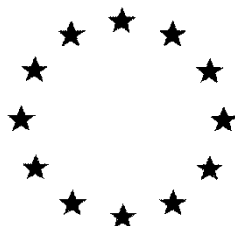


European Commission



Renewal Assessment Report
prepared according to the Commission Regulation (EU) N° 1107/2009

Aluminium Silicate Calcined
(Kaolin calcined)
SOKALCIARBO WP
SOKA

Volume 3 – B.3 (PPP)

Rapporteur Member State: Greece
Co-Rapporteur Member State: France

May 2020

Version History

When	What
February 2018	Initial version.
May 2020	Renewal Assessment Report (RAR)-prepared in the context of the application for renewal of approval of the a.s. according to Regulation (EC) No 1107/2009.

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B.3. DATA ON APPLICATION AND EFFICACY

B.3.1. FIELD OF USE ENVISAGED

SOKALCIARBO WP is intended to be used in field as foliar spray.

B.3.2. EFFECTS ON HARMFUL ORGANISMS

SOKALCIARBO WP contains Aluminium Silicate. Aluminium Silicate acts a physical repellent barrier against insect pests. Aluminium Silicate creates a particle film having a repellent effect on insects causing damages to crops. It is also thought to camouflage crops from migrating insects by changing the wavelength of light emitted from the crop surface.

B.3.3. DETAILS OF INTENDED USE**Table 3.3-1 Intended GAP**

PPP (product name/code): SOKALCIARBO WP

Formulation type:

WP

Active substance 1: Aluminium silicate

Conc. of as 1:

100%

Safener: n.a

Conc. of safener:

n.a.

Synergist: n.a

Conc. of synergist:

n.a.

Applicant: Soka

Professional use:

☒

Zone(s): SEU

Non professional use:

☐

Verified by MS: y/n

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Use- No. (e)	Member state(s)	Crop and/ or situation (crop destination / purpose of crop)	F, Fn, G, Gn, Gpn or I	Pests or Group of pests controlled (additionally: developmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/synergist per ha (1)
					Method / Kind	Timing / Growth stage of crop & season	Max. number a) per use b) per crop/ season	Min. interval between applications (days)	kg product / ha a) max. rate per appl. b) max. total rate per crop/season	kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max		
1	All zones	Apricot tree	F	<i>Brachycaudus schwartzi</i> and <i>Hyalopterus amygdali</i>	Foliar spray	1 st : BBCH 51-59 2 nd -3 rd : BBCH 69-79 + Post harvest	a) 4 b) 4	7	a) 1 st : 50 2 nd -4 th : 30 b) 140	a) 1 st : 50 2 nd -4 th : 30 b) 140	600- 1000	1	-
2	All zones	Almond tree	F	<i>Brachycaudus amygdalinus</i> , <i>Hyalopterus pruni</i> and <i>Brachycaudus persicae</i>	Foliar spray	1 st : BBCH 51-59 2 nd -3 rd : BBCH 69-79 + Post harvest	a) 4 b) 4	7	a) 1 st : 50 2 nd -4 th : 30 b) 140	a) 1 st : 50 2 nd -4 th : 30 b) 140	600- 1000	1	-
3	All zones	Cherry tree	F	<i>Myzus cerasi</i>	Foliar spray	1 st : BBCH 51-59 2 nd -3 rd : BBCH 69-79 + Post harvest	a) 4 b) 4	7	a) 1 st : 50 2 nd -4 th : 30 b) 140	a) 1 st : 50 2 nd -4 th : 30 b) 140	600- 1000	1	-
4	All zones	Hazel tree	F	<i>Corylobium avellanae</i> and <i>Myzocallis coryli</i>	Foliar spray	1 st : BBCH 51-59 2 nd -3 rd : BBCH 69-79 + Post harvest	a) 4 b) 4	7	a) 1 st : 50 2 nd -4 th : 30 b) 140	a) 1 st : 50 2 nd -4 th : 30 b) 140	600- 1000	1	-

