



EUROPEAN COMMISSION
HEALTH AND CONSUMERS DIRECTORATE-GENERAL

Directorate E – Safety of the food chain
Unit E.3 - Chemicals, contaminants, pesticides

Quizalofop-P

SANCO/169/08 final (revised)

9 July 2010¹

Review report for the active substance **Quizalofop-P**

Finalised in the Standing Committee on the Food Chain and Animal Health at its meeting on
23 January 2009
in view of the inclusion of Quizalofop-P in Annex I of Directive 91/414/EEC

1. Procedure followed for the re-evaluation process

This review report has been established as a result of the re-evaluation of Quizalofop-P, made in the context of the work programme for review of existing active substances provided for in Article 8(2) of Directive 91/414/EEC concerning the placing of plant protection products on the market, with a view to the possible inclusion of this substance in Annex I to the Directive.

Commission Regulation (EC) No 451/2000⁽²⁾ laying down the detailed rules for the implementation of the second and third stages of the programme of work referred to in Article 8(2) of Council Directive 91/414/EEC, as last amended by Regulation (EC) No 1490/2002⁽³⁾, has laid down the detailed rules on the procedure according to which the re-evaluation has to be carried out. Quizalofop-P is one of the existing active substances covered by this Regulation.

In accordance with the provisions of Article 4 of Regulation (EC) No 451/2000, Nissan Chemical Europe SARL and Chemtura Europe Limited notified to the Commission of their wish to secure the inclusion of the active substance Quizalofop-P in Annex I to the Directive.

Under Annex I to Regulation (EC) No 1490/2002 Finland was designated by the Commission as rapporteur Member State to carry out the assessment of Quizalofop-P on the basis of the dossiers submitted by the notifiers.

In Regulation (EC) No 1490/2002 the Commission specified furthermore that the deadline for the notifier with regard to the submission to the rapporteur Member States of the dossiers required under Article 7(2) of Regulation (EC) No 1490/2002, as well as for other parties with regard to further technical and scientific information was 30 November 2004.

¹ On 9 July 2010 the Standing Committee on Food Chain and Animal Health has taken note of an amended version of the review report after the finalisation of the reference specification referred to in point 7 of this report.

² OJ No L 55, 29.02.2000, p.25.

³ OJ No L 224, 21.8.2002, p.23. Regulation as last amended by Regulation (EC) No 1095/2007 (OJ L 246, 21.09.2007, p. 19).

The notifiers submitted by the deadline a dossier to the rapporteur Member State, which did not contain substantial data gaps, taking into account the supported uses. Therefore Nissan Chemical Europe SARL and Chemtura Europe Limited were considered to be the main data submitters.

In accordance with the provisions of Article 10(1) of Regulation (EC) No 1490/2002, Finland submitted on 1 February 2007 (variant quizalofop-P-ethyl) and 2 May 2007 (variant quizalofop-P-tefuryl) to the EFSA the report of their examination, hereafter referred to as the draft assessment report, including, as required, a recommendation concerning the possible inclusion of Quizalofop-P in Annex I to the Directive. Moreover, in accordance with the provisions of Article 10(2) of Regulation (EC) 1490/2002, the Commission and the Member States received also the summary dossier on Quizalofop-P from the notifiers.

In accordance with the provisions of Article 11 of Regulation (EC) No 1490/2002, the EFSA organised the consultation on the draft assessment report by all the Member States as well as by Nissan Chemical Europe SARL and Chemtura Europe Limited being the main data submitters, on 24 October by making it available.

The EFSA organised an intensive consultation of technical experts from a certain number of Member States, to review the draft assessment report and the comments received thereon (peer review).

In accordance with the provisions of Article 11 (4) of Regulation 1490/2002 the EFSA sent to the Commission its conclusion on the risk assessment [Conclusions regarding the peer review of the pesticide risk assessment of the active substance Quizalofop-P (finalised 26 November 2008)⁴]. This conclusion refers to background document A (draft assessment report) and background document B (EFSA peer review report).

In accordance with the provisions of Article 12 of Regulation (EC) No 1490/2002, the Commission referred a draft review report to the Standing Committee on the Food Chain and Animal Health, for final examination. The draft review report was finalised in the meeting of the Standing Committee on 23 January 2009.

The present review report contains the conclusions of the final examination by the Standing Committee. Given the importance of the conclusion of the EFSA, and the comments and clarifications submitted after the conclusion of the EFSA (background document C), these documents are also considered to be part of this review report.

2. Purposes of this review report

This review report, including the background documents and appendices thereto, has been developed and finalised in support of the Directive **2009/37/EC**⁵ concerning the inclusion of Quizalofop-P in Annex I to Directive 91/414/EEC, and to assist the Member States in decisions on individual plant protection products containing Quizalofop-P they have to take in accordance with the provisions of that Directive, and in particular the provisions of article 4(1) and the uniform principles laid down in Annex VI.

