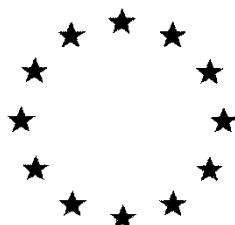


European Commission



Renewal Assessment Report
prepared according to Regulation (EC) N° 1107/2009

Aluminium Silicate Calcinated
(Kaolin calcined)
SOKALCIARBO WP
SOKA

Volume 3 – B.6 (CP)

Rapporteur Member State: GREECE
Co-Rapporteur Member State: FRANCE

May 2020

Version History

Date	Data points containing amendments or additions and brief description
March 2008	Draft Assessment Report (DAR) – prepared by RMS Hungary in the context of the application for the first inclusion of the a.s. aluminium silicate in Annex I to Council Directive 91/414/EEC.
May 2011	Final Addendum to the DAR
May 2020	<p>Draft Renewal Assessment Report (RAR) – prepared by RMS EL in the context of the application for renewal of approval of the a.s. according to Reg (EU) No 1107/2009.</p> <p><i>NOTE: The RAR is a stand-alone document containing the evaluations already displayed in the initial DAR, as well as the new assessments. The revision of the initial DAR has been done in accordance with SANCO/10180/2013 rev.1 (March 2013), with changes in the original text – resulting from assessment of new studies (or reconsideration of old studies or studies that were not yet previously peer-reviewed) – being highlighted by means of yellow shading.</i></p>

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B.6 TOXICOLOGY AND METABOLISM DATA AND ASSESSMENT OF RISKS FOR HUMANS

General comment	All the additions/corrections made by the RMS in the DAR are highlighted with yellow colour.
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B.6.1 Acute toxicity of Plant Protection Product

The representative formulated product SOKALCIARBO WP is 100% aluminium silicate. Consequently, the acute toxicity data package with the active, applies also to the preparation.

The detailed evaluation of all studies is included in Vol. 3_CA_B6.

A summary of the acute toxicity studies with aluminium silicate owned by SOKA is presented below:

Parameter	Species	Result	Reference
Acute Oral LD50	Rat	> 2000mg/kg No classification	██████████ (2016a)
Acute Dermal LD50	Rat	> 2000mg/kg No classification	██████████ (2016b)
Acute Inhalation LC50	Rat	> 5.07 mg/l No classification	██████████ (2016)
Skin sensitisation	Mouse	non-sensitising No classification	██████████ (2016c)

In addition to the above, it has been concluded that aluminium silicate is not a skin and eye irritant.

Overall, SOKALCIARBO WP is considered of low acute oral, dermal and inhalation toxicity, is not a skin and eye irritant and is not a skin sensitizer.

B.6.1.1 Oral

Please refer to Vol. 3 CA, Point B.6.2.1.

B.6.1.2 Dermal

Please refer to Vol. 3 CA, Point B.6.2.2.

B.6.1.3 Inhalation

Please refer to Vol. 3 CA, Point B.6.2.3.

B.6.1.4 Skin irritation

Please refer to Vol. 3 CA, Point B.6.2.4.

B.6.1.5 Eye irritation

Please refer to Vol. 3 CA, Point B.6.2.5.

B.6.1.6 Skin sensitization

Please refer to Vol. 3 CA, Point B.6.2.6.

B.6.2 Dermal absorption

Aluminium silicate is a natural inorganic mineral. It is inert, insoluble in aqueous and organic solvents. Due to its physicochemical properties, dermal penetration of aluminium silicate is negligible.

B.6.3 Available toxicological data relating to co-formulants

Please refer to Volume 4.

B.6.4 Exposure data

SOKALCIARBO WP is a wettable powder (WP) formulation containing 1000 g/kg aluminium silicate. The representative uses comprise outdoor application by vehicle mounted spraying or manual spraying to a variety of crops. The critical uses are presented in Table B.6.4-1 below while, full details of the GAP can be found in Appendix 1.

Table B.6.4-1: Critical use pattern of the formulated product

Use No.	12*	13
Crop	Citrus	Lavender
Application rate (kg as/ha)	50	15
Number of applications/minimum interval	6/7	5/7
Crop growth stage (BBCH)	At beginning of fruit ripening and the first capture of insect	At the first capture of insect
Application method	Foliar spray	Foliar spray
Minimum water volume	600	150

*Covering Stone fruits, pome fruits, nuts fruits, Olive tree and Grapevine

An AOEC value of 1.4 mg/m³ (8hrs-TWA) has been set for aluminium silicate (calcined). This value corresponds to 14 mg /day considering an inhalation rate of 1.25 m³/h (HEEG Opinion No 17, Default human factor values for use in exposure assessments for biocidal products) and a work rate of 8 hrs.

In addition, a workplace exposure limit (WEL)-time weighted average (TWA) of 2 mg/m³ has been established for aluminium silicate for occupational settings¹. The TWA of 2 mg/m³ for a working day of 8 hrs, is equivalent to 20 mg/day considering the inhalation rate of 1.25 m³/h.

For completeness, inhalation exposure estimates have been compared to both reference values.

B.6.4.1 Operator exposure

Operators are exposed to a plant protection product *via* the dermal and inhalation routes. In case of SOKALCIARBO WP, where the absorption through the skin is considered negligible, only exposure *via* inhalation is relevant to the assessment.

Estimation of operator exposure towards aluminium silicate been calculated using the EFSA Guidance on the assessment of exposure of operators, workers, residents and bystanders in risk assessment for plant protection products, [EFSA Journal 2014;12(10):3874[55 pp.].

