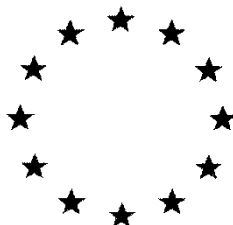


European Commission



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

Aluminium Silicate Calcined
(Kaolin calcined)

SURROUND® WP CROP PROTECTANT
Tessenderlo

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

Field use, such as agriculture, horticulture, forestry and viticulture.

B.3.2. EFFECTS ON HARMFUL ORGANISMS

SURROUND® WP CROP PROTECTANT greatly reduces insect damage to crops by creating a particle film that has repellent and irritant effects on pests. It is also thought to camouflage crops from migrating insects by changing the wave-length of light emitted from the crop surface.

Kaolin also provides horticultural benefits for plants by allowing photosynthesis to occur while reflecting harmful IR and UV radiations. Studies have shown that kaolin-treated trees actually increase their rate of carbon fixation.

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B.3.3. DETAILS OF INTENDED USE

Table 3.3-1 Intended GAP

PPP (product name/code): SURROUND WP CROP PROTECTANT

Formulation type:

EC

Active substance 1: Aluminium silicate

Conc. of as 1:

950 g/kg

Safener: None

Conc. of safener:

None

Synergist: None

Conc. of synergist:

None

Applicant: Tessenderlo Group N.V.

Professional use:

☒

Zone(s): EU

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 (f)
					Method / Kind	Timing / Growth stage of crop & season	Max. number a) per use b) per crop/ season	Min. interval between applications (days)	kg or L product / ha a) max. rate per appl. b) max. total rate per crop/season	g or kg as/ha a) max. rate per appl. b) max. total rate per crop/season	Water L/ha a) max per use b) max per season		
Zonal uses (field or outdoor uses, certain types of protected crops)													
1	--	Grapevine	F	<i>Frankliniella occidentalis</i>	Broadcast spraying of entire plant	Up to BBCH 65	a) 1-4 b) 1-4	7	a) 30 kg/ha b) 120 kg/ha	a) 28.5 kg/ha b) 114 kg/ha	a) 500 – 1000 L/ha b) 2000 – 4000 L/ha	N/A	First spraying at emergence of overwintering females Use sufficient spray volume, apply to near drip but avoid run-off. Re-apply each 7 to 21 days, depending on rainfall and crop development. .
Interzonal uses (use as seed treatment, in greenhouses (or other closed places of plant production), as post-harvest treatment or for treatment of empty storage rooms)													
3		None											
Minor uses according to Article 51 (zonal uses)													
4		None											
Minor uses according to Article 51 (interzonal uses)													

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5		None											
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B.3.4. APPLICATION RATE AND CONCENTRATION OF THE ACTIVE SUBSTANCE

Refer to above table in B 3.3 for full details of application rates.

Crop	Concentration (fp, kg/hL)	Concentration (ai, kg/hL)
Grapevine	2.0 - 3.0	1.90 – 2.85

B.3.5. METHOD OF APPLICATION

Air-blast assisted mist-blower generating fine spray droplets. Spray volume should be adjusted to suit crop size. Complete coverage up to near drip is recommended but avoid spraying to run-off.

Type of diluent: Water

Volume of diluent in pear trees: 500 to 1000 L/ha

For full details of all uses please refer to Point CP 3.3.

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

Maximum number of applications and their timings: Maximum four applications

Growth stages of crops or plants to be protected: Up to BBCH 65.

Development stages of the harmful organism concerned: At the beginning of *F. occidentalis* presence.

Duration of protection afforded by each application: Variable. The effect of SURROUND® WP CROP PROTECTANT is that of a barrier film. Protection will last until the integrity of the particle film is compromised, either by wind erosion, rainfall or new plant growth.

Duration of protection afforded by the maximum number of applications: Please see Point above. SURROUND® WP CROP PROTECTANT has no systemic action. Protection will last until the particle film's integrity is compromised, irrespective of the number of applications.

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

Minimum waiting periods or other precautions between last application and sowing or planting succeeding crops:

No waiting period required between last application and sowing or succeeding plantings. Kaolin is an inert, non-toxic, naturally occurring product normally found in soil as clay. There are no known phytotoxic effects.

Limitations on choice of succeeding crops: None. Kaolin is an inert, non-toxic, naturally occurring product normally found in soil as clay. There are no known phytotoxic effects.

B.3.8. PROPOSED INSTRUCTIONS FOR USE

Apply using a conventional sprayer with continuous agitation. Spray volume should be adjusted to suit crop size. Complete coverage up to near drip is recommended but avoid spraying to run-off. Ensure the crop is covered by a white film. Reapply at 7-14 day interval or if protective cover is eroded, washed off or new shoots appear.

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, SURROUND® WP CROP PROTECTANT 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.