



Document Title Summary of the fate and behaviour in the environment Bixafen + Prothioconazole EC 225 (75 + 150 g/L) Data Requirements EU Regulation 1107/2009 & EU Regulation 284/2013 Document MCB Section 9c Fate and behaviour in the environment According to the guidance document, SANCO fol81/2013, for preparing dossiers for the approval of a Chemical and Data Requirements .ation 1107/2009 & EU Regulation 284/21 Document MCB .section 95 Fate and behaviour in the environment According to the guidance document, SANCO 16481/2015, for preparing gossiers for the approval of a Chemical active substance Date 2015-12-11 Bayer CrusScience

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Version history

Date	Data points containing amendments or additions ¹ and brief description	Document identifies and version number
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Table of Contents

		Dogg	×
CP 9	FATE AND BEHAVIOUR IN THE ENVIRONMENT	Page 55 10 10 10 10 10 10 10 10 10 10 10 10 10	TC
CP 9.1	Fate and behaviour in soil	/ \? 8	,
CP 9.1.1	Rate of degradation in soil.		ìô
CP 9.1.1.1	Laboratory studies	, jó	Ÿ
CP 9.1.1.2	Laboratory studies Field studies	Ý)
CP 9.1.1.2.1	Soil dissipation studies		١, (
CP 9.1.1.2.2	Soil accumulation studies		
CP 9.1.2	Mobility in the soil	, A)
CP 9.1.2.1	Laboratory studies)
CP 9.1.2.2	Lysimeter studies	10)
CP 9.1.2.3	Field leaching studies	£)
CP 9.1.3	Estimation of concentrations in soil		
CP 9.2	Fate and behaviour in water and sediment		,
CP 9.2.1	Aerobic mineralisation in surface water.	, 14	r
CP 9.2.2	Water/sediment study	15	,
CP 9.2.3	Irradiated water/sediment study	15	,
CP 9.2.4	Estimation of concentrations in groundwater	15	,
CP 9.2.4.1	Calculation of concentrations in groundwater	15	į
CP 9.2.4.2	Additional field tests &	18	,
CP 9.2.5	Estimation of concentrations in surface water and sediments	19)
CP 9.3	Fate and behavious in air.	36)
CP 9.3.1	Route and rate of degradation in air and transport via air	36)
CP 9.4	Estimation of concentrations for other routes of exposure	36)
8			
Ò			
Q			
, L			
<u>.</u> f			
٥			
*O4	Mobility in the soil Laboratory studies Lysimeter studies Field leaching studies Estimation of concentrations in soil Fate and behaviour inwater and sediment Aerobic mineralisation in surface water Water/sediment study Irradiated water/sediment study Estimation of concentrations in groundwater Calculation of concentrations in groundwater Additional field tests Estimation of concentrations in surface water and sediment Fate and behaviour in air. Route and rate of degradation in air and transport via air Estimation of concentrations for other routes of exposure		
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CP9 FATE AND BEHAVIOUR IN THE ENVIRONMENT

Introduction

A dossier on prothioconazole (CAS No. 178928-70-6) was submitted Fobruary 2002 by Bayer CropScience to the EU RMS United Kingdom for agricultural use as a fungicide. Prothipsonazor was included into Annex I of the Council Directive 91/414/EEC by the Commission Directive 2008/44/EC published 4 April 2008, with an entry into force by 1 August 2008.

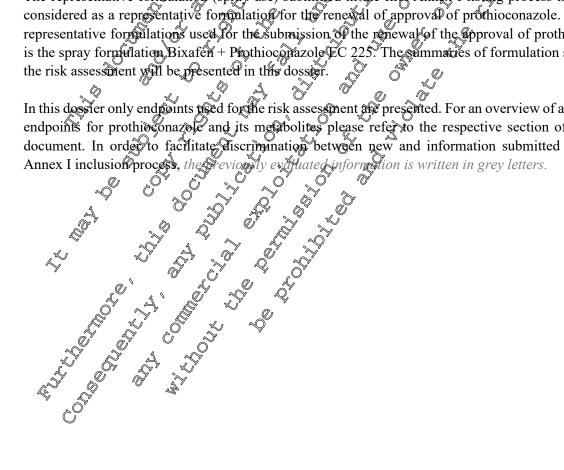
This Supplemental Dossier contains only detailed summaries of Studies, which were not part of the dossier during the first Annex I inclusion of protheconazole and were therefore, no Devaluated during the first EU review of this compound. In order to facilitate discrimination between new and old information, the new information is writter on black letters whereas were lesseribe the old information.

All studies, which have been already submitted by Bayer CropScience for the first Annex I inclusion, are contained in the Monograph and its Addonda and are included in the Baseline dossor provided by Bayer CropScience. The summaries on the different endpoints were taken from the Monograph and its Addenda and supplemented with row information (new studies) references, further comments).

A synonymous name for prothoconazole used at several locations in this Supplemental Dossier is JAU 6476.

The representative formulation (spray use) Submitted in the first Annex I listing process is no longer considered as a representative formulation for the renewal of approval of prothioconazole. One of the representative formulations used for the submission of the renewal of the approval of prothioconazole is the spray formulation Bixafen + Prothiocorazole LC 225. The summaries of formulation studies and

In this dossier only endpoints used for the risk assessment are presented. For an overview of all available endpoints for prothioconazole and its metabolites please refer to the respective section of the MCA document. In order to facilitate discrimination between new and information submitted during the



Use pattern considered in the environmental exposure and risk assessment

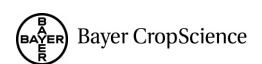
Table CP 9-1: Intended application pattern

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Crop	F						Ţ		T ()	1
	G		Appli	cation		Application	ı rate ber	treatment@	* ~Y	
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	(b)				Ž,		V ^V	، گ	Remarks." (m)	
	(-)	method	growth	number	intomial	~ ~ ~ /la#	water	treatment	48 \ X	
		kind	stage &	min	bet@een		L/ha	6° Q		
			season	max	applications	min max	min	mfw max		1
		(f-h)	(j)	111411	(min)	~ . @	₩ min ₩	\max		
		(1 11)	0)	(k) 🎉	y (IIIII)	min max	min max	\$ \\		
***	-	E II	DDCH 25	1.00	14-21 Č	P 22 4 8 7 7 7	F00-400	02 55		
Wheat Triticale	F	Foliar	BBCH 25- 69	1-2	44-21 Č	23.4%3.75 RIX	6 00-400	93. A 5 BDX	1.25 L/hay	0
Rye		spray	09			**************************************	A C	D¥A	L/hag/	
Spelt				4	y' ay	√46.9-18 7 5		187.5		
Spen					* **	PTZ	& (C	PTZ	0	
Barley	F	Foliar	BBCH 25		% 4-21 ×	18.8-75	100-460	PTA PTA BIX	Ø.0 L/ha	
Oat		spray	BBCH 250 61	"0"		BIX		BIX	₩*	
						1 × + « V	Q	LO + ~	*	
						37.5050 100Z		√ 15₩.		
					V	PUZ	<u> </u>	PTCZ		_
Compounds In addition t 9- 2 were ad		('n 0 1		Ů O			ŢŎ		
Compound	s add	ressed in	this docum	ient 🌋						
In addition t	to the	active su	bstance pro	thiocodaz	zole the deg	radatkon pre	ducts su	nmarised	in Table Cl	P
9-2 were ad	ldress	ed in this	document a	ıs tlooy ha	ve to be con	sidered for	exposture	assessmer	nts.	
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Compounds In addition to 9-2 were add Addit										

Table CP 9-2: Active substance and degradation products addressed in this document

Compound / Codes	Chemical structure	Considered for	
Prothioconazole (JAU 6476)	CI OH	PEC _{soil} PEC _{gw} PEC _{sw} & PEC _{sed}	
	N N S		
JAU 6476-S-methyl (M01)	N S CO	PECsil PECsw & PECscy	
	N S S S S S S S S S S S S S S S S S S S	PECsol PECsol PECsol PECsol PECsw & PECsed	
JAU 6476-desthio (M04)		* O' *	
		PECS & PECCO	
JAU 6476-that ocine (M12)	N N N N N N N N N N N N N N N N N N N	PEGN & PECsed	
1			
1,2,4-triagole (M13) (M13)	NNH	PEC _{sw} & PEC _{sed}	
JAU 6476-triazolylketone (M42)	CI	PEC _{sw} & PEC _{sed}	
	<i>[</i>] 1 N		

A list of metabolites, which contains structures, synonyms and code numbers attributed to the compound prothioconazole, is presented in <u>Document N3</u> of this dossier.



Definition of the residue for risk assessment

Justification for the residue definition for risk assessment is provided by MCA Section 7.

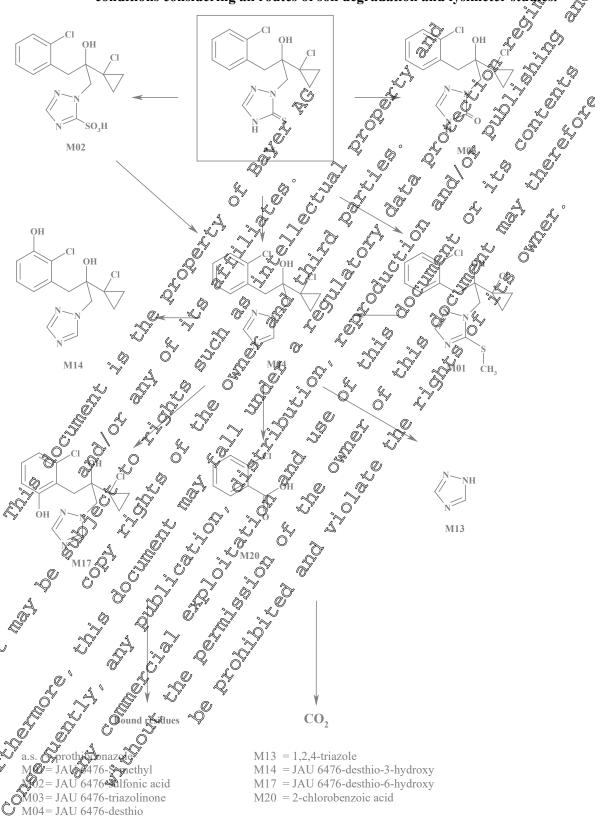
Table CP 9-3: Definition of the residue for risk assessment

JAU 6476-desthio (M04) Surface water Prothioconazole.	~ ≯			
Groundwater Prothioconazole, JAU 6476-S-methyl (M01) and JAU 6476-desthio (M04)		·0	efinition for risk assessment	Compartment
Groundwater Prothioconazole, JAU 6476-S-methyl (M01) and JAU 6476-desthio (M04)				Soil
JAU 6476-desthio (M04)				
JAU 6476-desthio (M04)			azole,	Groundwater
Surface water Prothioconazole, JAU 6476-S-methyl (M01), & & & & & & & & & & & & & & & & & & &		· · · · · · · · · · · · · · · · · · ·	desthio (M04)	
JAU 64/6-S-methyl ($M0I$), Q			azole,	Surface water
JAU 6476-desthio ($M04$), \bigcirc			S-methyl (M01), desthio (M04), thiazocine (M12), ble (M13) and	
JAU 6476-thiazocine (MIQ),			thiazocine $(M/2)$,	
1,2,4-triazole (M13) ang (Y)			triazolylketone (MAY)	
Sediment Prothioconazole, JAU 6476-S-method (M04), JAU 6476-destled (M04), JAU 6476-thiazocine (M12), 1,2,4-triazole (M13) and			azole, Q	Sediment
JAU 6476-S-methyl (M01)	, \$		S-methyl $(M0J_0)$	
JAU 6476-dest (M04), JAU 6476-thiazocine (M12), 1,2.4-triaze (M13) and	,		dest Qi (M04), this zocine (M12)	
1,2,4-triazete (M13) and			MC (M13) and	
JAU 6476-triazofylketone M42)	_		triazoviketone 7M424	
Air Prothio@nazol@nd JAU 6476-dethio (M04)			azolQand V	Air

^{*}Justification for the residue definition for risk assessment is

CP 9.1 Fate and behaviour in soft please refer to MCA Section 7, data point 7.1. For information on the fate and behaviour in soil please refer to MCA Section 7, data point 7. The proposed degradation pathway of prothioconazole in soil is shown in Figure CP 9.1-1.

Figure CP 9.1-1: Proposed degradation pathway of prothioconazole in soil under laboratory conditions considering all routes of soil degradation and lysimeter studies.



Rate of degradation in soil **CP 9.1.1**

No specific studies with the formulation are required. For further information on the fate and behaviour in soil please refer to MCA Section 7, data points 7.1.1 and 7.1.2.