The calculated exposure levels in mg a.s./day, are presented below:

Table B.6.4-1 Estimated operator exposure

		Aluminium silicate		
Model data	Level of RPE	Total inhalation exposure levels (mg a.s./day)	% of AOEC -TWA (14 mg a.s./day)	% of WEL -TWA (20 mg a.s./day)
Citrus – HCTM				
Application rate		50 kg a.s./ha		
EFSA calculator (AOEM; 75 th percentile)	Potential exposure	15.94	114	80
	Closed cab	14.13	101	71
Citrus – HCHH (manual-hand held)				

¹ EH40/2005 Workplace exposure limits (Fourth Edition 2020), <https://www.hse.gov.uk/pubns/priced/eh40.pdf>

Application rate		50 kg a.s./ha		
EFSA calculator (AOEM; 75 th percentile)	Potential exposure	17.09	122	85
	FP2, P2 and similar	17.09	122	85
Citrus – HCTM (manual knapsack)				
Application rate		50 kg a.s./ha		
EFSA calculator (AOEM; 75 th percentile)	Potential exposure	2.91	21	15
Lavender – LCTM				
Application rate		15 kg a.s./ha		
EFSA calculator (AOEM; 75 th percentile)	Potential exposure	9.71	69	49
Lavender – LCHH (manual-hand held)				
Application rate		15 kg a.s./ha		
EFSA calculator (AOEM; 75 th percentile)	Potential exposure	8.38	60	42
Lavender – LCTM (manual knapsack)				
Application rate		15 kg a.s./ha		
EFSA calculator (AOEM; 75 th percentile)	Potential exposure	0.51	3.6	2.6

In case of application to citrus *via* vehicle-mounted sprayer, operator inhalation exposure levels exceed the AOEC (8hrs-TWA) value even when closed-cab tractor is considered. No exceedance of the WEL (8hrs-TWA) is observed.

When application to citrus is performed manually *via* hand-held equipment, operator inhalation exposure levels exceed the AOEC (8hrs-TWA) value while, no exceedance of the WEL (8hrs-TWA) is observed. It is noted that the use of RPE e.g. FP2, P2 & similar, does not reduce the inhalation exposure levels estimated by the EFSA Model.

For the rest of the scenarios assessed, operator inhalation exposure levels are below the AOEC (8hrs-TWA) and the WEL (8hrs-TWA).

B.6.4.1.1 Measurement of operator exposure

Not required.

B.6.4.2 Bystander and resident exposure

Bystander and resident exposure towards aluminium silicate has been calculated using the EFSA Guidance on the assessment of exposure of operators, workers, residents and bystanders in risk assessment for plant protection products [EFSA Journal 2014;12(10):3874[55 pp.].

Among the initial four pathways of exposure, only spray drift (at the time of application) and vapour (which may occur after the PPP has been applied) are considered. Exposure to surface deposits and entry into treated crops are not retained as dermal absorption is negligible. Likewise, hand/object-to-mouth exposure is not considered as a route of exposure for children, as aluminium silicate is not orally absorbed.

No AAOEC value has been set. Since, the assessment covers long-term exposure, bystanders are covered by residents for long-term effects.

The calculated exposure levels in mg a.s./day, are presented below:

Table B.6.4-2 Estimated bystander/resident exposure

		Aluminium silicate		
Model data		Total exposure levels (mg a.s./day)	% of AOEC -TWA (14 mg a.s./day)	% of WEL -TWA (20 mg a.s./day)
Tractor mounted air assisted spray application outdoors Buffer zone: 5 m Drift reduction technology: No DT ₅₀ : 30 days DFR: 3 µg/cm ² /kg a.s./ha Interval between treatments: 7 days				
Number of applications and application rate		5 applications, 50 kg a.s./ha		
Resident child Body weight: 10 kg	Drift (75 th perc.)	0.1369565	0.98	0.68
	Vapour (75 th perc.)	0.0107000	0.08	0.05
	Deposits (75 th perc.)	-	-	-
	Re-entry (75 th perc.)	-	-	-
	Sum (mean)	0.1215696	0.87	0.61
Resident adult Body weight: 60 kg	Drift (75 th perc.)	0.1750000	1.25	0.88
	Vapour (75 th perc.)	0.0138000	0.10	0.07
	Deposits (75 th perc.)	-	-	-
	Re-entry (75 th perc.)	-	-	-
	Sum (mean)	0.1554667	1.1	0.78
Tractor vehicle mounted spray application outdoors Buffer zone: 5 m Drift reduction technology: No DT ₅₀ : 30 days DFR: 3 µg/cm ² /kg a.s./ha Interval between treatments: 7 days				
Number of applications and application rate		5 applications, 15 kg a.s./ha		
Resident child Body weight: 10 kg	Drift (75 th perc.)	0.0220000	0.16	0.11
	Vapour (75 th perc.)	0.0107000	0.08	0.05
	Deposits (75 th perc.)	-	-	-
	Re-entry (75 th perc.)	-	-	-
	Sum (mean)	0.0277000	0.20	0.14
Resident adult	Drift (75 th perc.)	0.0100000	0.07	0.05

Body weight: 60 kg	Vapour (75 th perc.)	0.0138000	0.10	0.07
	Deposits (75 th perc.)	-	-	-
	Re-entry (75 th perc.)	-	-	-
	Sum (mean)	0.0228000	0.16	0.11

It is concluded that bystander/resident exposure levels are below the AOEC (8hrs-TWA) and the WEL (8hrs-TWA) for all scenarios assessed.

B.6.4.2.1 Measurement of bystander and resident exposure

Not required.

B.6.4.3 Worker exposure

Following field applications, a worker is exposed to plant protection products *via* the dermal route through contact with the dried residues settled on the foliar of the crop. As dermal absorption of aluminium silicate is negligible, a worker exposure assessment is not relevant.

B.6.4.3.1 Measurement of worker exposure

Not required.

B.6.5 Exposure and risk assessment

SOKALCIARBO WP is a wettable powder (WP) formulation containing 950 g/kg aluminium silicate. The representative use comprises outdoor application by vehicle-mounted spraying or manual spraying to a variety of crops.

Dermal and oral absorption of aluminum silicate is considered negligible. Thus, only exposure by the inhalation route was considered relevant in the context of the exposure assessment. Operator and bystander/resident can potentially be exposed to the plant protection product *via* inhalation. For workers no inhalatory exposure is foreseen following outdoor application of SOKALCIARBO WP.

