt	exempt	exempt	exempt
Zaftra AZT 250 SC	azoxystrobin	30	20	30	30	30	30
Revus	mandipropamid	90	50	90	90	90	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
Sythane 20 EW	myclobutanil	6	10	10	2	5	6
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	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	30
Ortiva	azoxystrobin	30	20	30	30	30	30
Zaftra AZT 250 SC	azoxystrobin	30	20	30	30	30	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	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	3
Afinto	flonicamid	3	20	20	20	20	3
Karate Zeon 5 CS	lambda-cyhalotrin	10	10	10	-	0.7	10
Karis 10 CS	lambda-cyhalotrin	10	10	10	-	0.7	10
Movento SC 100	spirotetramat	15	10	15	15	4	15



**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
Karis 10 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
Karate Zeon 5 CS	lambda-cyhalotrin	10	10	10	-	<b>0.7</b>	10
Karis 10 CS	lambda-cyhalotrin	10	10	10	-	<b>0.7</b>	10
Lepinox plus	Bacillus thuringiensis var. kurstaki	0.01 default	exempt	0.01 default	- exempt	0.01 default	0.01 default
Agree WG	Bacillus thuringiensis var. aizawai	0.01 default	exempt	0.01 default	exempt	0.01 default	0.01 default

**Table 9: Two-spotted spider mite (*Tetranychus urticae*)**

Product	Active ingredient	Maximum residue level (ppm)					
		EU	USA	Japan	China*	Korea	Great Britain
Nissorun 10 WP	hexythiazox	20	20	25	3	3	20
Nissorun 250 SC	hexythiazox	<b>20; proposed 3</b>	20	25	<b>3</b>	<b>3</b>	20
Vertimec PRO	abamectin	0.1	0.2	0.2	0.1	0.15	0.1
Milbeknock	milbemectin	0.2	-	0.1	-	0.2	0.2
Kanemite SC	acequinocyl	15	15	15	<b>0.01</b>	15	15
Movento SC 100	spirotetramat	15	10	15	15	<b>4</b>	15



**Table 10: Alfaalfa snout weevil (*Otiorhynchus ligustici*)**

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

**Table 11: Herbicides/defoliants**

Product	Active ingredient	Maximum residue level (ppm)					
		EU	USA	Japan	China*	Korea	Great Britain
Beloukha	pelargonic acid	- exempt	- exempt	0.01 default	-	- exempt	- exempt

**Table 12: Repellents**

Product	Active ingredient	Maximum residue level (ppm)					
		EU	USA	Japan	China*	Korea	Great Britain
Trico	sheep fat	exempt	exempt	exempt	exempt	exempt	exempt