ALUMINIUM SILICATE (Kaolin) Volume 3 – B.3 (PPP) – SOKALCIARBO WP

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Use- No. (e)	Member state(s)	Crop and/ or situation (crop destination / purpose of crop)	F, Fn, Fpn G, Gn, Gpn or I	Pests or Group of pests controlled (additionally: developmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/synergist per ha (f)
					Method / Kind	Timing / Growth stage of crop & season	Max. number a) per use b) per crop/ season	Min. interval between applications (days)	kg product / ha a) max. rate per appl. b) max. total rate per crop/season	kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max		
5	All zones	Walnut tree	F	<i>Rhagoletis completa</i>	Foliar spray	From the first capture of insect	a) 6 b) 6	10 days after the 1 st application and then 20 days	a) 1 st : 60 2 nd to 6 th : 30 b) 210	a) 1 st : 60 2 nd to 6 th : 30 b) 210	600- 1000	-	-
6	All zones	Peach tree	F	<i>Myzus persicae</i>	Foliar spray	1 st : BBCH 51-59 2 nd -3 rd : BBCH 69-79 + Post harvest	a) 4 b) 4	7	a) 1 st : 50 2 nd to 4 th : 30 b) 140	a) 1 st : 50 2 nd to 4 th : 30 b) 140	600- 1000	1	-
7	All zones	Pome tree (apple, pear, quince, nashi)	F	<i>Dysaphis pyri</i> , <i>Aphis pomi</i> and <i>Rhopalosiphum insertum</i>	Foliar spray	1 st : BBCH 51-59 2 nd -3 rd : BBCH 69-79 + Post harvest	a) 4 b) 4	7	a) 1 st : 50 2 nd -4 th : 30 b) 140	a) 1 st : 50 2 nd -4 th : 30 b) 140	600- 1000	1	-
8	All zones	Pear tree, quince tree, nashi tree	F	<i>Melanaphis pyrararia</i> and <i>Anuraphis farfarae</i>	Foliar spray	1 st : BBCH 51-59 2 nd -3 rd : BBCH 69-79 + Post harvest	a) 4 b) 4	7	a) 1 st : 50 2 nd -4 th : 30 b) 140	a) 1 st : 50 2 nd -4 th : 30 b) 140	600- 1000	1	-
9	All zones	Apple tree	F	<i>Dysaphis plantaginea</i>	Foliar spray	1 st : BBCH 51-59 2 nd -3 rd : BBCH 69-79 + Post harvest	a) 4 b) 4	7	a) 1 st : 50 2 nd -4 th : 30 b) 140	a) 1 st : 50 2 nd -4 th : 30 b) 140	600- 1000	1	-
10	All zones	Apple tree	F	<i>Psylla pyrisuga</i> , <i>Psylla mali</i> , <i>Psylla costalis</i> , <i>Cacopsylla pyricola</i> and <i>Cacopsylla pyri</i>	Foliar spray	1 st generation: BBCH 01-59 Following generation: BBCH 69-79	a) 7 b) 7	7	a) 30 b) 210	a) 30 b) 210	600- 1000	1	-
11	All zones	Plum tree	F	<i>Brachycaudus schwartzi</i> , <i>Hyalopterus pruni</i> and <i>Brachycaudus helichrysi K</i>	Foliar spray	1 st : BBCH 51-59 2 nd -3 rd : BBCH 69-79 + Post harvest	a) 4 b) 4	7	a) 1 st : 50 2 nd -4 th : 30 b) 140	a) 1 st : 50 2 nd -4 th : 30 b) 140	600- 1000	1	-
12	All zones	Citrus tree	F	<i>Empoasca vitis</i>	Foliar spray	At beginning of fruit ripening and	a) 6	7 days after the 1 st	a) 1 st : 50 2 nd to 6 th : 30	a) 1 st : 50 2 nd to 6 th : 30	600- 1000	-	-

ALUMINIUM SILICATE (Kaolin) Volume 3 – B.3 (PPP) – SOKALCIARBO WP

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Use- No. (e)	Member state(s)	Crop and/ or situation (crop destination / purpose of crop)	F, Fn, Fpn G, Gn, Gpn or I	Pests or Group of pests controlled (additionally: developmental stages of the pest or pest group)	Application				Application rate			PHI (days)	Remarks: e.g. g safener/synergist per ha (f)
					Method / Kind	Timing / Growth stage of crop & season	Max. number a) per use b) per crop/ season	Min. interval between applications (days)	kg product / ha a) max. rate per appl. b) max. total rate per crop/season	kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha min / max		
						the first capture of insect	b) 6	application and then 21 days	b) 200	b) 200			
13	All zones	Lavender, lavandin	F	<i>Hyalesthes obsoletus</i>	Foliar spray	At the first capture of insect (except from the flowering period)	a) 5 b) 5	7	a) 1 st : 15 2 nd to 5 th : 12 b) 63	a) 1 st : 15 2 nd to 5 th : 12 b) 63	150- 200	-	-
14	All zones	Olive tree	F	<i>Bactrocera oleae</i>	Foliar spray	At the first capture of insect (with olives on the trees)	a) 6 b) 6	10 days after the 1 st application and then 20 days	a) 1 st : 50 2 nd to 6 th : 30 b) 200	a) 1 st : 50 2 nd to 6 th : 30 b) 200	600- 1000	-	-
15	All zones	Grapevine (wine and table)	F	<i>Empoasca vitis</i>	Foliar spray	BBCH 69-85	a) 4 b) 4	7	a) 20 b) 80	a) 20 b) 80	200- 300	1	-
16	All zones	Walnut tree	F	<i>Panaphis juglandis</i> , <i>Chromaphis juglandicola</i>	Foliar spray	1 st : BBCH 51-59 2 nd -3 rd : BBCH 69-79 + Post harvest	a) 4 b) 4	7	a) 1 st : 50 2 nd -4 th : 30 b) 140	a) 1 st : 50 2 nd -4 th : 30 b) 140	600- 1000	1	-