Calculations were undertaken using the EFSA model and applying the EFSA Guidance on the assessment of exposure of operators, workers, residents and bystanders in risk assessment for plant protection products (2015). The results are summarized below:

Table B.6.5-1 Estimated operator exposure

Table B.0.3-1 Estimated operator exposure				
		Aluminium silicate		
Model data	Level of RPE	Total inhalation exposure levels (mg a.s./day)	% of AOEC -TWA (14 mg a.s./day)	% of WEL -TWA (20 mg a.s./day)
Citrus – HCTM				
Application rate		50 kg a.s./ha		
EFSA calculator (AOEM; 75 th percentile)	Potential exposure	15.94	114	80
	Closed cab	14.13	101	71
Citrus – HCHH (manual-hand held)				
Application rate		50 kg a.s./ha		
EFSA calculator (AOEM; 75 th percentile)	Potential exposure	17.09	122	85
	FP2, P2 and similar	17.09	122	85
Citrus – HCTM (manual knapsack)				
Application rate		50 kg a.s./ha		
EFSA calculator (AOEM; 75 th percentile)	Potential exposure	2.91	21	15
Lavender – LCTM				
Application rate		15 kg a.s./ha		
EFSA calculator (AOEM; 75 th percentile)	Potential exposure	9.71	69	49
Lavender – LCHH (manual-hand held)				
Application rate		15 kg a.s./ha		
EFSA calculator (AOEM; 75 th percentile)	Potential exposure	8.38	60	42
Lavender – LCTM (manual knapsack)				
Application rate		15 kg a.s./ha		

EFSA calculator (AOEM; 75 th percentile)	Potential exposure	0.51	3.6	2.6
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In case of application to citrus *via* vehicle-mounted sprayer and hand-held equipment a risk has been identified for operators even when RPE/RMM are considered.

For the rest of the scenarios assessed, outdoor application of SOKALCIARBO WP poses no risk for operators even without the use of any RPE/RMM.

Table B.6.5-2 Estimated bystander/resident exposure

		Aluminium silicate		
Model data		Total exposure levels (mg a.s./day)	% of AOEC -TWA (14 mg a.s./day)	% of WEL -TWA (20 mg a.s./day)
Tractor mounted air assisted spray application outdoors Buffer zone: 5 m Drift reduction technology: No DT ₅₀ : 30 days DFR: 3 µg/cm ² /kg a.s./ha Interval between treatments: 7 days				
Number of applications and application rate		5 applications, 50 kg a.s./ha		
Resident child Body weight: 10 kg	Drift (75 th perc.)	0.1369565	0.98	0.68
	Vapour (75 th perc.)	0.0107000	0.08	0.05
	Deposits (75 th perc.)	-	-	-
	Re-entry (75 th perc.)	-	-	-
	Sum (mean)	0.1215696	0.87	0.61
Resident adult Body weight: 60 kg	Drift (75 th perc.)	0.1750000	1.25	0.88
	Vapour (75 th perc.)	0.0138000	0.10	0.07
	Deposits (75 th perc.)	-	-	-
	Re-entry (75 th perc.)	-	-	-
	Sum (mean)	0.1554667	1.1	0.78
Tractor vehicle mounted spray application outdoors Buffer zone: 5 m Drift reduction technology: No DT ₅₀ : 30 days DFR: 3 µg/cm ² /kg a.s./ha Interval between treatments: 7 days				
Number of applications and application rate		5 applications, 15 kg a.s./ha		
Resident child Body weight: 10 kg	Drift (75 th perc.)	0.0220000	0.16	0.11
	Vapour (75 th perc.)	0.0107000	0.08	0.05
	Deposits (75 th perc.)	-	-	-

	perc.)			
	Re-entry (75 th perc.)	-	-	-
	Sum (mean)	0.0277000	0.20	0.14
Resident adult Body weight: 60 kg	Drift (75 th perc.)	0.0100000	0.07	0.05
	Vapour (75 th perc.)	0.0138000	0.10	0.07
	Deposits (75 th perc.)	-	-	-
	Re-entry (75 th perc.)	-	-	-
	Sum (mean)	0.0228000	0.16	0.11

It is concluded that outdoor application of SOKALCIARBO WP poses no risk for bystanders/residents.

B.6.6 References relied on

Data point	Author(s)	Year	Title Source (where different from company) Compagny, Report No GLP or GEP (where relevant), Published	Vertebrate study Y/N	Data Protectio n Claimed Y/N	Justification if data protection	Owner
K-CA 5.2.1/01	■■■■■ ■	2016a	Kaolin: acute oral toxicity in the rat – fixed dose method ■■■■■ ■■■■■ GLP: Yes Published: No	Y	Y	New study for renewal dossier - confirmatory data	KPC- Europe aisbl
K-CA 5.2.2/01	■■■■■ ■	2016b	Kaolin: acute dermal toxicity (limit test) in the rat ■■■■■ ■■■■■ GLP: Yes Published: No	Y	Y	New study for renewal dossier - confirmatory data	KPC- Europe aisbl
K-CA 5.2.3/01	■■■■■ ■■■	2016	Kaolin: acute inhalation toxicity (nose only) study in the rat ■■■■■ ■■■■■ GLP: Yes Published: No	Y	Y	New study for renewal dossier - confirmatory data	KPC- Europe aisbl
K-CA 5.2.6/01	■■■■■ ■	2016c	Kaolin: local lymph node assay in the mouse – pooled method ■■■■■ ■■■■■ GLP: Yes Published: No	Y	Y	Study required according to Regulation (EU) no. 283/2013	KPC- Europe aisbl

Appendix 1 Intended uses supported in the EU for which data have been provided

PPP (product name/code):	SOKALCIARBO WP	Formulation type:	WP
Active substance 1:	Aluminium silicate	Conc. of as 1:	1000 g/kg
Safener:	None	Conc. of safener:	None
Synergist:	None	Conc. of synergist:	None
Applicant:	Soka	Professional use:	<input checked="" type="checkbox"/>
Zone(s):	EU	Non professional use:	<input type="checkbox"/>
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 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	-

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Use- No. ^(e)	Member state(s)	Crop or (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 pyrarica</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</i> <i>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</i> K	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 the first capture of insect	a) 6 b) 6	7 days after the 1 st application and then 21 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	-	-
13	All zones	Lavender, lavandin	F	<i>Hyalesthes obsoletus</i>	Foliar spray	At the first capture of insect (except from the	a) 5 b) 5	7	a) 1 st : 15 2 nd to 5 th : 12	a) 1 st : 15 2 nd to 5 th : 12	150-200	-	-