CP 9.1.1.1 Laboratory studies

For information on laboratory studies please refer to MCA Section 7, data point 7.1.2

CP 9.1.1.2 Field studies

CP 9.1.1.2.1 Soil dissipation studies

For information on field dissipation studies pleasurefer to MCAS

CP 9.1.1.2.2 Soil accumulation studies

7 data point 7.12.2. For information on field accumulation studies please

CP 9.1.2 Mobility in the soil

For information on mobility studies please refer to MCA

CP 9.1.2.1 Laboratory studies please refer to MCA Section , daga point

CP 9.1.2.2 Lysimeter soudies

A Section 7, data point 3.4.2. CP 9.1.2.3 Field leaching studies please refer to MCA Section 7, data point 7.1.4.3 For information on lysimeter studies please ofer to MC

CP 9.1.3 Estimation of concentrations in soil

New calculations were performed to reflect findings from new studies presented in the active substance dossier, section 7 "Fate and behaviour in the environment". In addition these calculations considered the most recent guidance documents for exposure calculations. Calculations of predicted environmental concentrations in soil (PEC_{soil}) are presented below.

Predicted environmental concentrations in soil (PEC

Endpoints for PEC_{soil}

For deriving the respective end points please refer to MCA Section 7, data point 7.1.

Table CP 9.1.3-1: Key modelling input parameters for prothice nazole and its metabolites

Compound	Worst case DT ₅₀ non-normalised [days]	Maximum occurrence	Molar nQss √[@mol]≪	Molar mass consection factor
Prothioconazole	1.6		** 344 ®	
JAU 6476-S-methyl	280	4.2	3,538.3	1.0407
JAU 6476-desthio	63.4 &		\$12.2 C	50 .9068

Report: 2015; M\$36053-01

Prothic conazole (PTZ) and metabolites: PEZ soil EUR - Use in cereals as spray application and as ceed treatment in Europe

EnSa-15-0492
M-536053-01-1
not applicable
no Title:

Report No.: Document No.: Guideline(s): Onot applicable
Guideline deviation(s) not applicable

GLP/GEP:

Methods and Materials. The predicted environmental concentrations in soil (PECsoil) of prothioconazole and its metabolites were estimated based on a first tier approach using a Microsoft® Excel spreadstreet. A bulk density of 15 kg/L and a soil mixing depths of 5 cm were used as after long tea.

the background co.

ata used for simulation of recommended by FOCUS 1997 and EU Commission (1995, 2000). The accumulation potential of prothiocogazole and metabolites after long term use was also assessed, employing the mixing depth of 20 cm for the calculation of the background concentration.

Detailed application data used for simulation of PECsoil were compiled in Table CP 9.1.3-2.

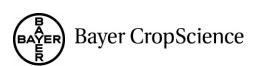


Table CP 9.1.3-2: Application pattern used for PEC_{soil} calculations of prothioconazole

			Amount			
Individual crop	FOCUS crop used for interception	Rate per season	Interval	Plant interception	BBCH stage	reaching soil per season o application
		[g a.s. /ha]	[days]	[%]	29	Ag a.s./ba
Winter & spring cereals, GAP	-	2 × 187.5	14	- J	2 × 25-69	
Winter cereals	Winter cereals	2 × 187.5	14	2 × 26	2 × 25-69	2×15000
Spring cereals	Spring cereals	2 × 187.5	<u> </u>	2 20	∘ 2 × 2 5-69	2 × © 0.0 , ©

Substance Specific Parameters: The compound specific Triput parameters (empoints for PEC_{soil} calculations) are summarized in Table CP 9.1Q-1.

Findings: The maximum PEC_{soil} values for prothic conazole and its metabolites are summarised in Vable CP 9.1.3-3. The maximum, short-term and long-term PEC_{soil} values and the time weighted average values (TWAC_{soil}) are provided thereafter.

Table CP 9.1.3-3: Maximum PECon of prothiocopazole and its metabolites for the uses assessed

		Prothiocon	azole S-	methy	Destino
Use Pattern		PECsalm	g/kg PECs	oil [100g/kg] 🖔	PEC, [mg/kg]
Winter ans spring	cereals		A Q		
2×287.5 g a.s./ha,	, 14 days, 🤌			2,058 ₆	° 0.189
2×20%					()

Table CP 9.1.3-6 PECsoil (actual) ofprojioconazoleand its metabolites

	% ✓	Ò	Winter	and spring cer .s./h@/14 daws.	eals
2/	₩		20187.5 g a	.s./h@/ 14 da@s.	2×20%
			Prothioconazole	S-methyl	Desthio
		Tipag	PEC W	PECoil [mg/kg]	PECsoil
	\$\frac{1}{2}\tag{1}	[days]	[mg/kg]	[mg/kg]	[mg/kg]
Ö	Initial Short	[days]	🔍 ജിത്വ	- Øĭ 058	0.189
	Short term	<u> </u>	0.130	0.058	0.187
~Q~	tarra	2	° 0 082b/ ≈	0.058	0.185
4	tem	Q 4"	0.082	0.058	0.181
Ø,	, Q	õ ^y 7 (0.010 0.000 <0.000	0.057	0.175
Ø.		[™] 14√	√×0.0 0 √	0.056	0.163
	Lone term	~2°0°	<0.001	0.055	0.151
. %	Long	<u></u> 28	> © © © © 0 0 0 1	0.054	0.139
(W)		7 42 560	60.001	0.052	0.120
Õ	A	5 %	<0.001	0.051	0.110
		400	<0.001	0.045	0.063
	term	D'	v		
. T	1 ~	Ž.			
		/			
	(O)				
	-				

Table CP 9.1.3-5: TWAC_{soil} of prothioconazole and its metabolites

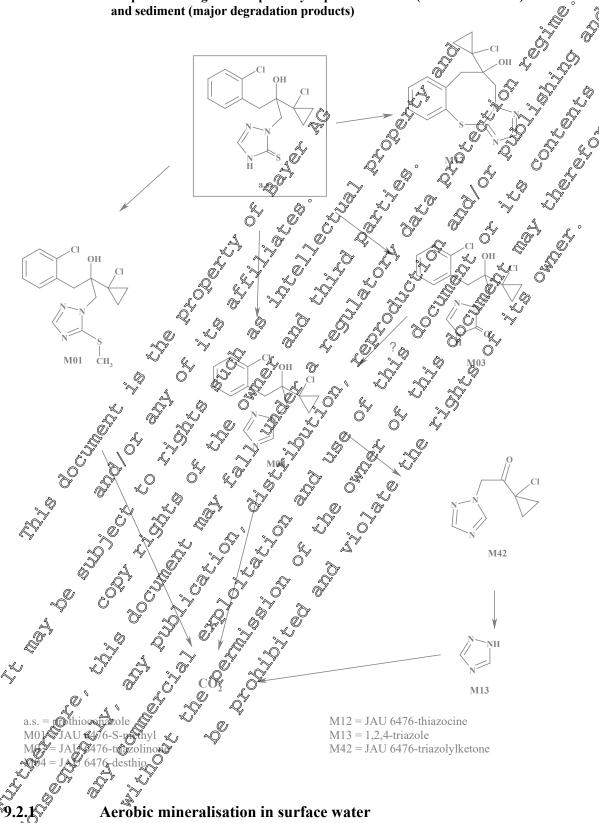
			Winter ar	nd spring cere	als I	
			2×187.5 g a.s	./ha, 14 days,	2×20%	
			Prothioconazole	S-methyl	Desthig	
		Time	TWAC soil	TWACsoil	TWAG	
		[days]	[mg/kg]	[mg/kg]	[mg/kg]	
	Initial	0			\$\frac{1}{2}-	
	Short	1	0.163	3 0.058	≈ 0.188	
	term	2	0.134	[®] 0.058	0.187	
	term	4	0.095	0.058	0.185	
		7	0.063	0.058	0.182	
		14	0.033	0.057	0.17 6 Q	
	Long	21	0.022 🔻	。 0. % 7	~ 0.169	
	term	28	0.017	0,056	0.463	7 7
		42	0.011	©0.055°°	8.152 °°	
		50	10 ,009, 0	0.055%	0.146	
		100	0.005	0.031	J	
Datantial againmil	la4:au :u	~~ : 1.				
Potential accumul	ation in	son:		, 2'		
	potential	l after lo	ng term use was sal	so assessed	The results to	or a standard-mixing
The accumulation	an arabl	e cop w	ith∕tillage are preser	ited in Table	CP ₂ 9.1.3- 6.	O _A
depth of 20 cm for			<i>№ №</i>			
depth of 20 cm for	۵			o 4 .		8
The accumulation depth of 20 cm for Table CP 9.1.3-6: PI	ECsoil of	rothioco	nazobeand its metabo	ு lites taking tæ	Seffect of accu	gulation into account
The accumulation depth of 20 cm for Table CP 9.1.3-6: PI	ECsoil of	rothioco	nazofeand its metabo ge) depth of 20 cm	O Staking the	Seffect of accur	paulation into account
Table CP 9.1.3-6: PI	EC _{soil} of p	rothioco	nazojeand its metabo ge) depth of 20 cm/	lites taking the	Seffect of accur	pulation into account
The accumulation depth of 20 cm for Table CP 9.1.3-6: PI	EC _{soil} of p	rothioco	nazofeand its metabo ge) depth of 20 cm/	lites taking the	Seffect of accu	paulation into account Desthio
	EC _{soil} of p	rothio Con xing Atilla	nazofeand its metabo ge) depth of 20 cm/ Proth	lites taking the	Seffect of accur	pulation into account

Use Pattern S	0, 5	Prothioconazole	Smethad	Desthio
Use I attern	PEC _{soil}	∰ng/kgØ	[mg/kg]	[mg/kg]
Winter and spring cereals I	plateau	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	0 :Q 10	< 0.001
2×187.50 a.s./f@; 14 days, 2×20%	gofal*		0.068	0.190

Anulti-year use) Table CP 9.1.3-3)

For information on the fate and behaviour in water and sediment please refer to MCA Section 7, data point 7.2.

Figure CP 9.2- 1: Proposed bio-degradation pathway of prothioconazole (JAU 6476-desthio) in water



For information on aerobic mineralisation in surface water studies please refer to MCA Section 7, data point 7.2.2.2.

CP 9.2.2 Water/sediment study

For information on water/sediment studies please refer to MCA Section 7, data point 7.2.2.3.

CP 9.2.3 Irradiated water/sediment study

For information on irradiated water/sediment studies please refer to MCA Section 7, data point 7.22.4.4

CP 9.2.4 Estimation of concentrations in groundwater

Calculations were performed, to reflect findings from new studies presented in the active substance dossier, section 7 "Fate and behaviour in the environment". In addition these calculations consider the most recent guidance documents for exposure calculations.

Calculations of predicted environmental concentrations in groundwater (PECgw) are presented below.

Endpoints for PECgw

For deriving the respective end points please refer to MCA Section 7 data point 7.1

Table CP 9.2.4.1-1: Compound specific input parameters for prothoconazole and its metabolites

	Q			
Parameter	_{7,} "Unit,"	Prothioconazole	S-methyl (Desthio
Common		y		Ö
Molar Mass	(g/mol] ⊘	√ √344.3 ₀ ′	∜ 3 58.3 €	312.2
Solubility . Q	Qmg/L	22.5	4.6	S 50.6
Vapour Pressure	[Pa]	22.5 1.00E-10	8.20 E-0 6	1.00E-10
Freundlich Exponent	2 3		Q.88 ×	0.81
Plant Uptake Factor				0
Walker Exponent	S 79		$\mathcal{L}_{\mathcal{L}} = 0.7_{\mathcal{Q}}$	0.7
PEARL Parameters			Smet	
Substance Code		PTZ	Smet	Des
Substance Code DT50	[days] 💆	. Q 0.9Q 6	% 46.4	24.7
Molar Activ. Energy	ŴkJ/mo∭	65 0 4 0	65.4	65.4
Kom Ž	[m J Øg]	₩024 🛷	1465	332.7
PELATO Parameter Substance Code				
Substance Code		AS Á	^y A1	B1
Rate Constant	%[1/day)	🧷 0.71 0 09 🛼	0.02806	0.01494
Q10 Q 5		₩ . 2.58 ₩	2.58	2.58
Koc O O		″ູຶຶ1765 © ″	2526	573.5

Table CP. 2.4.1-2: Degracation pathway related parameters for prothioconazole and its metabolites

Degradation nationation 194	0.11 PTZ -> Smet 0.49 TTZ -> Des
(FOCUS PEARL)	1.5met -> Des
	© 3773080 Active Substance -> A1
Degradation take from to	, 0.0847180 Active Substance -> B1
(FOCUS PELMO)	0.3080650 Active Substance ->
(FOCUS PALMO)	0.0280630 A1 -> B1
	0.0149390 B1 ->

CP 9.2.4.1 Calculation of concentrations in groundwater



Predicted environmental concentrations in soil (PEC_{gw})

Report:

Title:

Report No.: Document No.: Guideline(s): Guideline deviation(s):

GLP/GEP:

KCP 9.2.4.1/01

Prothioconazole (PTZ) and metabolites: PECgw FOCUS PECRL, PELMO FOR - Use in cereals as spray application and as seed treatment in Europe EnSa-15-0491
M-536056-01-1
not applicable not applicable
not applicable The predicted environmental concentrations in groundwater (PEC,) for prothicconazole and its metabolites were calculated using the circulated value of the circulated value o metabolites were calculated using the simulation model FQCUS PEARL wersion 4.4.4) and FOCUS PELMO (version 5.5.3). Crop interception was taken into account according to the BBCM growth stage, as recommended by FOCUS (2014). Application dates for the simulation runs were defined following the crop event dates of the respective crop and scenario as given by OCUS 2000 2009

Detailed application data used for simulation of PTC gw were compiled in Table

Application pattern used for PECgw Calculations **Table CP 9.2.4.1-3:**

	~/ >	" ≈ (3)	V	a Co	0	
				lication 🥎 🦳		Amount
Individual	FOCUS crop	A Rate	Interval	√ Plant ≈	BBCH	reaching soil
	used for	per season		interception	stage	per season
Crop	Interception [application
		[g a&s. /ha] Ś	[days]	[%]©′	4	[g a.s./ha]
Winter & spring		2× 187.5	\$\frac{1}{2}\delta \text{3}		2 × 25-69	
cereals, GAP	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	2 ~ 107.0	Z 14 5		2 ^ 23-09	_
Winter cereals	Winter 🖔	7 8 187 5 2	(1.10)		2 × 25-69	2 × 150.0
simulation	© reals _∞	2 * \$101.5 @		0 × 20	2 ^ 23-09	2 ^ 130.0
Spring cereals	Winter	2 × 187.5	a. 14 . Q	2 2 20	2 × 25-69	2 × 150.0
simulation	Ceresis ,	10/.3	\$ 14 \$\frac{1}{2}\$	<u></u>	2 ^ 23-09	Z ^ 130.0

For cereal applications, absolute dates were derived for the simulation runs. All application dates are summarised in the table below.