B.3.4. APPLICATION RATE AND CONCENTRATION OF THE ACTIVE SUBSTANCE

Application rate of SOKALCIARBO WP depends on concerned uses. The minimum application rate is 12 kg/ha (corresponding to 12 kg a.s./ha) and the maximum application rate is 60 kg/ha (corresponding to 60 kg a.s./ha). For more information please refer to point 3.3.

B.3.5. METHOD OF APPLICATION

SOKALCIARBO WP is applied by foliar spraying using a water as carrier. The water volume varies between 150 – 1000 l/ha depending on the concerned crop. Spray volume should be adjusted to suit crop size. For more information please refer to point 3.3.

B.3.6. NUMBER AND TIMING OF APPLICATIONS AND DURATION OF PROTECTION

Number and timing of application depend on concerned uses. In general for orchards maximum 4 applications are recommended with a minimum interval of 7 days between applications (1st at BBCH 51-59, 2nd and 3rd at BBCH 69-79 and 4th at post harvest). For the use on walnut tree against *Rhagoletis completa* maximum 6 applications are recommended with a minimum interval of 10 days after the first application and 21 days after the 2nd to last applications. For the use on apple tree against *Psylla pyrisuga*, *Psylla mali*, *Psylla costalis*, *Cacopsylla pyricola* and *Cacopsylla pyri*, maximum 7 applications are recommended with a minimum interval of 7 days between applications (1st generation: BBCH 01-59; following generation: BBCH 69-79). For the use on lavender, maximum 5 applications are recommended with a minimum interval of 7 days between applications. For the use on olive tree maximum 6 applications are recommended with a minimum interval of 10 days after the first application and 20 days after the 2nd to last application. For the use on grapevine, maximum 4 applications are recommended with a minimum interval of 7 days between applications (BBCH 69-85). For more information please refer to point 3.3.

It can be noted that due to the nature of the product, a new treatment is required after leaching (> 25 mm), following erosion by the wind, following a significant growth of vegetation or enlargement of the fruit.

B.3.7. NECESSARY WAITING PERIODS OR OTHER PRECAUTIONS TO AVOID PHYTOTOXIC EFFECTS ON SUCCEEDING CROPS

Not applicable. Aluminium silicate is intended to be used on perennial crops only.

B.3.8. PROPOSED INSTRUCTIONS FOR USE**Application Rules**

All sprayers are suitable for the use of SOKALCIARBO. Sprayers (high pressure) with strict piston pumps are not recommended. Prefer ceramic nozzles. Choose nozzles suitable for the application of contact products (turbulence for example). Fill the tank halfway with water and with fairly rapid stirring, gradually pour the SOKALCIARBO® WP then complete the filling. The agitation must be on until the end of preparation and treatment. (If adding an adjuvant, introduce it first; additional information: consult SOKA). Maximize water volumes, without reaching runoff.

Registered Uses

OLIVE FLY		
OLIVE	• M.D./year : 210 kg/ha • B.Z. water. : 5 m • P.H.I. : none	<i>Trapping must be carried out in the orchard throughout the period of presence of flies in order to properly start the treatments</i> 1ST APPLICATION 50 kg/ha At the first fly caught in the trap and / or wait until the olives reach a length of at least 6mm Tall (> 8m) and dense trees: 1st application at 60kg / ha or 2 crossed passages at 30kg / ha at close intervals RENEWALS 30kg/ha 10 days after the first application then every 20 to 30 days + * depending on the situation
	• M.D./year : 210 kg/ha • flies + aphids • B.Z. water. : 5 m	