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Use- No. ^(e)	Member state(s)	Crop or (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 ⁽ⁱ⁾
					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		
						flowering period)			b) 63	b) 63			
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	-

- (a) For crops, the EU and Codex classifications (both) should be taken into account; where relevant, the use situation should be described (e.g. fumigation of a structure)
- (b) Outdoor or field use (F), greenhouse application (G) or indoor application (I)
- (c) e.g. biting and sucking insects, soil born insects, foliar fungi, weeds
- (d) e.g. wettable powder (WP), emulsifiable concentrate (EC), granule (GR)
- (e) CropLife International Technical Monograph no 2, 6th Edition. Revised May 2008. Catalogue of pesticide
- (f) All abbreviations used must be explained
- (g) Method, e.g. high volume spraying, low volume spraying, spreading, dusting, drench
- (h) Kind, e.g. overall, broadcast, aerial spraying, row, individual plant, between the plant- type of equipment used must be indicated

- (i) g/kg or g/L. Normally the rate should be given for the active substance (according to ISO) and not for the variant in order to compare the rate for same active substances used in different variants (e.g. fluoroxypyr). **In certain cases, where only one variant is synthesised, it is more appropriate to give the rate for the variant (e.g. benthiavalicarb-isopropyl).**
- (j) Growth stage range from first to last treatment (BBCH Monograph, Growth Stages of Plants, 1997, Blackwell, ISBN 3-8263-3152-4), including where relevant, information on season at time of application
- (k) Indicate the minimum and maximum number of applications possible under practical conditions of use
- (l) The values should be given in g or kg whatever gives the more manageable number (e.g. 200 kg/ha instead of 200 000 g/ha or 12.5 g/ha instead of 0.0125 kg/ha)
- (m) PHI - minimum pre-harvest interval

Appendix 2 Exposure calculations

Operator exposure for SOKALCIARBO WP outdoor spray applications

Application rate of active substance	50 kg a.s./ha	<i>i_AppRate</i>
Assumed area treated	10 ha/day	<i>d_AreaTreated</i>
Amount of active substance applied	500 kg a.s./day	<i>i_AmountAS</i>
Dermal absorption of the product	0,00%	<i>i_AbsorpProduct</i>
Dermal absorption of in-use dilution	0,00%	<i>i_AbsorInuse</i>
Formulation type	Wettable powder, soluble powder	
Indoor or Outdoor application	Outdoor	
Application method	Upward spraying	
Application equipment	Vehicle-mounted	
Season	not relevant	

Outdoor/Wettable powder, soluble powder/Upward spraying/Vehicle-mounted

Mixing and loading	Exposure values	µg exposure/day mixed and loaded		Reference	Comment
		75 th centile	95 th centile		
	Hands	2889735	11180941	AOEM	
	Body	6535924	1738427	AOEM	
	Head	62365	99472	AOEM	
	Protected hands (gloves)	51478	1008021	AOEM	
	Protected body (workwear or protective garment and sturdy footwear)	264056	994924	AOEM	
	Protected head (hood and face shield)	1002	5632	AOEM	
	Inhalation	13802	5670	AOEM	
	Protective Equipment	Select for inclusion		Penetration factor	Inhalation Protection factor
	Gloves	No			
	Clothing	Potential exposure		Incl. in AOEM model	
	Head and respiratory PPE	None		1	1
	Water soluble bag	No		1	

Application	Exposure values	µg exposure/day applied		Reference	Comment
		75 th centile	95 th centile		
	Hands	624231	3118387	AOEM	No data available for a drift reduction scenario
	Body	4405853	25708101	AOEM	
	Head	579002	3553612	AOEM	
	Protected hands (gloves)	17593	459717	AOEM	
	Protected body (workwear or protective garment and sturdy footwear)	57483	112349	AOEM	
	Inhalation	2139	41336	AOEM	
	Protective Equipment	Select for inclusion		Penetration factor	Inhalation Protection factor
	Gloves	No			
	Clothing	Potential exposure		Incl. in AOEM model	
	Head and respiratory PPE	None		1	1
	Closed cab	No		vehicle mounted upward spraying only	

1. Total

	Without RPE/PPE	With RPE/PPE
Longer term		
Total systemic exposure from mixing, loading and application (mg a.s./day)	15,9405909	15,9405909
Total systemic exposure from mixing, loading and application per kg body weight (mg/kg bw/day)	0,2656765	0,2656765
% of RVNAS	#ΔIAIP/0!	#ΔIAIP/0!
Acute		

Operator exposure for SOKALCIARBO WP outdoor spray applications

Application rate of active substance	50 kg a.s./ha	<i>i_AppRate</i>
Assumed area treated	10 ha/day	<i>d_AreaTreated</i>
Amount of active substance applied	500 kg a.s./day	<i>i_AmountAS</i>
Dermal absorption of the product	0.00%	<i>i_AbsorpProduct</i>
Dermal absorption of in-use dilution	0.00%	<i>i_AbsorInuse</i>
Formulation type	Wettable powder, soluble powder	
Indoor or Outdoor application	Outdoor	
Application method	Upward spraying	
Application equipment	Vehicle-mounted	
Season	not relevant	

OutdoorWettable powder, soluble powderUpward sprayingVehicle-mounted

Mixing and loading	Exposure values	µg exposure/day mixed and loaded		Reference	Comment
		75 th centile	95 th centile		
	Hands	2889735	11180941	AOEM	
	Body	6535924	1738427	AOEM	
	Head	62365	99472	AOEM	
	Protected hands (gloves)	51478	1008021	AOEM	
	Protected body (workwear or protective garment and sturdy footwear)	264056	994924	AOEM	
	Protected head (hood and face shield)	1002	5632	AOEM	
	Inhalation	13802	5670	AOEM	
	Protective Equipment	Select for inclusion		Penetration factor	Inhalation Protection factor
Application	Gloves	No			
	Clothing	Potential exposure		Incl. in AOEM model	
	Head and respiratory PPE	None		1	1
	Water soluble bag	No		1	
	Exposure values	µg exposure/day applied		Reference	Comment
		75 th centile	95 th centile		
	Hands	326908	1037791	AOEM	No data available for a drift reduction scenario
	Body	1468318	4176861	AOEM	
	Head	7479	97223	AOEM	
	Protected hands (gloves)	17593	381329	AOEM	
	Protected body (workwear or protective garment and sturdy footwear)	34002	80401	AOEM	
	Inhalation	327	10468	AOEM	
	Protective Equipment	Select for inclusion		Penetration factor	Inhalation Protection factor
	Gloves	No			
	Clothing	Potential exposure		Incl. in AOEM model	
	Head and respiratory PPE	None		1	1
	Closed cab	Yes		vehicle mounted upward spraying only	