Table CP 9.2.4.1- 4: First application rule	on dates and related info	rmation for prothioco	nazole as used for the
Individual crop	Winter cereals	Spring cereals	
Repeat Interval for App. Events	Every Year	Every Year	
Application Technique	Spray	Spray	
Absolute / Relativ		Absolute	
Scenario	1 st App. Date/(Julian day)	1 st App Date/(Julian day)	
Chateaudun	14 Feb (45)	@3 Apr/(93) &	
Hamburg	15 F 6 / (46)	\sim 22 Agr/(112) $^{\circ}$	
Jokioinen	19 Feb/(50)	01, Min/(152)	
Kremsmuenster	15 Feb (46)	/ ** TPI// 12/ *	ľ.
Okehampton	06 Feb (37)	(App 107)	
Piacenza	21 Feb/(52)	1 4 1 - 2	
Porto	15/Feb/(46)	07 Apr/(99)	
Sevilla	28 Dec/(362)		
Thiva	5\(\frac{1}{28}\) Jath/(28)		
Porto Sevilla Thiva Findings: PEC _{GW} were evaluated as t			
Findings: PEC _{GW} were evaluated as t	he 80th percentibe of the 1	mean annual leachaite	concentration at 1 m
soil depth. FOCUS PEARL and REI	MOPEC Tresults for	prothioconazole and	its metabolites after
application to winter and saring coea			

soil depth. FOCUS PEARL and RELMO PECgy results for prothiocopazole and its metabolites after application to winter and spring coreals are given in Table CP 9.2.4. \$\frac{1}{2}\sqrt{5}\$

Table CP 9.2.4.1- 5: FOCUS PEARL PELMO PECgw results of & spring cereals prothiocoorzole and its metabolites

	S () \		, s. F. Q.		9			
Use Pattern	Winter	reads 2 × 187.	5 g ats./ha, 🔊	4 4 Pr	reals 2 × 187.			
S	2 × 20% ir	iterception, 14	d interval	$2 \times 20\%$ interception, 14 d interval				
Ĉ	O PTŽ*	🍃 S-methyl 🍣	Destidio	PTZ	S-methyl	Desthio		
FOCUS PLARL	PEC _{gw}	P&C _{gw}	PECgw	RE C _{gw}	PEC_{gw}	PEC_{gw}		
TOCUSTRAKE	øμg/Lb	Ψμ̃g/L]_∖	Őμ̈́g/LKζ້	_ Φμg/L]	[µg/L]	[µg/L]		
Chateaudun	<0.001	<0.0 6 ¥ .	<0.001	₫ [%] <0.001	< 0.001	< 0.001		
Hamburg	> <0.001 <i>6</i>	<9.001	° <0 0 001 😞	< 0.001	< 0.001	< 0.001		
Jokioinen ©	₹ 0 :001 €	0.001	6 0.001	< 0.001	< 0.001	< 0.001		
Kremsmuenster	0.001	, &0.00D	o<0.0010°	< 0.001	< 0.001	< 0.001		
Okehampton * • • • • • • • • • • • • • • • • • •	C <0,001 ×	<0.001	<0.001	< 0.001	< 0.001	< 0.001		
Piacenza 🚄	<0.901) < 0.0 001 0	< 02001	-	-	-		
Porto 🔎 "	\$0.001	©.001 <0.004	√ ≲ 0.001	< 0.001	< 0.001	< 0.001		
Sevilla 😂	×0.001	<0.001	°©<0.001	-	-	-		
Thiya 🗸	<0,000	© <0,001 🚕	<0.001	-	-	-		
FOCUS PELMQ &	PÆC _{gw}	PÉC _{gw} O	[♥] PEC _{gw}	PEC_{gw}	PEC_{gw}	PEC_{gw}		
FOCUS PELMO	[μg/L]	#ng/L]	[µg/L]	[µg/L]	[µg/L]	[µg/L]		
Chateaudun	<0.00	<0.001 ³	< 0.001	< 0.001	< 0.001	< 0.001		
Hamburg 🖉 🤘	<0.0001	, < Q5 01	< 0.001	< 0.001	< 0.001	< 0.001		
Jokioinen 👸 🦠	6 0.001	<0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Kremsmuenster	<0.0010	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Jokioinen Kremsmuenster Okehampton	(0.00) (0.00)	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Piacenza	© < <u>0</u> 001	< 0.001	< 0.001	-	-	-		
Porto 🖾	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001		
Sevilla 💍 "	< 0.001	< 0.001	< 0.001	-	-	-		
Thiva	< 0.001	< 0.001	< 0.001	-	-	_		

^{*} PTZ = prothioconazole

azole in accordance of the state of the stat ance with the state of the stat Conclusion: There are no concerns for groundwater from the use of prothioconazole in accordance with

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CP 9.2.5 Estimation of concentrations in surface water and sediment

New calculations were performed, to reflect findings from new studies presented in the active substance dossier, section 7 "Fate and behaviour in the environment". In addition these calculations consider the most recent guidance documents for exposure calculations. Calculations of predicted environmental concentrations are presented below.

Predicted environmental concentrations in water (PECsw) and in the sediment (PECsw)

Endpoints for PECsw and sediment (PECsed)

For deriving the respective end points please refer to MCA Section 7, data point

Key modelling input parameters for prothioconazole and its metabolites at Steps 1/2 **Table CP 9.2.5-1:**

			4 T		V	¥ _1			*
	Parameter	Unit	C. Brothioconazole			.4Oriazole		Transly keleme	
		ۄٞ		LAU 6476- Pesthio	Thu 6476 kg	azo,	, sine	#	'n
		2	® 3	& LU 647∕6 }esthio	U 6476			<i>\$</i> *₹√	8
			\overline{\over			\ \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	C Thiaze	ر راي ال	ĺ
	4		rot ĵ			~ · ·			ĺ
	≪	J &		\$, Ø	<i>₽</i> a	
	Molar Mass Water Solubility Koc	g/mel mg/L mL/g	22.5 1765	312.2 506 579.5	358.3 486	69.1 700000 83 %	~\$6.8 \leq	ັ້ 185.7	ĺ
	Water Solubility	1 m3/0r/I	*22.5	500	46	700000	♥ 20 %	1000000	Ì
	Koc 2	days days	1765	519.5	<i>≈</i> 2526 ₍	83 📞	20 5	1	Ì
	Degradation Soil	40.00	\$1.4 \	30.6	620	18000	©1000	1000	Ì
	Soil System	days days	14 2	39.00 55.66	267		\$\frac{1000}{1000}	1000	Ì
	Water O	days	1.90	20	10.4	1000	122.1	1000	Ì
	Sedimen	days	80 / .1	. \$\interpreces 57 \(\alpha \)	53.60	1000	1000	1000	ĺ
0	Max Occurrence		4 2	39.60 55.60 20 257 54.5	<i>7</i>	1000 2000 1000 1000			ĺ
×C	Water / Sediment		100	54.5	2.7	41.8	15.2	9.1	Ì
	Water / Sediment	%	1.4 14.2 1.20 80.1 100 100	\$6.2	14.2%	0.0001	0.0001	0.0001	
	.\$° 4°								
			Ų' , IJ),					
)" . <i>U</i>		. 0	T'				
					P				
	A. O	\$	4						
), "Ø"	Q, (
	A A	*	a G	, Q'					
		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Q ~	Sy"					
v	@ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		, ' L	)					
			Q"						
			<i>w</i>						
6			~						
		O							
		V							
	A a								
Ö	Total System  Water Sediment  Water / Sediment Soil								

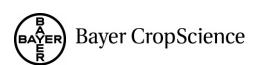


Table CP 9.2.5- 2: Additional modelling input parameters for prothioconazole and its metabolites at Steps 3/4 level PEC calculations

Steps 3/4 level PEC calculation		101 <b>p</b> 100000		
Parameter	Unit	Prothioconazole	JAU 6476-desthio	
SWASH code		PTZ	Des C	Ô
General			<b>**</b>	~\$°
Molar mass	g/mol	344.3	312.2	
Water solubility (temp.)	mg/L	22.5 (20 °C)	′ 50.6 (20°°C) 🤸	
Vapour pressure (temp.)	Pa	1E-10 (20 🎢	1E-10 <b>,(2</b> 0 °C)∕	
Crop processes	*	Z.		
Coefficient for uptake by plant (TSCF)	a V			
Wash-off factor	_ <b>∆</b> ¶/m	-\$\dot()  \cdot\)		
Sorption	<b>~</b> ′	7765,38 1024	Q' \0' \	Ů
KOC	mL/g		∂ <b>5.7</b> 3.57, ∜	47
KOM	m¶/g	1024	332.7	
Freundlich exponent (1/n)	<b>W</b> - (		0.84 A	r L°
Transformation		0.9		<i>\O'</i>
DT50 in soil temperature moisture content (relative to)	days		Q <b>Q</b> 4.7	
temperature				P
moisture content (relative to)	Nog(cm)			
pF	nog(cm)			
formation fraction in soil O			0.6	
temperature	ways 2		55.6	
formation fraction in water	/ - @		<b>9</b> 638	
temperature formation fraction in water DT50 in sediment	davs	1000	× 4000	
		1000	20	
formation fraction in Sediment	)   - %	20	0.638	
DT50 on cangry	davš	_ 10 🔍	4	
Exponent for the effect of moisture	, Ø	\$ \$7.7 \$ \$0.40	,	
PRZM and TOXXWA (Walker evn)	~~.   **-	5° 84.7 5°	0.7	
MACRO (calibrated value)	J - >	<b>3</b> 0.49	0.49	
	Ş	0 4/		
TOXSWA (molar activation energy)	kJ/mol	@ 650 <del>4</del>	65.4	
MACRO (effect of temperature)		948	0.0948	
PRZM (Q10)	) <u> </u>	2.58	2.58	

Report:
Title:

Report No:

Document No:

KCP 92.5/0 (PVZ) and metabolites: PECsw,sed FOCUS EUR - Use in winter and spring cereals in Europe

EnSa-1508240

M-536090-01-1

Document No.:

Guideline(s):

Guideline deviation(s):

GLP/GEP:

M-536990,01-1

not applicable

no

**Report:** ,; 2015; M-536126-01-1

Title: Protheconazole (PTZ) and metabolites: PECsw,sed FOCUS EUR - Use in winter and pring cereals in Europe

Report No.: This a-15-0834

Document No.: M-536126-01-1
Guideline (s): not applicable
Guideline deviation(s): not applicable

GLP/GEP: no

Materials and Methods: Predicted environmental concentrations in surface water and sediment (PEC_{sw} and PEC_{sed}) of prothioconazole and its metabolites have been calculated for the use in winter and spring cereals in Europe. All relevant entry routes of a compound into surface water were considered in these calculations.

At FOCUS Step 2 the application period was set from October to February for winter cereals and from March to May for spring cereals. Additionally, the use in Northern and Southern Europe was considered. Details of the application pattern used in the Step 2 calculations are summarised in Table CD 9.2.5.