	P.H.I. : none	(If there are white marks on the olives at harvest, they will be easily eliminated during the usual oil production or brining process)	
PSYLLA			
APPLE TREE (apple, pear, quince, medlar, nashi, cheekbone)	a M.D./year : 210 kg/ha Z.N.T.eau : 5 m P.H.I. : 15 days	1 ST GENERATION (BBCH 01 - BBCH 59) APPLICATION 30 kg/ha as soon as 50% of the wintering females are mature, ready to lay. RENEWALS Up to 3 applications on the first generation, at the rate of 7-21 days + * depending on the situation	POST FLORAISON GENERATIONS (BBCH 69 - BBCH 79) APPLICATION 30 kg/ha from the end of flowering, and against subsequent generations of the psyllid. RENEWALS Up to 4 applications in post-flowering, at the rate of 7-21 days + * depending on the situation
		(For late applications close to harvest, there is a risk of white marking on unwashed marketed fruit)	
EMPOASCA VITIS			
VINE	a M.D./year : 80 kg/ha B.Z. water : 5 m P.H.I. : 15 days	2 ND GENERATION (BBCH 69 - BBCH 85) APPLICATION Dose per Application : 20 kg/ha from the first catches of adults of the 1st generation (June in average year) identified with a yellow trap in the plot, or from the first second generation larvae on the leaves (1-10 larvae / 100 leaves) RENEWALS Up to 4 applications ha/year, at the rate of 7-21 days + * depending on the situation	
APHIDS			
APPLE (pear, quince, nashi), PEACH TREE (plum), CHERRY TREE, PLUM TREE NUTS (almond, hazelnut, wallnut)	a M.D./year : 140 kg/ha - flies + aphids B.Z. water : 20 m P.H.I. : 60 days (90 on peach tree)	STRATEGY ON SPRING BBCH 51 à 59 (then in post flowering, BBCH stage 69 to 71 if necessary) 1 ST APPLICATION 50 kg/ha at the end of winter (stage BBCH 51) before installation of the founders RENEWALS every 7 - 20 days at 30 kg/ha + * depending on the situation	STRATEGY ON AUTOMN APPLICATION After harvest and before the leaves drop at 30 kg/ha RENEWALS 30kg/ha if the leaves fall late and the protective barrier is altered
		NO TREATMENT DURING FLOWERING	
LEAFHOPPER, CERCOPIDAE, PSYLLA			
CITRUS	a M.D./an : 200 kg/ha B.Z. water : 5 m P.H.I. : none	A trap must be placed in the orchard from September to determine the migration period of the adult green leafhoppers 1 ST APPLICATION 50 kg/ha at the first appearance of adult green leafhoppers in the trap RENEWALS 30kg/ha 7 to 20 days after the first application then every 21 days + * depending on the situation (If there are white marks on citrus fruits at harvest, they will be easily removed during the usual brushing, washing, sizing, conditioning and waxing process which will mask the whiteness effect)	
OTHER PESTS (Hyalesthes obsoletus)			
Lavander -	a M.D./an : 63 kg/ha B.Z. water. : 20 m	1 ST APPLICATION 15 kg/ha located on the row (recommended water volume 150-200L) RENEWALS	

Lavandin	P.H.I... : 7 days	<p>12 kg/ha located on the row before the peak of the flight and within 20 days maximum. Up to 4 renewals (max.) Depending on the duration of the flight + * depending on the situation</p> <p>TREATMENTS BY AGE OF PLANTATION</p> <p><i>Planting year or topping: perform a topping before the flight of the leafhopper begins, in order to treat in the absence of bees. First treatment at the start of the flight First cut: It is advisable to advance the harvest a few days above normal so as not to treat in the presence of bees Following cuts: Treat outside flowering period: before flowering and after harvest (The effectiveness of the treatments is only noticeable in the spring or autumn of the following year when the symptoms are expressed after the incubation time of the phytoplasma)</i></p>
<small> M.D./year : Maximum dose/year (kg/ha) - B.Z. water. : Buffer Zone (m) alongside water body (All the other buffer zones for Arthropods and crops are 5m) P.H.I... : Délai avant récolte (jours) </small>		

B.3.9. EFFECTIVENESS

No new data on the effectiveness were submitted for the renewal of active substance. The representative uses are presented in the GAP table.

B.3.10. INFORMATION ON THE DEVELOPMENT OF RESISTANCE

Aluminium silicate (kaolin) has no toxic mode of action and therefore cannot induce resistance in pest populations.

Aluminium silicate (kaolin) cannot cause resistance like conventional chemical insecticides. Aluminium silicate (kaolin) is not killing the insects through a specific target site so selection pressure to counteract the effects of kaolin is of very low probability. Insects are very unlikely to be selected on the basis of modified behaviour and/or morphological attributes that avoid the repellent barrier effects of kaolin. In conclusion, there is very little risk of target pests developing resistance to kaolin.

B.3.11. ADVERSE EFFECTS ON TREATED CROPS

Aluminium silicate (kaolin) is a purified type of clay naturally present in most agricultural soils. Agricultural soils typically contain 5 to 50% clay. Aluminium silicate is neither absorbed nor translocated by plants. There are no adverse effects of aluminium silicate (kaolin) on treated crops.

B.3.12. OBSERVATIONS ON OTHER UNDESIRABLE OR UNINTENDED SIDE-EFFECTS

When applied on crops, SOKALCIARBO WP leaves a white kaolin film that provides an effective barrier against insect pests. This layer of white particles may be difficult to remove from soft, fragile fruits and, although totally non-toxic, may prove unsightly to customers.

B.3.13. REFERENCES RELIED ON

None.