1. Total

	Without RPE/PPE	With RPE/PPE
Longer term		
Total systemic exposure from mixing, loading and application (mg a.s./day)	14.1291692	14.1291692
Total systemic exposure from mixing, loading and application per kg body weight (mg/kg bw/day)	0.2354862	0.2354862

Operator exposure for SOKALCIARBO WP outdoor spray applications

Application rate of active substance	50 kg a.s./ha	<i>i_AppRate</i>
Assumed area treated	4 ha/day	<i>d_AreaTreated</i>
Amount of active substance applied	200 kg a.s./day	<i>i_AmountAS</i>
Dermal absorption of the product	0,00%	<i>i_AbsorpProduct</i>
Dermal absorption of in-use dilution	0,00%	<i>i_AbsorInuse</i>
Formulation type	Wettable powder, soluble powder	
Indoor or Outdoor application	Outdoor	
Application method	Upward spraying	
Application equipment	Manual-Hand held	
Season	not relevant	

OutdoorWettable powder, soluble powderUpward sprayingManual-Hand held

Mixing and loading	Exposure values	µg exposure/day mixed and loaded		Reference	Comment
		75 th centile	95 th centile		
	Hands	1427289	5477975	AOEM	
	Body	3432282	1332095	AOEM	
	Head	24946	39789	AOEM	
	Protected hands (gloves)	28354	403209	AOEM	
	Protected body (workwear or protective garment and sturdy footwear)	117213	397970	AOEM	
	Protected head (hood and face shield)	401	2253	AOEM	
	Inhalation	10508	5548	AOEM	
	Protective Equipment	Select for inclusion		Penetration factor	Inhalation Protection factor
	Gloves	No			
	Clothing	Potential exposure		Incl. in AOEM model	
	Head and respiratory PPE	None		1	1
	Water soluble bag	No		1	
Application	Exposure values	µg exposure/day applied		Reference	Comment
		75 th centile	95 th centile		
	Hands	228551	506774	AOEM	No data available for a drift reduction scenario
	Body	140853	187835	AOEM	
	Head	836	4658	AOEM	
	Protected hands (gloves)	4780	24828	AOEM	
	Protected body (workwear or protective garment and sturdy footwear)	1033	1938	AOEM	
	Inhalation	6583	4294	AOEM	
	Protective Equipment	Select for inclusion		Penetration factor	Inhalation Protection factor
	Gloves	No			
	Clothing	Potential exposure		Incl. in AOEM model	
	Head and respiratory PPE	None		1	1
	Closed cab	No		vehicle mounted upward spraying only	

1. Total

	Without RPE/PPE	With RPE/PPE
Longer term		
Total systemic exposure from mixing, loading and application (mg a.s./day)	17,0901857	17,0901857
Total systemic exposure from mixing, loading and application per kg body weight (mg/kg bw/day)	0,2848364	0,2848364

Operator exposure for SOKALCIARBO WP outdoor spray applications

Application rate of active substance	50 kg a.s./ha	<i>i_AppRate</i>
Assumed area treated	4 ha/day	<i>d_AreaTreated</i>
Amount of active substance applied	200 kg a.s./day	<i>i_AmountAS</i>
Dermal absorption of the product	0.00%	<i>i_AbsorpProduct</i>
Dermal absorption of in-use dilution	0.00%	<i>i_AbsorInuse</i>
Formulation type	Wettable powder, soluble powder	
Indoor or Outdoor application	Outdoor	
Application method	Upward spraying	
Application equipment	Manual-Hand held	
Season	not relevant	

OutdoorWettable powder, soluble powderUpward sprayingManual-Hand held

Mixing and loading	Exposure values	µg exposure/day mixed and loaded		Reference	Comment
		75 th centile	95 th centile		
	Hands	1427289	5477975	AOEM	
	Body	3432282	1332095	AOEM	
	Head	24946	39789	AOEM	
	Protected hands (gloves)	28354	403209	AOEM	
	Protected body (workwear or protective garment and sturdy footwear)	117213	397970	AOEM	
	Protected head (hood and face shield)	401	2253	AOEM	
	Inhalation	10508	5548	AOEM	
	Protective Equipment	Select for inclusion		Penetration factor	Inhalation Protection factor
	Gloves	No			
	Clothing	Potential exposure		Incl. in AOEM model	
	Head and respiratory PPE	FP2, P2 and similar		0.8	0.1
	Water soluble bag	No		1	

Application	Exposure values	µg exposure/day applied		Reference	Comment
		75 th centile	95 th centile		
	Hands	228551	506774	AOEM	No data available for a drift reduction scenario
	Body	140853	187835	AOEM	
	Head	836	4658	AOEM	
	Protected hands (gloves)	4780	24828	AOEM	
	Protected body (workwear or protective garment and sturdy footwear)	1033	1938	AOEM	
	Inhalation	6583	4294	AOEM	
	Protective Equipment	Select for inclusion		Penetration factor	Inhalation Protection factor
	Gloves	No			
	Clothing	Potential exposure		Incl. in AOEM model	
	Head and respiratory PPE	FP2, P2 and similar		0.8	0.1
	Closed cab	No		vehicle mounted upward spraying only	

1. Total

	Without RPE/PPE	With RPE/PPE	
Longer term			
Total systemic exposure from mixing, loading and application (mg a.s./day)	17.0901857	1.7090186	