Table CP 9.2.5-3: Application pattern used for PEC_{sw,sed} calculations at FOCUS steps 1&2

Стор	Rate [g a.s./ha]	Interval [days]	BBCH & stage	FOCUS	, / =	<b>7 \$</b>	gason ,	Crop
Winter & spring cereals, GAP & simulation	2 × 187.5	14		cercals, with	r & sprii	ng OS	pring rMay)	average of oper
Winter & spring cereals, GAP & simulation	2 × 150		25-61	gereal Swinte Zarable G	ı(& sprii lops);≪	ng s (Mar	pring r May)	average crop cover

In FOCUS Step 3, the application date for each scenario was determined by the Pesticide Application Timer (PAT), which is part of the FOCUS SW Scenagos. The user thay only define an application time window. The actual application date is then set by the PAT in such a way that there are at least 10 mm of rainfall in the first 10 days after application, and at the same time less than 2 mm of rain per day in a five day period around the date of application of no such date can be found within the application time window, the above rules are step-wise relaxed. Details of the parameters used are summarised in Table CP 9.2.5.4 and Table CP 9.2.5.5. window, the above rules are step-wise relaxed. Details of the parameters used in the Step 3 calculations

Table CP 9.2.5-4: Application dates of prothioconazole for the FOCUS Step 3 calculations  $(2 \times 187.5, BBCH 25-69)$ 

(2 × 187.5, BBCH 25-09)										
Parameter	Winter	cereals	Spring o	ereals						
PAT start date				ute spray sliar linear, 4 cm						
rel./absolute		olute	æ <b>j</b> šol	ute 🐣 🔊						
Appl. method		l spray	ground	spray S						
(appl. type)	(CAM 2 – appln f	foliar linear, 4 cm)	(CAM 2 ≠ appln fo	oliar linear, 4, cha) 🔣						
PAT window	1,4		Ů							
range	PAT	07	61 ONT							
Application	Start/End Date	Appl. Dat	Stan End Date	Appl. Date						
Details	(Julian Day)	Appl. Date	(Julian Day)	Appl. Lagic						
D1	28-Feb/15-Jun	07 Mar	22-May/22-Jul	N Mun &						
Ditch/Stream	(59/166)	29/Mar 🗳 °	(142/203*)	702 Jul						
	(63.100)			, L A .						
D2	01-Apr/17-Jul	△ 01 Appr								
Ditch/Stream	(91/198)	07 Way ~								
D3	08-May/23-Aug	R WY5 Max ~	22 Apr/20 Jun	21 Apr						
Ditch	(128/235)	%29 Mayy	(112/173)	05 May						
D4	21 5 1 /00 1-	Feb S	0 12 10 0							
D4 Pond/Stream	21-Feb/08-Jpm	LOM-9	7 13-Way/13 Jul	30 May 0 04 Jul						
Pond/Stream	(52/1595)	Preb 19 Mar 12 Feb	(133/194)	⊚″ 04 Jul						
D5	12-Feb@0-Mav	12 Feb	03-Apr/03-Jan	Ø 08 Apr						
Pond/Stream	(43×150)	Maray	(93/154)	22 Apr						
1 ond Stroum				22 1 pi						
D6	28-Jan/15-May	© 27 F\$ 20								
Ditch	(28/435)	14 Mar 🔊								
R1 (	120Mar/27-Jun	(6°17 Mar								
Pond/Stream	(71478)	26 Apr 💸								
D2®	21 1 100 1		0 _ O ~							
R3	21-#60/08-min	© ° 21 Feb 20 Mar €								
Stream		21 1 CO Mar 20 M	À							
R4	2-Feb/30-Mas	(2) Mar (2) √	03-Apr/03-Jun	04 May						
C4	A3/1505	504 Apr	(93/154)	27 May						
			(201201)	_,,						
4										
	A Q									
, <del>W</del>										
~		4 5								
A S		<b>%</b>								
. Ö	F O D	ν								
29 2	ř A Q									
, SO,										
$\bigcirc$										

Table CP 9.2.5-5: Application dates of prothioconazole for the FOCUS Step 3 calculations  $(2 \times 150, BBCH 25-61)$ 

Parameter	Winter	cereals	Spring	cereals		
PAT start date			- D	, O S		
rel./absolute	abso	olute	a) so	lute 🤻 🔊		
Appl. method		d spray	ground spray			
(appl. type)	(CAM 2 – appln f	foliar linear, 4 cm)	(CAM 2 ppln fo	oliar linear, 4, cho		
PAT window						
range	I .	4 🔻	Q 44	4 0 0		
Application	PAT	- A	PAT			
Details	Start/End Date	Appl. Date	Stant End Date	Appl. Dafe @		
	(Julian Day)		(Julian Pay)			
D1	28-Feb/13-Apr	07 Mar	22-May 05-Jul	MJun 💸		
Ditch/Stream	(59/103)	29/Mar 🗘	(F42/186)	702 Jul		
D2	01 A /15 M					
D2 Ditch/Stream	01-Apr/15-May	01 Apr				
Ditch/Stream	(91/135)	U Wray				
D3	08-May/21-Jun	Q (17 Mars)	22-Apr/06-Jun	21 Apr		
Ditch	(128/172)	29 May	(112436)	05/May		
	Q V					
D4	21-Feb/06-Appr	Feb S	2 13-Way/26 Oun	30 May		
Pond/Stream	(52/96)\$	7 19 Mar 4	(₹33/137) . [©]	🍼 16 Jun		
	~ &					
D5	12-Feb@28-Mar©″	12 Feb	03-Apr/17-May	08 Apr		
Pond/Stream	(43/87)	Mar ₀ Mar ₀	(93/137)	22 Apr		
D.(						
D6	S-Jan/I 3-Mar	27 500				
Ditch	\$\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	13 Mar Q				
R1 . «	120 ar/25 Åpr	17 May				
Pond/Stream	7 (71/18)	07 km				
Tond/Stream		A STAPE				
R3 💉	21-Feb/06-Apr	© 21 Feb ~				
Stream	\$\int_{\infty}(52/9\hat{\hat{\hat{\hat{\hat{\hat{\hat{	* ~ \^20 M@r*	<b>1</b>			
			Š			
R4	12-Feb/28-Mar	∑ Mar O′	03-Apr/17-May	29 Apr		
Stream	♥ <b>/3</b> 43/87 <b>/</b> \$ (4	or ≈ 16 Mags ~ C	(93/137)	13 May		

Compound input parameters for the Step 1&2 simulation runs are summarised in Table CP 9.2.5-1 and for the Steps 3&4 simulation runs in Table CP 9.2.5-2.

Findings: Steps 1&2: The maximum PEC_{sy6} PEC_{sed} and 21d-TWA_{SW} values for prothioconazole and its metabolites at Steps 1&2 are summarised in Table CP 9.2.5- 6 and Table CP 9.2.5- 7.

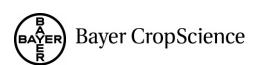


Table CP 9.2.5- 6: Maximum PEC_{sw} and PEC_{sed} values and 21d-TWA_{SW} values for prothioconazole and its metabolites at Steps 1&2

		Pro	thiocona	zole	JAU	6476-de	sthio	JAU (	6476-S-ŋ	aethyl d
Use pattern	Scenario	PEC _{sw} [μg/L]	21d- TWA [µg/L]	PEC _{sed}	PEC _{sw} [μg/L]	21d- TWA [µg/L]	PEC _{sed}		21d-@ TWAx [µg/L]	PECO _d [pg/kg]
	Step 1	40.73	24.02	657.9	73.39	63.94	4/17/5	8.468 \$	<b>P</b> .435	\$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$203.3 \$2
Winter & spring	Step 2				Ğ		4	×.		
cereals	N-EU Multi	1.551	0.223	11.44	<b>%</b> 011	4.563	©33.48	0.730	0.501	17,80
2 ×	S-EU Multi	1.551	0.316	18.71 🎣	11.28	8.620	63.31	1.372	15012	\$4.03 ₆
187.5 g a.s./ha	N-EU Single	1.724	0.232	11.64©	6.747	2.746	20.14	@790	0.308	¹ 0.2%
	S-EU Single	1.724	0.324	18,87	6.747	5.156	<b>҈</b> \$7.84 ॣ	0.790	∉ 0.5§1 [™]	19.52
	Step 1	32.58	19.22	<i>5</i> 26.3	58.72	\$1.15	329,2	6.774	5,948	162.6
Winton & amino	Step 2		§			" "\\"	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		***	<b>4</b>
Winter & spring	N-EU Multi	1.241	0.197ℂ	ັ 10.6 <b>©</b> ັ	5.862	4,463	<b>3</b> 20.75	<b>7</b> 12 <b>3</b>	0.5214	17.48 _o
cereals $2 \times 150$ g a.s./ha	S-EU Multi	1.241	0.290	17,88	12 13	<b>\$2,526</b>	82.73 _~	1.35 <i>5</i> 0	1.000	33/1/2
	N-EU Single	1.380	0:204	_ 100.74 _∞	<b>%</b> .646%	, 2 [°] .679- ⁴		0.77,8	0.301	<b>10.08</b>
	S-EU Single	1.380	<i>@</i> 297,%	√18.00@	$^{9}6.646$	5.089	3 <i>7</i> °. <b>3</b> ′9	<b>0</b> 778	<b>20</b> 574	9.31

Table CP 9.2.5-7: Maximum PEC_{sw} and PEC_{sed} values and 21d-TW sw values for prothioconazole and its metabolites at Steps 182 (conte.)

			M 4	.1.	√ T	hiazocin		T-6	¥	
	9		2,4-triaz	oie	» I		~//		žolylket	one
Use pattern	Scenario S	PEGw [µg/L]	ΤχνΑ [μg/L]	PECsed	()	Ž1d- TWA [µg/L]	PEC	PE@w [ag/L]	21d- TWA [μg/L]	PEC _{sed} [μg/kg]
	Step 1	∂9.732 <u>∠</u>	9.634	8.048	14.39	<b>13</b> .21	<b>&amp;2</b> 3.59 <i>&amp;</i>	√6.297	6.251	0.063
Winter & spring	Step <b>W</b>		<b>2</b> 331 .	Š		( ♥n				
cereals	NASU Mulit	0.341	<b>Q 3</b> 31 .	0.276 [≈]	\$0.50 ₁₆	0.463	0.7992	0.216	0.214	0.002
$2 \times 187.5 \text{ g}$	& EU Multi	<b>%</b> 445 ⊘			0.65\$	0,641	1,045	0.284	0.282	0.003
a.s./ha 🦠	N-EUSingle	_{0.343}			OSO9	<b>3</b> 331	0.566	0.220	0.151	0.002
	S-EA Single	0.343	0,336	Q.281		Q0.479 (	0.819	0.220	0.218	0.002
	Step 1 🔬	7.J.86	<b>7</b> 707	<b>6.438</b>	[©] 11.5	11.30	18.87	5.038	5.001	0.050
Winter & Spring	Step 2	Ž 1		Ş	$\sim \mathbb{C}_{\lambda}$					
. /	N-E <b>W</b> Multi̇̀∾	0.293 Î	0.285	0:238	0.431	<b>20.400</b>	0.684	0.186	0.185	0.002
cereals	S. FO Multil	0.308	0,389	<b>Ø</b> 325	[%] Ø.585 €	0.549	0.938	0.254	0.252	0.003
2 × 150 g a.s./ha	INSEU SINGIE	Q <b>\$</b> 16	<b>≈</b> 0.207 _≈	<b>%</b> .173	0.46	0.294	0.503	0.203	0.134	0.001
	Š-EU Strigle	<b>3</b> .316	©0.310>	0.259	0.469	0.443	0.757	0.203	0.201	0.002

Step 3: The maximum PEC_{sw} and PEC_{scd} values of prothioconazole and its metabolite JAU 6476-desthio for relevant FOCUS step 3 scenarios are given in the following tables.



**Table CP 9.2.5-8:** Winter cereals (2 × 187.5 g a.s./ha, BBCH 25-69): Maximum PEC_{sw} and PEC_{sed} values for prothioconazole at Step 3

			Prothio	conazole		
Use pattern		Wi	nter cereals, 2	$2 \times 187.5$ g a.s.	/ha 💍	
	S	ingle applicatio	n	Mu	ıltiple applica	tion 🤻 🎺 🧳 🗸
	Entry	PEC _{sw}	<b>PEC</b> _{sed}	Entry	₹ PEC _{sw}	PEC
FOCUS scenario	route*	[µg/L]	[µg/kg]	route* 🎺	🏓 [μg/L] 🦠	[©] [μg⁄kg] ∢
D1 (Ditch)	S	1.1790	0.4095🕲	S	1.0400 👟	1 40,8120
D1 (Stream)	S	0.7862	0.0143	S Q	0.7999	<b>9.0343</b>
D2 (Ditch)	S	1.1960	1.5270	SOA	1.05/50	2.1550
D2 (Stream)	S	0.9891	0 <u>,</u> 0876	<b>Š</b>	0,9 <del>9</del> 79	1.5900
D3 (Ditch)	S	1.1880	<b>7</b> 6531	S S	₽0390€	0.7586
D4 (Pond)	S	0.0410	©0.1392	S S	0.0532	√J0.2202>
D4 (Stream)	S	0.9195 🖔	/ 0.0 <b>3</b> 60 /	D" <b>S</b> V' s	0.7881	> 0.03 M
D5 (Pond)	S	0.0410	Q,¥194 💍	/ %\$ ~@	″ 0.00 <del>5</del> 00 <u>"</u>	0 <b>,1</b> 960
D5 (Stream)	S	0.8953	∂9.0188©	Q S	_0.8105 ©″	<b>20</b> 0238
D6 (Ditch)	S	1.1730	× 0.3176	SA.	0,1.0430	0.9570
R1 (Pond)	S	0.6710 ~	ຶ 0 <u>.</u> 1⊘414 ູ≉	6 8 V	× 0.0477	<b>∜</b> 0.2 <b>0</b> \$2
R1 (Stream)	S	Q7844, \$\frac{1}{2}	Q 125	S O	0.6784 <i>(i)</i>	0.1245
R3 (Stream)	S	J.106	×0.2615	S S	<b>3</b> 9.9566	<b>Q</b> .2533
R4 (Stream)	S	$\mathbb{Q}^{7} 0.7850$	0.1839	S'SO	© 0.67 <b>88</b>	1.3670

^{*} Entry route: letters S, D, and R correspond to the dominant entry path spray don, drainage, and runoff

Spring cereals (2 × 187.5 g 3/s./ha, BBCH 25-69); Maximum PECsw and PECsed values for prothioconazole at Step 3 **Table CP 9.2.5-9:** 

		<u> </u>	<u>' 🔊 , 0'</u>	<u> </u>		
			Prothio	con@zole 🚫		
Use pattern	Ç' s. i	Sp Sp	ring cereals, 2	2⊛ 187.5 g a.s./	ha ^y	
ي الله الله الله الله الله الله الله الل		ngle application	on 💝 🧵	Me Me	tiple applicat	ion
	Entry 💝	&PEC _{sw}	<b>PEC</b> sed	<b>Æ</b> ntry ∜	$PEC_{sw}$	<b>PEC</b> _{sed}
FOCUS scenario	Entry S		μg/kg)	Proute*	[µg/L]	[µg/kg]
D1 (Ditch)	o Š	) 1. <b>2</b> 010 🔏	y 2.5 <b>%</b> 00	<b>S</b>	1.5240	4.1110
D1 (Stream)	S S	129300 [©]	0.5089	/ ~§*	0.9085	0.5386
D3 (Datch)		₹.1870 ১	Ø.6168	` © _s S	1.0380	0.7097
D4 (Pond)	S S		~~ 0.1 <b>0</b> 58	S	0.0428	0.1527
D4 (Stream)		Ø 0. <b>9</b> 708	0.0646	S	0.8846	0.1612
D5 (Pond)	As &	Ø\$641Q <	0.1232	' S	0.0554	0.1935
D5 (Stream) @	S S	©0.942 <del>7</del>	∂9.0261∂°	S	0.8925	0.0566
R4 (Stream	( SO A	× 0.7 <b>83</b> 7	× 0.2724	S	0.6790	0.5364
* Entry route: letters S. 1	D. and R corress	and to he domin	ant entrepath – s	prav drift, draina	ge, and runoff.	
				F,	8-,	
			. ~Q*			
, W		v'	*****			
~			<b>y</b> "			
	. 4					
¥ .	A					
	y' gi	~ @				
Ţ, Ž		, "				
© _o						
FOCUS scenario  D1 (Ditch) D1 (Stream) D3 (Dich) D4 (Pond) D4 (Stream) D5 (Pond) D5 (Stream) R4 (Stream) * Entry route detters S, 1						



Table CP 9.2.5- 10: Winter cereals (2 × 187.5 g a.s./ha, BBCH 25-69): Maximum PEC_{sw} and PEC_{sed} values for JAU 6476-desthio at Step 3

		JAU 647	6-desthio	
Use pattern		Winter cereals, 2	2 × 187.5 g a.s./ha 💍	
	Single ap	plication	Multiple a	pplication 🤻 🎺 🧳 🤊
	$PEC_{sw}$	<b>PEC</b> _{sed}	PEC _{sw 4}	PEC sed
FOCUS scenario	[µg/L]	[µg/kg]	[µg/L]	· Pig/kg/p
D1 (Ditch)	0.0057	0.0776 💍	0.03 2	≈ 0.4312 °S
D1 (Stream)	0.0235	0.0435	0,0282	0.2913
D2 (Ditch)	0.0362	0.1094	@1388	₩ £4277 \$ ·
D2 (Stream)	0.0594	0.04 <b>5</b> V	0.0887,	P . 0.317₽
D3 (Ditch)	0.0122	0.0424	0.01996	0.0190
D4 (Pond)	0.0049	0.0944	0.0086	0,4,521
D4 (Stream)	0.0091	&0.0049©° ,*	> ~\%0122\% _	© 0x0120 ×
D5 (Pond)	0.0054	© 0.1019 ° ~	~~~0.01 <b>00</b> ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	
D5 (Stream)	0.0154	<u>⊿</u> 0.000004 ©	Q 0.0140 _	0 0.0007
D6 (Ditch)	0.0030	√	> 0 <del>:0</del> 144 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0246
R1 (Pond)	0.0284	× 0.30130	Ø.0692° ±	0.0240 \$\times \text{0.6206}
R1 (Stream)	0.4046	0.2380	≈ 0.64 <b>0</b> 4 ≈	0.5868
R3 (Stream)	0.3580	0.4289 🗸	0.3580 \$	<u></u>
R4 (Stream)	0.7553Q [*]	0.6315	<i>≫</i> ′ <u>6</u> 9976 <i>©</i>	1.4830

Table CP 9.2.5-11: Spring vereals (2 × 187.5 g a.s./ha, BBCH 25.69): Maximum PEC_{sw} and PEC_{sed} values for JAU 6476-desthip at Stop 3

				<u> </u>
		Spring cereals, gle application PEC. [µg/kg]	6-desthio	⁷
Use pattern		Spring cereals,	2 × <b>(587.5 g/a/s./ha</b>	
	(// i'	gle application	Multiple a	
	PEC	PEC PEC	Multiple a PEC [µga]	<b>PEC</b> _{sed}
FOCUS scenario	Sin PEC (μg/k)   (μg	gle application PEC	PEC (μg/l) 0,2392 0,0328	[µg/kg]
D1 (Ditch)	00)284	0 6 TO 1.00 10 0	0,2392	1.7870
D1 (Stream)	10° °0'.0325	<b>20.</b> 0814.5	0.2392 0.0328	0.4281
D3 (Ditch)		0.0056 0.1673	©0.0107	0.0139
D4 (Pond)	0.0084	0.1493	0.0137	0.1997
D4 (Stream)	6.0325 0.0059 0.9084 0.9098 4	0.9052	0.0210	0.0203
D5 (Pond)	₽ ^Ø.007 <b>7</b> ©	9.1192	0,0328 0,0107 0,01137 0,0210 0,0132	0.1912
D5 (Stream)	<u> </u>	<b>2 0.0005</b>	0.0154	0.0013
R4 (Stream	0,0019	0.9903	0.5745	0.8786
D4 (Stream) D5 (Pond) D5 (Stream) R4 (Stream)		0.0056 0.1473 0.9052 9.1192 0.0005 7 0.963		



**Table CP 9.2.5-12:** Winter cereals (2 × 150 g a.s./ha, BBCH 25-61): Maximum PEC_{sw} and PEC_{sed} values for prothioconazole at Step 3

			Prothio	conazole		
Use pattern		W	inter cereals,	$2 \times 150$ g a.s./l	ha 💸 💮	
	S	ingle applicatio	on	Mu	ıltiple applica	tion 🖖 🗼 🖓 🧷
	Entry	<b>PEC</b> _{sw}	<b>PEC</b> _{sed}	Entry	[≰] PEC _{sw}	PEC
FOCUS scenario	route*	[µg/L]	[µg/kg]	route* 🎺	🏓 [μg/L] 🦠	D [µg@kg] 🗸
D1 (Ditch)	S	0.9433	0.3275	S	0.8325	<b>1 20,6</b> 497 S
D1 (Stream)	S	0.6291	0.0114	S Q	0.640	<b>\$9</b> .027 <b>\$</b>
D2 (Ditch)	S	0.9564	1.2210	SOA	0.8442	o [™] 1.72 <b>40</b> 0
D2 (Stream)	S	0.7914	0 <u>%</u> \$701	<b>Š</b>	0,7945	1.2720
D3 (Ditch)	S	0.9500	<b>3.</b> 5224	S S	Ø8316	0.6070
D4 (Pond)	S	0.0328	©0.1115	S S	0.0428	√0.176 <b>3</b>
D4 (Stream)	S	0.7357 🖔	0.0288	\$~' <b>,5</b> ~' ,	0.6362	°> 0.02⁴49′
D5 (Pond)	S	0.0328	Q. <b>9</b> 956	/ %\$ ~@	° 0.00×400 "(	0 <b>,1</b> 569
D5 (Stream)	S	0.7164	<b>79</b> .01500	Q S	_0.6485 ©°	<b>200</b> 0190
D6 (Ditch)	S	0.9384	× 0.2540	s.	0.8341	©.7710°
R1 (Pond)	S	0,6328 %	^y 0,1⊘√32 , △	6 8 1	× 0.04¥6	<b>∜</b> 0.1 <b>₹2</b> 6
R1 (Stream)	S	Q6276, V	<b>Q</b> \$9900	S O	0\$428 <i>6</i>	0.1129
R3 (Stream)	S	0.885	×30.209 <b>2</b> 5	S S	~ <b>3</b> 7.7654©	<i>√</i> <b>©</b> .2027
R4 (Stream)	S	Q" 0.628Ĭ	0.1471	S' RO	1.0760	<b>≈</b> 0.9007

^{*} Entry route: letters S, D, and R correspond to the dominant entry path spray don, drainage, and runoff

Spring cereals (2 150 g 45./ha, BBCH 25-61); Waximum PEC and PEC and PEC values **Table CP 9.2.5-13:** for prothioconazole at Step 3

	· · ·	<u> </u>	<u> </u>	<u> </u>		
			Prothio	con@zole 🚫		
Use pattern	V	$S \sim S_1$	oring ceceals,	2× 150 g a.s./l	าล ั้	
, F		ngle application	on 💝 🧸	) Ay Ma	tiple applicat	ion
	Entry 💝	&PEC _{sw}	<b>PEC</b> sed	<b>Æ</b> ntry ∜	$PEC_{sw}$	<b>PEC</b> _{sed}
FOCUS scenario	Entry Si	© [μg/k]	μg/kg)	Froute*	[µg/L]	[µg/kg]
D1 (Ditch)	Ø Š ¢	0.9606	y 2.0 <b>5</b> 60	<b>S</b>	1.2200	3.2890
D1 (Stream)	S S	0 <b>3</b> 8403 [©]	0.4072	/ <b>\%</b>	0.7269	0.4309
D3 (Ditch)		<b>ૹ</b> .9492 ∖	Ø.4934	、 ◎″S	0.8309	0.5678
D4 (Pond)	\$\forall \text{\$'\text{\$'}}		°> 0.0847	s S	0.0406	0.1346
D4 (Stream)		♥ 0, <b>7</b> ₹68 @	0.0517	S	0.6935	0.0828
D5 (Pond)	AS S	Ø328 €	0.0987	' S	0.0444	0.1549
D5 (Stream)	S S	0.7542	Ø.0208	S	0.7141	0.0453
R4 (Stream®	O 80 ~	> 0.6 <b>2</b> ₹0	× 0.2479	R	1.0620	1.1870
* Entry route Netters S. I	D. and R correspond	and to he domin	ant entrepath – s	sprav drift, draina	ge, and runoff.	
		O' 'X'		1 7	<i>6</i>	
			. ~Q*			
, <b>4</b>		o' _&'	**************************************			
<b>*</b>	T S		ď			
· · · · · · · · · · · · · · · · · · ·						
	A »					
	7 27					
p ^o						
FOCUS scenario  D1 (Ditch) D1 (Stream) D3 (Datch) D4 (Pond) D4 (Stream) D5 (Pond) D5 (Stream) R4 (Stream) * Entry route letters S, I						



Table CP 9.2.5- 14: Winter cereals (2 × 150 g a.s./ha. BBCH 25-61): Maximum PEC_{sw} and PEC_{sed} values for JAU 6476-desthio at Step 3

		JAU 647	6-desthio				
Use pattern		Winter cereals,	2 × 150 g a.s./ha				
	Single ap	plication	Multiple application 🖖 🦼				
	$PEC_{sw}$	PEC _{sed}	PEC _{sw 4}	PEC sed			
FOCUS scenario	[µg/L]	[µg/kg]	[µg/L]	ag/kg/🎘			
D1 (Ditch)	0.0034	0.0443	0.01 3	\$\sqrt{0.23\chi2}  \sqrt{\sqrt{\sqrt{\sqrt{\chi}}}}			
D1 (Stream)	0.0184	0.0244	0,0218	0.1932			
D2 (Ditch)	0.0255	0.0731	@1021	₩ £ 2895 \$ \			
D2 (Stream)	0.0475	0.0296	0.0642	0.234			
D3 (Ditch)	0.0098	0.0	0.0093	0.0153			
D4 (Pond)	0.0039	0.0767	0.0068	0,1,228			
D4 (Stream)	0.0073	<b></b>	> ~\0091 </td <td>© *0×0087 *\frac{1}{2}</td>	© *0×0087 *\frac{1}{2}			
D5 (Pond)	0.0043	0'0.08222	~~~0.00 <b>%</b> ©~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	0.1381			
D5 (Stream)	0.0123	<u>⊿</u> 0.00003 €	Q 0.0112	0' 0.0005"			
D6 (Ditch)	0.0024	~ 0.0020~ ×	% 0 <del>2.0</del> 117 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0.0206			
R1 (Pond)	0.0222	. 2414° .	Ø.0509 ×	Ø.4717			
R1 (Stream)	0.3096	0.1938	<b>≈</b> 0.46 <b>€</b>	0.4218			
R3 (Stream)	0.2749	0.20998	02949 \$	© 0.2 <b>№</b> 3			
R4 (Stream)	0.5823·Q*	0.5119	8 650 C	12400			