Operator exposure for SOKALCIARBO WP outdoor spray applications

Application rate of active substance	50 kg a.s./ha	<i>i_AppRate</i>
Assumed area treated	1 ha/day	<i>d_AreaTreated</i>
Amount of active substance applied	50 kg a.s./day	<i>i_AmountAS</i>
Dermal absorption of the product	0,00%	<i>i_AbsorpProduct</i>
Dermal absorption of in-use dilution	0,00%	<i>i_AbsorInuse</i>
Formulation type	Wettable powder, soluble powder	
Indoor or Outdoor application	Outdoor	
Application method	Upward spraying	
Application equipment	Manual-Knapsack	
Season	not relevant	

OutdoorWettable powder, soluble powderUpward sprayingManual-Knapsack

Mixing and loading	Exposure values	µg exposure/day mixed and loaded		Reference	Comment
		75 th centile	95 th centile		
	Hands	316500	849400	AOEM	
	Body	26767	92900	AOEM	
	Head	167	367	AOEM	
	Protected hands (gloves)	600	5467	AOEM	
	Protected body (workwear or protective garment and sturdy footwear)	833	3433	AOEM	
	Protected head (hood and face shield)	167	367	AOEM	
	Inhalation	833	867	AOEM	
	Protective Equipment	Select for inclusion		Penetration factor	Inhalation Protection factor
	Gloves	No			
	Clothing	Potential exposure		Incl. in AOEM model	
	Head and respiratory PPE	None		1	1
	Water soluble bag	No		1	

Application	Exposure values	µg exposure/day applied		Reference	Comment
		75 th centile	95 th centile		
	Hands	71696	175479	AOEM	No data available for a drift reduction scenario
	Body	113379	185414	AOEM	
	Head	535	2959	AOEM	
	Protected hands (gloves)	1195	6207	AOEM	
	Protected body (workwear or protective garment and sturdy footwear)	1033	1938	AOEM	
	Inhalation	2081	1879	AOEM	
	Protective Equipment	Select for inclusion		Penetration factor	Inhalation Protection factor
	Gloves	No			
	Clothing	Potential exposure		Incl. in AOEM model	
	Head and respiratory PPE	None		1	1
	Closed cab	No		vehicle mounted upward spraying only	

1. Total

	Without RPE/PPE	With RPE/PPE
Longer term		
Total systemic exposure from mixing, loading and application (mg a.s./day)	2,9139317	2,9139317
Total systemic exposure from mixing, loading and application per kg body weight (mg/kg bw/day)	0,0485655	0,0485655

Operator exposure for SOKALCIARBO WP outdoor spray applications

Application rate of active substance	15 kg a.s./ha	<i>i_AppRate</i>
Assumed area treated	10 ha/day	<i>d_AreaTreated</i>
Amount of active substance applied	150 kg a.s./day	<i>i_AmountAS</i>
Dermal absorption of the product	0,00%	<i>i_AbsorpProduct</i>
Dermal absorption of in-use dilution	0,00%	<i>i_AbsorInuse</i>
Formulation type	Wettable powder, soluble powder	
Indoor or Outdoor application	Outdoor	
Application method	Downward spraying	
Application equipment	Vehicle-mounted	
Season	not relevant	

OutdoorWettable powder, soluble powderDownward sprayingVehicle-mounted

Mixing and loading	Exposure values	µg exposure/day mixed and loaded		Reference	Comment
		75 th centile	95 th centile		
	Hands	1143748	4378582	AOEM	
	Body	2803883	1225315	AOEM	
	Head	18709	29842	AOEM	
	Protected hands (gloves)	23512	302406	AOEM	
	Protected body (workwear or protective garment and sturdy footwear)	90831	298477	AOEM	
	Protected head (hood and face shield)	300	1690	AOEM	
	Inhalation	9646	5510	AOEM	
	Protective Equipment	Select for inclusion		Penetration factor	Inhalation Protection factor
	Gloves	No			
	Clothing	Potential exposure		Incl. in AOEM model	
	Head and respiratory PPE	None		1	1
	Water soluble bag	No		1	
Application	Exposure values	µg exposure/day applied		Reference	Comment
		75 th centile	95 th centile		
	Hands	243049	147104	AOEM	This scenario assumes that small area equipment is used
	Body	333471	422553	AOEM	
	Head	1997	23437	AOEM	
	Protected hands (gloves)	330	38	AOEM	
	Protected body (workwear or protective garment and sturdy footwear)	4170	4928	AOEM	
	Inhalation	65	722	AOEM	
	Protective Equipment	Select for inclusion		Penetration factor	Inhalation Protection factor
	Gloves	No			
	Clothing	Potential exposure		Incl. in AOEM model	
	Head and respiratory PPE	None		1	1
	Closed cab	No		vehicle mounted upward spraying only	

1. Total

	Without RPE/PPE	With RPE/PPE
Longer term		
Total systemic exposure from mixing, loading and application (mg a.s./day)	9,7109335	9,7109335
Total systemic exposure from mixing, loading and application per kg body weight (mg/kg bw/day)	0,1618489	0,1618489

Operator exposure for SOKALCIARBO WP outdoor spray applications

Application rate of active substance	15 kg a.s./ha	<i>i_AppRate</i>
Assumed area treated	4 ha/day	<i>d_AreaTreated</i>
Amount of active substance applied	60 kg a.s./day	<i>i_AmountAS</i>
Dermal absorption of the product	0,00%	<i>i_AbsorpProduct</i>
Dermal absorption of in-use dilution	0,00%	<i>i_AbsorInuse</i>
Formulation type	Wettable powder, soluble powder	
Indoor or Outdoor application	Outdoor	
Application method	Downward spraying	
Application equipment	Manual-Hand held	
Season	not relevant	

OutdoorWettable powder, soluble powderDownward sprayingManual-Hand held

Mixing and loading	Exposure values	µg exposure/day mixed and loaded		Reference	Comment
		75 th centile	95 th centile		
	Hands	564916	2145237	AOEM	
	Body	1472434	938920	AOEM	
	Head	7484	11937	AOEM	
	Protected hands (gloves)	12950	120963	AOEM	
	Protected body (workwear or protective garment and sturdy footwear)	40319	119391	AOEM	
	Protected head (hood and face shield)	120	676	AOEM	
	Inhalation	7343	5391	AOEM	
	Protective Equipment	Select for inclusion		Penetration factor	Inhalation Protection factor
	Gloves	No			
	Clothing	Potential exposure		Incl. in AOEM model	
	Head and respiratory PPE	None		1	1
	Water soluble bag	No		1	