Table CP 9.2.5- 15: Spring cereals (2 × 150 g 4s./ha. BBCH 25-61); Waximum PEC and PEC

	JAU 6476-desthio	
Use pattern	Spring cedeals, 2 150 g a.s./ha	
J.	O Single application Y Y Y Multiple a	pplication
O		PEC _{sed}
FOCUS scenario		[µg/kg]
D1 (Ditch)	0.10196	1.4740
D1 (Stream)	0.0260 0.0530 0.0046 0.0645 0.0085	0.2748
D3 (Drien)	0.0047  0.0045	0.0112
DA(Dond)	$\langle \rangle = \langle \langle \rangle \rangle \langle \langle \rangle \rangle \langle \rangle \langle \rangle \langle \rangle \langle \rangle \langle $	0.1530
D4 (Fond) D4 (Stream) D5 (Pond)	0.007	0.0091
D5 (Pond)	0.0062 0.0969 0.0105	0.1555
D5 (Stream)	0.0062 0.0004 0.0105	0.0011
R4 (Stream	© 64738 × 57312 1.2860	1.7310

Step 4: The maximum PECs, values of prothioconazole and its metabolite JAU 6476-destio for relevant FOCUS Step 4 scenarios are given in the following tables including mitigation measures [i.e. spray drift buffer (SD) and runoff buffer (RO); as well as drift reduction (50, 75 or 90%)]. First, the higher application rate (2x 187.5 g a.s./ha) will be presented for winter and spring cereals and thereafter, the lower application rate (2x 150 g a.s./ha).

Winter cereals (2 × 187.5, BBCH 25-69): Maximum PEC_{sw} values for **Table CP 9.2.5-16:** prothioconazole at Step 4 after single and multiple applications

					Prothio	conazole			
				Winter	cereals, 2	$\times$ 187.5 g	a.s./ha	*	
			Single ap	plication		N		applicatio	
Buffer			PECsw	[µg/L]			₽ECsw	[µg/L]	
Width	Scenario			eduction	<i></i> ≥a	4	Ørift R	eduction	
& Type*		0%	50%	75%	<b>90</b> %	0% Ø	50%	75%	<b>30%</b>
* *	D1 (Ditch)	0.1697	0.0849	0.0424	0.0170	0.146	0.0700		0.0140
	D1 (Stream)	0.1523	0.0761	0.0381	0.0152	0.4469		50.0368	
	D2 (Ditch)	0.1721	0.0860	0.0430	0.0172	0.9×420 €	0.071 <b>6</b>	0.0355	0.0142
	D2 (Stream)	0.1915	0.0958	0.0499	0.0192	>0.168 <i>€</i> Ø	0.0843	0.9422	<b>3</b> 0.0169
	D3 (Ditch)	0.1709	0.0855	0.0427	0.0174	0.1399	<b>9.07</b> 00	<b>3.</b> 0350, 5	90.0140
	D4 (Pond)	0.0255	0.0128	O.0064		0.0325	0.0162	\$0.0081°	0.0032
10m	D4 (Stream)	0.1781	0.0890	0.0449	0,0478	<b>1</b> 460 C	$0.0730^{\circ}$	0.0365	950146
SD & RO	D5 (Pond)	0.0255	0.0128	0:0064	<b>~9,0</b> 026	0.0305	0.04\$3	0.0076	<b>®</b> .0030
	D5 (Stream)	0.1734	0.0\$67	.00434	, 0.017 <i>8</i>	0.1489	0.0744	<b>∜</b> 9.037 <b>2</b>	0.0149
	D6 (Ditch)	0.1688	& <del>0</del> 844 ¢		0.0169	0.1404	<b>%</b> 0.0702@	0.035	0.0040
	R1 (Pond)	0.0255	<b>⊙</b> 0.012 <b>8</b> %	0.0064	0.0032	<b>%</b> :02875		0.0077	₿0035
	R1 (Stream)	0.151%		0.0742		×0.1246	0.0742		<b>₹</b> 0.0742
	R3 (Stream)	0.2142	0,1207	<b>@</b> 1207	0.1200	0.1757	20 <u>9</u> 207	Ø.1207	0.1207
	R4 (Stream)	0.1\$20	∘0,0987	0.098	0.0987	0Q499	0.2499		0.2499
	D1 (Ditch)	<b>6</b> .0881	0.044			CO.0712	9//	0.0178	0.0071
	D1 (Stream)		0.0396	000198	<b>6</b> .0079	0.0748	0.0374	<b>2</b> 0187	0.0075
	D2 (Ditch)	0.0894	0.6447	0.0223		0.0922	0.0361		0.0072
	D2 (Stream)	0,00996	Ø.0498€		0.0000	0,0858	0.0420		0.0086
	D3 (Ditch)	<b>6</b> 0888		0.0222	<b>Q.0</b> 089	©.071	0.0356	0.0178	0.0071
• •	D4 (Pord)	0.017	0.0085	0.9043	9.0017	0.0214	0.0107	0.0054	0.0021
20m	D4 (Stream) 2	0.0926	0.0463	0.0232	0.0093	0.0743	0.0372	0.0186	0.0074
SD & RO	D (Pond)		0.0085	0.0043	0.0017	0.0201	0.0100	0.0050	0.0020
	(Stream)	<b>◎</b> .0902 ○	<i>V</i>	0.0225	00090	0.0758	0.0379	0.0189	0.0076
Ď	D6 (Divch)	0.0876	0.0438	00219	8.0088	0.0713	0.0357	0.0178	0.0071
	R1 (Pond)	0.0471	0.0085	0.0043	0.0049	0.0188	0.0096	0.0050	0.0022
	R1 (Stream)	. 911	©.0395 \	0.0388	0.0388	<b>©</b> .0634	0.0388	0.0388	0.0388
•	R3 (Stream) R4 (Stream)	,~9.1114; √0.07 <b>9</b> 0,		0.0625 0.0517		₹0.0894	0.0625	0.0625	0.0625
	R4 (Stream)	* 0.0 / <b>9</b> 1*	0.9517	- W	<i>y</i>	0.1311	0.1311	0.1311	0.1311
* SD and R	O denote správdi	rift- <b>and</b> rur	off buffer		F				
			y _o"		W.				
			,O.*		Ò				
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	" <u>*</u> * . 6	, A	~Q~						
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4 G	R4 (Speam) O denote spraydr								
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		,							
A 10 1	•								
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Spring cereals (2 × 187.5, BBCH 25-69): Maximum PEC_{sw} values for **Table CP 9.2.5-17:** prothioconazole at Step 4 after single and multiple applications

						conazole	^		
					cereals, 2		- 4.2		n
				plication		I	Multip®e a	applicatio	n '*
Buffer				[µg/L]			RECsw	[μg/L] Č	
Width	Scenario	00/		eduction	Ĉ,	00/	Jyriit K	eauction	
& Type*	D1 (D'; 1)	0%	50%	75%	0.0173	0% @		75%	. au
	D1 (Ditch) D1 (Stream)	0.1728 0.2034	0.0864 0.1017	0.0432	√0.01/3 ∀0.0203	0.20 <b>5</b> 2 0.1669	0.1026 0.0834	0,0513 00.0417	0.02 0.01
	D1 (Sitealit) D3 (Ditch)	0.2034	0.1017	0.030	0.0203	0.1009	0.0834		0.01
10m	D4 (Pond)	0.0255	0.0128	0.0064	0.0026	> 0.0261	0.013	0.0965	<b>©</b> 000
SD & RO	D4 (Stream)	0.1880	0.0940	₂ 0.0470	0.0188	0.1623	0,0812	<b>3</b> 0406	
	D5 (Pond)	0.0255	0.0128	0.0470	0.0	0.0338	0169 0.0820	\$0.0085	0.00
	D5 (Stream)	0.1826	0.0913	0.0457	0,0¥83	<b>J</b> 991639	00.0820		0,01
	R4 (Stream	0.1518	0.1032		0,1032	0.2098	0.2098	0.2098	<b>49</b> :20
	D1 (Ditch)	0.0898	0.6449	0.0224 ₀	,0.0090	0.1043	0.0521	0.0261	0.01
	D1 (Stream)	0.1058	\$.0529% 0.0443/	0.0264 0.0222	0.0196	0 <u>0</u> 0849 0:07112		0.0210 0.0478	
20m	D3 (Ditch) D4 (Pond)	0.0887	0.0085	0.0043	0.0089	0.017	0.03 <b>5</b> 0.0 <b>0</b> 86	0.0078	0 <b>29</b> 00 ≪ov 000
SD & RO	D4 (Folia) D4 (Stream)	0.0178	0.0083 9. <b>©</b> 489	© 0244	0.001	0.0827	0.0030	0.0207	0.00
	D5 (Pond)	0.0170	0.0085	0.004	0.0017	0.0223	0.0111	0.0056	0.00
	D5 (Stream)	0.0949	0.047\$	0.0237	0.0095	(0.083 <u>4</u>	0.0447	0.0209	0.00
	R4 (Stream	0.0789	0.0539	000539	<b>@</b> .0539	0.1005	0.1095	Ø21095	0.10
	D5 (Pond) D5 (Stream) R4 (Stream) denote spray dri								



le CP 9.2.5-			p 4 after s	single and	multiple	application	ons		or JAU 6	y° (
					JAU 647	6-desthio				
				Winter	cereals,	2 × 187.5	g a.s./ha	<b>y</b>	, W	
			Single ar	plication		N	Tultime a	pplicatio	n 🔻 🦠	Ş"
Buffer				μg/L]			RECow	[µg/L]		r Ön
Width	Scenario			eduction			Prift R	eduction		W.
& Type*	200111110	0%	50%	75%	<b>99%</b>	0% Ø	50%	75%	Ø8% .	
J I	D1 (Ditch)	0.0057	0.0057	0.0057	. 0 0057	0.031	0.0312	.09312	0.0312	
	D1 (Stream)	0.0061	0.0040	0.003%	0.0037	0.0498	0.0198	$0.0198^{\circ}$	0.0198	
	D2 (Ditch)	0.0362	0.0362	0.0362	0.0362	0.4388	₀ 0.1388	0.1388	0.1988	L
	D2 (Stream)	0.0233	0.0233	0.0233	0.0233	<b>&gt;</b> 0.088 <i>7</i> Ø	[™] 0.088♥	0 0887	<b>@</b> 0887	W ^v
	D3 (Ditch)	0.0018	0.0009	0.0004	0.000	0.0016	0,0008	<b>3</b> 0004 _×	0.0002	V
	D4 (Pond)	0.0030		0.001	0.0012	0.6052	0035	0.0032	0.0029	
10m	D4 (Stream)	0.0051	0.0051	0.0054	0,0951	<b>6</b> 90122 (	≫0.0122 °	1 0.042/2	0,0122	L, °
SD & RO	D5 (Pond)	0.0033	0.0016	0.0008	~0,000 <u>3</u>	0.0060	0.0030	0.0015	<b>6</b> .0006	<b>(</b> )
	D5 (Stream)	0.0030	0.0015	0.0007			0.0014	0.0014		
	D6 (Ditch)	0.0004	9.0002	0.0002	0.0002			0.0000	0.0007	
	R1 (Pond)		)0.010 <b>%</b> 0.1830		0.0094	0:0298 0.2909	0.02 <b>6%</b> 0.2 <b>0</b> 09	0.0252	0g9243 ≤0.2909	
	R1 (Stream) R3 (Stream)	0.1830	0.1830	0.1830	0.1830 0.1595	0.1582			<b>30.2909 30.1582 30.1582 30.2909 30.1582</b>	
	R4 (Stream)	0.1582 0.8435	0.3435	0.3435	0.158 <b>2</b> ) 0.3495	0.1082	04549≥	9.1582 0.4549	0.1382	
	D1 (Ditch)	©.0057	0.0037	0.9057	0.0057	(0.0312		0.0312	0.0312	
	D1 (Stream)	0.0041	0.0037	0.0037	9.0037	0.0408	0.0362	0.0312	0.0312	
	D1 (Stream)	0.0362	0.0362	Ø.03624			0.07388	0.1388	0.1388	
	D2 (Stream)		≈0.0233€		0.0233	Ø 0887	08870	0.0887	0.0887	
		®.000g		0.00002	<b>20.001</b>	0.0008	0.0004	0.0002	< 0.001	
	D4 Pond)	0.0020	0.0014	0.0012	30.001 dz	0.0038	0.0033	0.0030	0.0029	
20m	D4 (Stream)	0,0051	<b>6.0</b> 051	0.0051	0.00	0 <b>\$</b> \frac{1}{2}22	0,0122	0.0122	0.0122	
SD & RO	95 (Pond)	0.0022 §		0.0005	0.0002		√0.0019	0.0010	0.0004	
2		©0.001 <i>6</i> ©	/	0.0004	<b>©</b> 00003	0.001 <i>4,</i>	0.0014	0.0014	0.0014	
Ò	D6 (Ditch)	0.0002	0.0002	0,0002	0.0002	0.0000	0.0007	0.0007	0.0007	
	R1 (Pond	0.0069	<b>10</b> 0057	0.0051	0.0047	0.0758	0.0138	0.0128	0.0122	
	R1 (Stream)	0956	0.0956	0.0956	0.0956	<b>⊕</b> .1523 <b>&gt;</b> 0.0819	0.1523	0.1523	0.1523	
•	R3 (Stream) R4 Stream)	0.10000	0.0849	0.0819	0.0819	AI I	0.0819	0.0819	0.0819	
	K4 (Stream)	0.1800	04800	W:1900C	0.1800	0.2386	0.2386	0.2386	0.2386	
* SD and RO	deaote spany dr	ift-cand run	off buffer		Ş					
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* SD and RO	denote span dr	ift and run								

Spring cereals (2 × 187.5, BBCH 25-69): Maximum PEC_{sw} values for JAU 6476-Table CP 9.2.5- 19: desthio at Step 4 after single and multiple applications

		JAU 6476-desthio  Spring cereals, 2 × 187.5 g a.s./ha  Single application  Multiple application									
				Spring	cereals, 2	2 × 187.5 g			n Sonov		
			Single ap	plication		N	Aultipoe a	applicatio	n 🤊 🦠		
Buffer			<b>PECsw</b>	[µg/L]			<b>REC</b> sw	[μg/L] $^{\circ}$	Z Z		
Width	Scenario			eduction	<i></i> >.		Prift R	eductión			
& Type*		0%	50%	75%	90%	0% ₡	× 50%	75%	<b>30</b> %		
	D1 (Ditch)	0.0186	0.0118	0.0118	@0.0118	0.0525	0.0525	.090525	0.0525		
	D1 (Stream)	0.0075	0.0075	0.0075	0.0075	0.0\$28	0.0328	0.0328	0.0308		
	D3 (Ditch)	0.0008	0.0004	0.0002	< 0.001	0.0014	_≫ 0.000 <b>7</b> \$	0.0004	0.0001		
10m	D4 (Pond)	0.0052	0.0025	0.0035	0.0013	<b>∞</b> 0.0083©	[₹] 0.006¥	0.0054	<b>@</b> .0050		
SD & RO	D4 (Stream)	0.0061	0.0061	Q.0061	0.0061	0.0210	0.00210	<b>3</b> 0210	0.0210		
	D5 (Pond)	0.0048	0.0023	@:0012@	0.0005	0.00080	0039	0.0020 0.001/5	ገ በበበበዩ		
	D5 (Stream)	0.0031	$0.0016_{4}$	0.0008	0.0005	Ø028 °	Ď0.0015 ^{"©}	0.001/5	0,0015		
	R4 (Stream	0.2783	0.27&3	0.2783	0.2783	0.2613	0.26 $$3$	0.2613	© .2613		
	D1 (Ditch)	0.0118	0.01/18	0.0118	7.0.011 <b>8</b>	0.0555	0.9525	Ø.052 <b>5</b> c	0.0528		
	D1 (Stream)	0.0075	_0~60075 <b>○</b>	(/ 0 ⁷ 0075/	0.0075	0.0328	£0.0328@	0.0328	0.0928		
	D3 (Ditch)	0.0004	@.0002 [%]	0.000	<0.001	<b>@</b> 0007£		0.0002	<b>69</b> .001		
20m	D4 (Pond)	0.00340	0.0002	0.0014	~ 0.0013.4	0.006	0.0056	0.00052	<b>0</b> .0049		
SD & RO	D4 (Stream)	0.0001	0.0001	<b>Q 0</b> 061	0.006 0.0003	0.0210	0.0026 0.0026	6.0210	0.0210		
	D5 (Pond)	0.0032	0.0016	ິ ປີ.0008∂ີ	0.0003	0;0052	J.0026	0.0013	0.0005		
	D5 (Stream)	0%0016 _©	0.000	0.0005	0.0005	Ø.0015	0.0045	0.0015	0.0015		
	R4 (Stream	∂0.1458Ô	0.1458	0.12458	0.1458	0.1369	0.1369	Ø21369	0.1369		
	D5 (Stream) R4 (Stream RO denote spray)										

Table CP 9.2.5- 20: Winter cereals (2 × 150, BBCH 25-61): Maximum PEC_{sw} values for prothioconazole at Step 4 after single and multiple applications

					Prothio	conazole				
		Winter cereals, 2 × 150 g a.s./ha								
			Single ap		,		AL.V	application	n s	
Buffer			PECsw	-		PFC lug/ll &				
	Scenario		Drift Re				Prift R	eduction		
& Type*	~ 201111110	0%	50%	75%	90%	0% @	50%	75%	290%	
1 jpc	D1 (Ditch)	0.1358	0.0679	0.0340	_e 0.0136	0.112	0.0560	0280 ×	ASU	
	D1 (Stream)	0.1220	0.0610		0.0122	0.1473	0.0587	0.0293	0.0.07	
	D2 (Ditch)	0.1377	0.0688	0.0344	0.0122	0.136	%0.056 <b>%</b>	0.0284	0.0114	
	D2 (Stream)	0.1534	0.0767	0.03-84	0.0153	9.1346 [©]		0.0337	<b>©</b> .0135	
	D3 (Ditch)	0.1368	0.0684	0.0342	0.0137		0,0060	20280°	0.0112	
	D4 (Pond)	0.0203	0.0102	Ø:0051@		0.00060	a 130 s	©0 0065	0.0026	
10m	D4 (Stream)	0.1426	0.0713	0.035	0.043	<b>1</b> 166	0.0583	0.0292	Q 0117	
SD & RO	D5 (Pond)	0.0203	0.0102	// <i>//∕∕∕</i> ≥	0.0020	0.0244	0.0122	0.0061	<b>3</b> .0024	
	D5 (Stream)	0.1389	0.0694	\$0. <b>0</b> 347	Ø.0139 [©]	0.1189	020594	<b>%</b> 0297		
	D6 (Ditch)	0.1350	0.0675	(Ø.033&		0.1923		0.0280	0.0012	
	R1 (Pond)	0.0203	_ <b>0</b> .0102 [©]	0.005	0.0025	<b>6</b> 00267		0.0074	<b>@</b> 0035	
	R1 (Stream)	0.1217	90.060°	0.0594	0.0594	0.099	0.0594	0.0594	<b>∞</b> 0.0594	
	R3 (Stream)	0.1716	0.0965	Ø965 a	0.0965)	0.1403	<b>Q.0</b> 965	\text{\text{\text{0}}.0965\text{\text{\text{\text{0}}}}	0.0965	
	R4 (Stream)	0.129/8	0.0790	(Ø.0790)	0.0 <b>790</b>	0.4894	0.4894	0.4894	0.4894	
	D1 (Ditch)	0%0705 _@	0.0353	0.0 <u>1</u> 76	0.0071	.0.0570 [©]	0.0285	0.0143	0.0057	
		©0.0633	0.033	0.0058	0.0063	0.0598	0.0299	ø <b>2</b> 0150	0.0060	
	D2 (Ditch) &		0.0957	Ø0179	Ç0.00 <b>7</b> ₺^	0.0578	0,0289~	0.0145	0.0058	
	D2 (Stream)	0.0796	<b>3</b> 0398 (	50.01 <b>%</b>	0,0000	© 0686 © 0570	0.03430	0.0172	0.0069	
	D3 (Ditch)		<b>₹</b> 0.0355.	0.0458	Q:0071	@.057g	∥0.02 <b>8</b> 3	0.0143	0.0057	
	D4 (Pord)	0.013 م	0.0068	0.0034	<b>3</b> 0.0014	0.0171	0.0085	0.0043	0.0017	
20m	D4 (Stream)	"0.0 <b>740</b> "	0.6370		0.007	0.9595	0,0297	0.0149	0.0059	
SD & RO	D5 (Pond)	0.0736	\$0,0068 ₀		0.0014	<b>Ø</b> :0161 ¥	$\sqrt{0}.0080$	0.0040	0.0016	
	Do (Stream)	©0721 (	00.03 <b>60</b> €	0.0180		0.0606	0.0303	0.0152	0.0061	
Ĉ	D6 (Dich)	0.070	0.0351	0.0175	©.0070 °	0.0571	0.0286	0.0143	0.0057	
	R1 (Pond)		0.0068	9.0034	0.00	0.0975	0.0090	0.0047	0.0022	
KG .	R1 (Stream)	0.632	0.0316	0.03	0.0311	₫0507	0.0311	0.0311	0.0311	
* y	R3 (Stream)	<b>10</b> .08912		0.0500	©0.0500	k.	0.0500	0.0500	0.0500	
	R4 (Speam)	0.0632	0.0414	0.0414	0.0414	0.2564	0.2564	0.2564	0.2564	
* SD and I	RO denote spray	driftandı	rupoff buff							
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Spring cereals (2 × 150, BBCH 25-61): Maximum PEC_{sw} values for prothioconazole Table CP 9.2.5- 21: at Step 4 after single and multiple applications