Application	Exposure values	µg exposure/day applied		Reference	Comment
		75 th centile	95 th centile		
	Hands	61760	168520	AOEM	
	Body	3554720	5480280	AOEM	
	Head	480	3400	AOEM	
	Protected hands (gloves)	200	880	AOEM	
	Protected body (workwear or protective garment and sturdy footwear)	356120	2505200	AOEM	
	Inhalation	1040	1040	AOEM	
	Protective Equipment	Select for inclusion		Penetration factor	Inhalation Protection factor
	Gloves	No			
	Clothing	Potential exposure		Incl. in AOEM model	
	Head and respiratory PPE	None		1	1
	Closed cab	No		vehicle mounted upward spraying only	

1. Total

	Without RPE/PPE	With RPE/PPE
Longer term		
Total systemic exposure from mixing, loading and application (mg a.s./day)	8,3834106	8,3834106
Total systemic exposure from mixing, loading and application per kg body weight (mg/kg bw/day)	0,1397235	0,1397235

Operator exposure for SOKALCIARBO WP outdoor spray applications

Application rate of active substance	15 kg a.s./ha	<i>i_AppRate</i>
Assumed area treated	1 ha/day	<i>d_AreaTreated</i>
Amount of active substance applied	15 kg a.s./day	<i>i_AmountAS</i>
Dermal absorption of the product	0,00%	<i>i_AbsorpProduct</i>
Dermal absorption of in-use dilution	0,00%	<i>i_AbsorInuse</i>
Formulation type	Wettable powder, soluble powder	
Indoor or Outdoor application	Outdoor	
Application method	Downward spraying	
Application equipment	Manual-Knapsack	
Season	not relevant	

OutdoorWettable powder, soluble powderDownward sprayingManual-Knapsack

Mixing and loading	Exposure values	µg exposure/day mixed and loaded		Reference	Comment
		75 th centile	95 th centile		
	Hands	94950	254820	AOEM	
	Body	8030	27870	AOEM	
	Head	50	110	AOEM	
	Protected hands (gloves)	180	1640	AOEM	
	Protected body (workwear or protective garment and sturdy footwear)	250	1030	AOEM	
	Protected head (hood and face shield)	50	110	AOEM	
	Inhalation	250	260	AOEM	
	Protective Equipment	Select for inclusion		Penetration factor	Inhalation Protection factor
	Gloves	No			
	Clothing	Potential exposure		Incl. in AOEM model	
	Head and respiratory PPE	None		1	1
	Water soluble bag	No		1	

Application	Exposure values	µg exposure/day applied		Reference	Comment
		75 th centile	95 th centile		
	Hands	15440	42130	AOEM	
	Body	888680	1370070	AOEM	
	Head	120	850	AOEM	
	Protected hands (gloves)	50	220	AOEM	
	Protected body (workwear or protective garment and sturdy footwear)	89030	626300	AOEM	
	Inhalation	260	260	AOEM	
	Protective Equipment	Select for inclusion		Penetration factor	Inhalation Protection factor
	Gloves	No			
	Clothing	Potential exposure		Incl. in AOEM model	
	Head and respiratory PPE	None		1	1
	Closed cab	No		vehicle mounted upward spraying only	

1. Total

	Without RPE/PPE	With RPE/PPE
Longer term		
Total systemic exposure from mixing, loading and application (mg a.s./day)	0,5100000	0,5100000
Total systemic exposure from mixing, loading and application per kg body weight (mg/kg bw/day)	0,0085000	0,0085000

Resident exposure for SOKALCIARBO WP					
Croptype	Citrus fruit				
Application method	Upward spraying				
Application equipment	Vehicle-mounted				i_AppEquip
Formulation type	Wettable powder, soluble powder				i_FormVal
Buffer strip	5 m				i_Buffer
Application rate of the product	50 kg a.s./ha				i_AppRate
Concentration of active substance (in-use dilution for liquid applications)	83,33333333 g a.s./l				d_ConcAS
Dermal absorption of product	0,00%				i_AbsorpProduct
Dermal absorption of in-use dilution	0,00%				i_Absorplnuse
Oral absorption	0,00%				i_AbsorpOrallnuse
Dislodgeable foliar residue (i_AppRate*i_DFR)	150 µg a.s./cm²				d_DFR
Vapour pressure of in-use dilution	low volatile substances having a vapour pressure of <5*10-3Pa Pa				i_Volat
Concentration in air	0,001 mg/m³				d_AirCon
Resident dermal spray drift exposure 75th percentile - adult	5,63 ml spray dilution/person				
Resident dermal spray drift exposure 75th percentile - child	1,689 ml spray dilution/person				
Resident inhal. spray drift exposure 75th percentile - adult	0,00210 ml spray dilution/person				
Resident inhal. spray drift exposure 75th percentile - child	0,00164 ml spray dilution/person				
Resident dermal spray drift exposure mean - adult	3,68 ml spray dilution/person				
Resident dermal spray drift exposure mean - child	1,11 ml spray dilution/person				
Resident inhal. spray drift exposure mean - adult	0,00170 ml spray dilution/person				
Resident inhal. spray drift exposure mean - child	0,00133 ml spray dilution/person				
Exposure duration dermal	2 hours				d_ReExpDur
Exposure duration inhalation	24 hours				d_ReExpDurInhal
Exposure duration entry into treated crops	0,25 hours				d_ExpDurTreatCrop
Light clothing adjustment factor	18,0%				d_ClothAF
Breathing rate adult	0,23 m³/day/kg				d_BreathRAd
Breathing rate child (1-3 year old)	1,07 m³/day/kg				d_BreathRCh
Drift percentage on surface (75th percentile)	15,79%				
Drift percentage on surface (mean)	11,69%				
Turf transferable residues percentage	5,00%				d_Turf
Transfer coeff. of surface deposits-adult	7300 cm²/hour				d_ReTCAd
Transfer coeff. of surface deposits-child (1-3 year old)	2600 cm²/hour				d_ReTCCh
Saliva extraction percentage	50,00%				d_SalExt
Surface area of hands mouthed	20 cm²				d_AreaHM
Frequency of hand to mouth activity	9,5 events/hour				d_ReFreqHM
Ingestion rate for mouth of grass per day	25 cm²				d_MouthGrass
Dislodgeable residues percentage transferability for object to mouth	20,00%				d_DRP
Transfer coefficient for entry into treated crops (75th percentile) - ad	7500 cm²/h				d_TcEntryAd
Transfer coefficient for entry into treated crops (75th percentile) - chi	2250 cm²/h				d_TcEntryCh
Transfer coefficient for entry into treated crops (mean) - adult	5980 cm²/h				d_TcEntryAd
Transfer coefficient for entry into treated crops (mean) - child	1794 cm²/h				d_TcEntryCh
1. Total					
1.1 1-3 year old child					
Spray drift (75th percentile)		Vapour (75th percentile)	Surface deposits (75th percentile)	Entry into treated crops (75th percentile)	All pathways (mean)
Total systemic exposure (mg a.s./day)	0,1369565	0,0107000	0,0000000	0,0000000	0,1215696
Total systemic exposure per kg body weight (mg/kg bw/day)	0,0136957	0,0010700	0,0000000	0,0000000	0,0121570
% of RVNAS	#ΔIAP/0!	#ΔIAP/0!	#ΔIAP/0!	#ΔIAP/0!	#ΔIAP/0!
1.2 Adult					
Spray drift		Vapour	Surface deposits	Entry into treated crops	All pathways (mean)
Total systemic exposure (mg a.s./day)	0,1750000	0,0138000	0,0000000	0,0000000	0,1554667
Total systemic exposure per kg body weight (mg/kg bw/day)	0,0029167	0,0002300	0,0000000	0,0000000	0,0025911
% of RVNAS	#ΔIAP/0!	#ΔIAP/0!	#ΔIAP/0!	#ΔIAP/0!	#ΔIAP/0!

Resident exposure for SOKALCIARBO WP					
Croptype	Ornamentals				
Application method	Downward spraying				
Application equipment	Vehicle-mounted				i_AppEquip
Formulation type	Wettable powder, soluble powder				i_FormVal
Buffer strip	2-3 m				i_Buffer
Application rate of the product	15 kg a.s./ha				i_AppRate
Concentration of active substance (in-use dilution for liquid applications)	100 g a.s./l				d_ConcAS
Dermal absorption of product	0,00%				i_AbsorpProduct
Dermal absorption of in-use dilution	0,00%				i_AbsorpInuse
Oral absorption	0,00%				i_AbsorpOrallnuse
Dislodgeable foliar residue (i_AppRate*i_DFR)	45 µg a.s./cm²				d_DFR
Vapour pressure of in-use dilution	low volatile substances having a vapour pressure of <5*10-3Pa				i_Volat
Concentration in air	0,001 mg/m³				d_AirCon
Resident dermal spray drift exposure 75th percentile - adult	0,47 ml spray dilution/person				
Resident dermal spray drift exposure 75th percentile - child	0,327 ml spray dilution/person				
Resident inhal. spray drift exposure 75th percentile - adult	0,00010 ml spray dilution/person				
Resident inhal. spray drift exposure 75th percentile - child	0,00022 ml spray dilution/person				
Resident dermal spray drift exposure mean - adult	0,22318 ml spray dilution/person				
Resident dermal spray drift exposure mean - child	0,18 ml spray dilution/person				
Resident inhal. spray drift exposure mean - adult	0,00009 ml spray dilution/person				
Resident inhal. spray drift exposure mean - child	0,00017 ml spray dilution/person				
Exposure duration dermal	2 hours				d_ReExpDur
Exposure duration inhalation	24 hours				d_ReExpDurInhal
Exposure duration entry into treated crops	0,25 hours				d_ExpDurTreatCrop
Light clothing adjustment factor	18,0%				d_ClothAF
Breathing rate adult	0,23 m³/day/kg				d_BreathRAd
Breathing rate child (1-3 year old)	1,07 m³/day/kg				d_BreathRCh
Drift percentage on surface (75th percentile)	5,60%				
Drift percentage on surface (mean)	4,10%				
Turf transferable residues percentage	5,00%				d_Turf
Transfer coeff. of surface deposits-adult	7300 cm²/hour				d_ReTCAd
Transfer coeff. of surface deposits-child (1-3 year old)	2600 cm²/hour				d_ReTCCh
Saliva extraction percentage	50,00%				d_SalExt
Surface area of hands mouthed	20 cm²				d_AreaHM
Frequency of hand to mouth activity	9,5 events/hour				d_ReFreqHM
Ingestion rate for mouthing of grass per day	25 cm²				d_MouthGrass
Dislodgeable residues percentage transferability for object to mouth	20,00%				d_DRP
Transfer coefficient for entry into treated crops (75th percentile) - adult	7500 cm²/h				d_TcEntryAd
Transfer coefficient for entry into treated crops (75th percentile) - child	2250 cm²/h				d_TcEntryCh
Transfer coefficient for entry into treated crops (mean) - adult	5980 cm²/h				d_TcEntryAd
Transfer coefficient for entry into treated crops (mean) - child	1794 cm²/h				d_TcEntryCh
1. Total					
1.1 1-3 year old child					
Spray drift (75th percentile)		Vapour (75th percentile)	Surface deposits (75th percentile)	Entry into treated crops (75th percentile)	All pathways (mean)
Total systemic exposure (mg a.s./day)	0,0220000	0,0107000	0,0000000	0,0000000	0,0277000
Total systemic exposure per kg body weight (mg/kg bw/day)	0,0022000	0,0010700	0,0000000	0,0000000	0,0027700
% of RVNAS	#ΔIAIP/0!	#ΔIAIP/0!	#ΔIAIP/0!	#ΔIAIP/0!	#ΔIAIP/0!
1.2 Adult					
Spray drift		Vapour	Surface deposits	Entry into treated crops	All pathways (mean)
Total systemic exposure (mg a.s./dav)	0,0100000	0,0138000	0,0000000	0,0000000	0,0228000