D4 (Pond)			Prothioconazole								
PECsw			Spring cereals, 2 × 150 g a.s./ha								
PECsw				Single an		, ,	Multiple application				
Type*    D1 (Ditch)   0.1383   0.0691   0.0346   0.0138   0.1642   0.0821   0.0410   0.01	Ruffor				_		P&C Ina/I 1				
Type*    D1 (Ditch)   0.1383   0.0691   0.0346   0.0138   0.1642   0.0821   0.0410   0.01		Scenario					Is the Company of the				
D1 (Ditch)   0.1383   0.0691   0.0346   0.0138   0.1642   0.0821   0.0410   0.01     D1 (Stream)   0.1629   0.0815   0.0407   0.0163   0.132   0.0666   0.0338   0.01     D3 (Ditch)   0.1366   0.0683   0.0342   0.0137   0.118   0.0559   0.0280   0.01     D4 (Pond)   0.0203   0.0102   0.0051   0.0020   0.0247   0.0124   0.062   0.00     D4 (Stream)   0.1506   0.0753   0.0377   0.0154   0.1241   0.0636   0.0318   0.01     D5 (Pond)   0.0203   0.0102   0.0051   0.0020   0.0271   0.0135   0.0068   0.00     D5 (Stream)   0.1462   0.0731   0.0365   0.0464   0.1309   0.0654   0.0327   0.01     R4 (Stream   0.1216   0.0825   0.0825   0.0825   0.4794   0.4791   0.4791   0.4791   0.4791     D1 (Ditch)   0.0718   0.0359   0.0180   0.0072   0.0835   0.0418   0.0209   0.00     D1 (Stream)   0.0846   0.0423   0.0242   0.0075   0.0669   0.0265   0.0442   0.000     D3 (Ditch)   0.0709   0.0355   0.0177   0.0071   0.0569   0.0265   0.0442   0.00     D4 (Pond)   0.0136   0.0068   0.0344   0.0143   0.0064   0.0163   0.0064   0.0068     D4 (Stream)   0.0782   0.0391   0.0196   0.0078   0.0648   0.0324   0.0162   0.00		Scenario									
D1 (Ditch)   0.1383   0.0691   0.0346   0.0138   0.1642   0.0821   0.0410   0.01     D1 (Stream)   0.1629   0.0815   0.0407   0.0163   0.132   0.0666   0.0338   0.01     D3 (Ditch)   0.1366   0.0683   0.0342   0.0137   0.118   0.0559   0.0280   0.01     D4 (Pond)   0.0203   0.0102   0.0051   0.0020   0.0247   0.0124   0.062   0.00     D4 (Stream)   0.1506   0.0753   0.0377   0.0154   0.1241   0.0636   0.0318   0.01     D5 (Pond)   0.0203   0.0102   0.0051   0.0020   0.0271   0.0135   0.0068   0.00     D5 (Stream)   0.1462   0.0731   0.0365   0.0464   0.1309   0.0654   0.0327   0.01     R4 (Stream   0.1216   0.0825   0.0825   0.0825   0.4794   0.4791   0.4791   0.4791   0.4791     D1 (Ditch)   0.0718   0.0359   0.0180   0.0072   0.0835   0.0418   0.0209   0.00     D1 (Stream)   0.0846   0.0423   0.0242   0.0075   0.0669   0.0265   0.0442   0.000     D3 (Ditch)   0.0709   0.0355   0.0177   0.0071   0.0569   0.0265   0.0442   0.00     D4 (Pond)   0.0136   0.0068   0.0344   0.0143   0.0064   0.0163   0.0064   0.0068     D4 (Stream)   0.0782   0.0391   0.0196   0.0078   0.0648   0.0324   0.0162   0.00			0%	50%	75%	90%	0%	50%	75%	3909	
D1 (Stream) 0.1629 0.0815 0.0407 0.0163 0.1\$32 0.0666 0.033\$ 0.01  D3 (Ditch) 0.1366 0.0683 0.034 0.0137 0.118 0.0559 0.0280 0.01  D4 (Pond) 0.0203 0.0102 0.0051 0.0020 0.0247 0.0124 0.0062 0.00  D5 (Pond) 0.0203 0.0102 0.0051 0.0020 0.0247 0.0124 0.0062 0.00  D5 (Stream) 0.1462 0.0731 0.0365 0.0146 0.7309 0.0654 0.0327 0.01  R4 (Stream 0.1216 0.0825 0.0825 0.4794 0.4791 0.4791 0.4791 0.4791 0.4791  D1 (Ditch) 0.0718 0.0359 0.0180 0.0072 0.0855 0.4794 0.4791 0.4791 0.4791  D1 (Stream) 0.0846 0.0423 0.0242 0.0055 0.0679 0.0340 0.0100 0.00  D3 (Ditch) 0.0709 0.0355 0.0177 0.0071 0.0569 0.0265 0.0422 0.00  D4 (Stream) 0.0136 0.0068 0.0034 0.0072 0.0855 0.0081 0.0042 0.00  D4 (Pond) 0.0136 0.0068 0.0034 0.0071 0.0569 0.0265 0.0042 0.00  D4 (Stream) 0.0782 0.0091 0.0196 0.0078 0.0048 0.0324 0.0162 0.00		D1 (Ditch)	0.1383	0.0691	0.0346	Ø.0138	0.1642	0.0821	0.0410	0.01	
D3 (Ditch)					0.0407		0.1332	<b>₽</b> .0666€	√0.033 <b>\</b>	0.01	
D4 (Pond)	10	D3 (Ditch)	0.1366	0.0683	0.0342		20×1118	©ð.0559 ั	0.0280	0201	
D4 (Stream)	10111		0.0203	0.0102	0,0051		90.0247,	0.01224	000062	<b>9</b> .00	
D5 (Pond)   0.0203   0.0102   0.0031   0.0026   0.0271   0.0135   0.0068   0.140     D5 (Stream)   0.1462   0.0731   0.0366   0.0146   0.1309   0.0654   0.0327   0.01     R4 (Stream   0.1216   0.0825   0.0825   0.0825   0.4794   0.4791   0.4791   0.4791   0.4791   0.4791   0.4791   0.4791   0.4791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.04791   0.0		D4 (Stream)	0.1506	0.0753	<b>6</b> 0377	Ø.015¥Ĵ	0.1 <b>2</b> %1			0.01	
R4 (Stream 0.1216 0.0825 0.0825 0.4794 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.4791 0.0791 0.0835 0.4794 0.0835 0.4794 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.0991 0.099	KO .	D5 (Pond)	0.0203	0.0102	0.0051					0.00	
D1 (Ditch)		D5 (Stream)			0.0366				0.0327	<b>Q</b> 1	
D1 (Stream)		R4 (Stream	0.1216		0.0825	1/// // // // //	⁹ 0.479√		<u> </u>	$_{0.47}$	
D4 (Pond)   0.0136   0.0068   0.6034   0.0014   0.0163   0.0081   0.0041   0.00 D4 (Stream)   0.0782   0.0391   0.0196   0.0078   0.0648   0.0324   0.0162   0.00					<b>Q</b> 0180 ×				(// n ⁻		
D4 (Pond)   0.0136   0.0068   0.6034   0.0014   0.0163   0.0081   0.0041   0.00 D4 (Stream)   0.0782   0.0391   0.0196   0.0078   0.0648   0.0324   0.0162   0.00		` /	0.0846	000423	0.0242	0.0085				0.00	
SD & D4 (Pond) 0.0136 0.0068 0.0034 3.0014 0.0163 0.0681 5.0041 0.00				∂ূัØ.0355 ^{°©}	0.0177	0.0071	<b>3</b> 9.0569 (	0.0285		. Ø <u>.</u> 00	
$_{RO}$   D4 (Stream)   0.0 $_{\odot}$   0.0 $_{\odot}$   0.0196 $_{\odot}$ 0.00 $_{\odot}$   0.0 $_{\odot}$   0.0324 $_{\odot}$ 0.0162 $_{\odot}$ 0.00	8 2				0,0034	<b>9</b> .0014 C	0.0163	0:2081	0.0041		
D5 (Pond)	RO	, ,			0.0196	0.0078	((// // *	₽ ₀	(/ ))		
D5 (Stream) 9.0759 0.0380 0.0690 0.0667 0.0667 0.0334 0.0267 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025 0.025	ito	D5 (Pond)	0.01/36	0.0068	0.0034	0.0014	Q.0178 _%	<b>©</b> .008 <b>9</b>	0.0045	0.00	
R4 (Stream \$0.063,1 0.0431 0.0431 0.0431 0.2501 0.2501 0.2501 0.25  *SD and RO denote spray drift, and rumpff buffer  **The strength of the st		D5 (Stream)	<b>₽</b> 0759 €	0.0386	0.0000	0.0076	0.0667	0.0334	0.90167		
SD and RO denote spray drifts and rusing if buffer in the state of the		R4 (Stream	<b>&gt;</b> 0.063₁1	0.04391	0.0431	<b>49</b> .043 <b>1</b>	°0.250¥	0.2501	<b>Q</b> .2501	0.25	
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**Table CP 9.2.5-22:** Winter cereals (2 × 150, BBCH 25-61): Maximum PEC_{sw} values for JAU 6476desthio at Step 4 after single and multiple applications

	JAU 6476-desthio  Winter cereals, 2 × 150 g a.s./ha  Single application  Multiple application								
		Single an	plication		2 × 150 g a.s./ha  Multiple application  RECsw [µg/L]  Prift Reduction				
			[µg/L]						
Scenario			eduction	۵.	Prift Reduction				
	0%	50%	75%	20%	0% Ø	<b>50%</b>	75%	20%	
1 (Ditch)	0.0028	0.0028	0.0028	0.0028	0.01	0.0173	_0.0173 ×	0.0173	
1 (Stream)	0.0044	0.0027	0.0019	90.0018	0.0410	0.0110	⊜0.011 <i>0</i> %	0.0120	
2 (Ditch)	0.0255	0.0255	0.025	0.0255	0.1021	0.102 <i>t</i> \$	0.1021	0.1021	
2 (Stream)	0.0160	0.0160		0.0160	> 0.0642		0,0642	<b>.0</b> .0642.	
3 (Ditch)			0.0004	0.0001			<b>@</b> :0003	, 0.00 <b>0)</b>	
			0.0010	0.0009				0.0021	
			0.0038	0.0938				0,0091	
` ′								<b>3</b> .0005©	
								0.000	
								0.0005	
			/ / /					Ø,0177 √0.2108	
	A( //							0.1215	
	0.1213						0.1213	0.1213	
	4 0079.					-		0.0173	
	0.0020		/\s\n		37 4	( ) ( )		0.0173	
		0.000						0.1021	
								0.0642	
					0.0006	0.0003		< 0.0012	
					0.0028	0.0024		0.0021	
								0.0091	
				0.0002	0.0031			0.0003	
o (Stream)	<b>©</b> .0012		റ ര്ന്മ്ദ	<b>അ</b> വാ -	<u>ື່</u> ທີ່ 0010	0.0008	0.0008	0.0008	
6 (Dikh)	[©] 0.00 <b>@</b> 3	0.0002	Ø Ø 002 g	30.0002°	0.0008	0.0005	0.0005	0.0005	
1 (Pond) 👟	0.0654	000044	9.0040	0.0037	0.09117	0.0101	0.0093	0.0089	
1 (Stream)		<b>ॐ</b> .0732 ⟨	0.0732	0.0732	<b>@</b> .1104	0.1104	0.1104	0.1104	
3 (Stream)		0.0629	0.0629	0.0629	<b>≫</b> 0.0629			0.0629	
4 (Stream) "	Ø0.13 <b>87</b>	0.1387	387 C		0.2444	0.2444	0.2444	0.2444	
denote spray	drift@ind ru	moff buffe							
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	1 (Stream) 2 (Ditch) 2 (Stream) 3 (Ditch) 4 (Pond) 4 (Stream) 5 (Pond) 5 (Stream) 6 (Ditch) 1 (Pond) 1 (Stream) 4 (Stream) 1 (Ditch) 1 (Stream) 2 (Ditch) 2 (Stream) 3 (Ditch) 4 (Pond) 4 (Stream) 6 (Ditch) 1 (Stream) 6 (Stream) 6 (Ditch) 1 (Stream) 6 (Stream) 6 (Ditch) 1 (Stream) 6 (Ditch)	1 (Ditch) 0.0028 1 (Stream) 0.0044 2 (Ditch) 0.0255 2 (Stream) 0.0160 3 (Ditch) 0.0014 4 (Pond) 0.0024 4 (Stream) 0.0026 5 (Stream) 0.0026 5 (Stream) 0.0024 6 (Ditch) 0.0003 1 (Pond) 0.0099 1 (Stream) 0.1400 3 (Stream) 0.1215 4 (Stream) 0.2449 1 (Ditch) 0.028 1 (Stream) 0.0245 2 (Stream) 0.0028 1 (Pond) 0.0016 1 (Pond) 0.0016 1 (Pond) 0.0003	1 (Ditch)	1 (Ditch)	1 (Ditch)	1 (Ditch)	1 (Ditch)	(Ditch)	

Table CP 9.2.5- 23: Spring cereals (2 × 150, BBCH 25-61): Maximum PEC_{sw} values for JAU 6476-desthio at Step 4 after single and multiple applications

		JAU 6476-desthio									
		Spring cereals, 2 × 150 g a.s./ha									
			Single ap	plication		Multipe application 🐣 🕏					
Buffer				$[\mu g/L]$		RECsw [µg/L]					
Width	Scenario		Drift Ro	eduction	Č.	Prift Reduction					
& Type*		0%	50%	75%	90%	0% @	× 50%	75%	90%		
	D1 (Ditch)	0.0148	0.0078	0.0058	0.0058	0.03₽₩	0.0344	_0°0344_	0.0344		
	D1 (Stream)	0.0051	0.0037		0.0037	0.0\$16	0.0216	Õ0.0216∜	<i>~</i> .		
	D3 (Ditch)	0.0007	0.0003	0.0002	< 0.001	0.6011	>0.0006		0.0001		
10m	D4 (Pond)	0.0041	0.0020	0.0001	0.0009	<b>№</b> 0.006 <i>7</i> ©	0.0033	0,0025	<b>Ø</b> .0022		
SD & RO	D4 (Stream)	0.0045	0.0045	0.0045	0.0045		0,0000		0.0100		
	D5 (Pond)	0.0038	0.0019	Ø.0009@		0.0064		\$0.00 <u>1</u> 5 '	0.0006		
	D5 (Stream)	0.0025	0.0013	0.000	0.9904		ÖÖ.0011 °C	0.001/1	0,0011		
	R4 (Stream	0.2155	0.2155	0.2135	<b>155</b>	0.5849	0.5849	0.5849	<b>₩</b> .5849@		
	D1 (Ditch)	0.0081	0.0058	0.0058			0.0344	Ø.0344 <u>/</u>			
SD & RO	D1 (Stream)	0.0037	0.0037	(Ø.003 <b>%</b> )	0.003/	0.0216	Ø:0216@	0.0246	$0.0\overline{2}16$		
	D3 (Ditch)	0.0003	©.0002	<0.001	<0.001		, 0.00 <b>6</b>	0.0001	<b>\$9</b> .001		
	D4 (Pond)	0.0027		0.0010		0.004	0.0027	0.00024			
	D4 (Stream)	0.0045	0.0045		90.004		<b>9.9</b> 100	Ø.0100 [°]	0.0100		
	D5 (Pond)	0.0025	00012	0.000	* */	0.9041	0.0020	( )	0.0004		
	D5 (Stream)	<b>Ø</b> Ø013 _€		- ~ /	0.0004	LO.0011		0.0011	0.0011		
	R4 (Stream	0.1129	0.1139	0.0129	0.1129	0.3064	0.3964	<b>J</b> \$\text{\$3064}	0.3064		

^{*} SD and RO denote spray drift- and runoff buffer

# For information on the fate and behaviour in air please refer to MC.

A Section 7, data point 7.3.

# Route and rate of degradation in air and transport via air

For information on route and rate degradation in air and transport via air please refer to MCA Section 7, data points 7,31 and

short half-life in air no PEC calculations are required. Due to the low volatility

# Estimation of concentrations for other routes of exposure

There are no other routes of exposure if the product is used according to good agricultural practice. Therefore no further estimations are considered necessary.