3 EFSA Scientific Report (2008) 205.

⁵ OJ No L 104, 24.4.2009, p.23

This review report provides also for the evaluation required under Section A.2.(b) of the above mentioned uniform principles, as well as under several specific sections of part B of these principles. In these sections it is provided that Member States, in evaluating applications and granting authorisations, shall take into account the information concerning the active substance in Annex II of the directive, submitted for the purpose of inclusion of the active substance in Annex I, as well as the result of the evaluation of those data.

In accordance with the provisions of Article 13 of Regulation (EC) No 1490/2002, Member States will keep available or make available this review report for consultation by any interested parties or will make it available to them on their specific request.

The information in this review report is, at least partly, based on information which is confidential and/or protected under the provisions of Directive 91/414/EEC. It is therefore recommended that this review report would not be accepted to support any registration outside the context of Directive 91/414/EEC, e.g. in third countries, for which the applicant has not demonstrated to have regulatory access to the information on which this review report is based.

3. Overall conclusion in the context of Directive 91/414/EEC

The overall conclusion from the evaluation is that it may be expected that plant protection products containing Quizalofop-P will fulfil the safety requirements laid down in Article 5(1)(a) and (b) of Directive 91/414/EEC. This conclusion is however subject to compliance with the particular requirements in sections 4, 5, 6 and 7 of this report, as well as to the implementation of the provisions of Article 4(1) and the uniform principles laid down in Annex VI of Directive 91/414/EEC, for each plant protection product containing Quizalofop-P for which Member States will grant or review the authorisation.

Furthermore, these conclusions were reached within the framework of the uses which were proposed and supported by the main data submitter and mentioned in the list of uses supported by available data (attached as Appendix II to this review report).

Extension of the use pattern beyond those described above will require an evaluation at Member State level in order to establish whether the proposed extensions of use can satisfy the requirements of Article 4(1) and of the uniform principles laid down in Annex VI of Directive 91/414/EEC.

The following reference values have been finalised as part of this re-evaluation:

Quizalofop-P-ethyl

ADI 0,009 mg/Kg bw/day

ARfD Not necessary

AOEL 0,01 mg/Kg bw/day

Quizalofop-P-tefuryl

ADI 0,013 mg/Kg bw/day

ARfD 0,1 mg/Kg bw/day

AOEL 0,01 mg/Kg bw/day

With particular regard to residues, the review has established that the residues arising from the proposed uses, consequent on application consistent with good plant protection practice, have no

harmful effects on human or animal health. The highest Theoretical Maximum Daily Intake (TMDI; excluding water) for a 60 kg adult is 23 % of the Acceptable Daily Intake (ADI), based on the WHO Cluster diet E.

Additional intake from water is not expected to give rise to intake problems.

Estimates of acute dietary exposure of adults and toddlers revealed that the Acute Reference Dose (ARfD) would not be exceeded (UK model – 37 % for toddlers).

The review has also concluded that under the proposed and supported conditions of use there are no unacceptable effects on the environment, as provided for in Article 4 (1) (b) (iv) and (v) of Directive 91/414/EEC, provided that certain conditions are taken into account as detailed in section 6 of this report.

4. Identity

The identity of Quizalofop-P is given in Appendix I.

At the time of the evaluation no FAO specification was allocated.

The review has established that for the active substance notified by the main data submitter none of the manufacturing impurities considered are, on the basis of information currently available, of toxicological or environmental concern.

5. Endpoints and related information

In order to facilitate Member States, in granting or reviewing authorisations, to apply adequately the provisions of Article 4(1) of Directive 91/414/EEC and the uniform principles laid down in Annex VI of that Directive, the most important endpoints were identified during the re-evaluation process. These endpoints are listed in the conclusion of the EFSA, and at section 3 of this report.

6. Particular conditions to be taken into account on short term basis by Member States in relation to the granting of authorisations of plant protection products containing Quizalofop-P

On the basis of the proposed and supported uses (as listed in Appendix II), the following particular issues have been identified as requiring particular and short term attention from all Member States, in the framework of any authorisations to be granted, varied or withdrawn, as appropriate:

Member States should pay particular attention to:

- the operator and worker safety and ensure that conditions of use prescribe the application of adequate personal protective equipment;
- the protection of non target plants and must ensure that conditions of authorisation include risk mitigation measures such as buffer zones, where appropriate.

7. List of studies to be generated

Further studies on non target-arthropods and on the specification of the active substance as manufactured were considered necessary in relation to the inclusion of quizalofop-P in Annex I under the current inclusion conditions.

As regards the specification, further information was submitted and evaluated in line with the Guidance Document on the Finalisation of the Reference Specification for Technical Active Substances after the Peer Review (Doc. SANCO/6075/2009 rev 3, July 2009)⁶.

Some endpoints however may require the generation or submission of additional studies to be submitted to the Member States in order to ensure authorisations for use under certain conditions. The list of studies to be generated, still ongoing or available but not peer reviewed can be found in the relevant part of the EFSA Scientific report (pages 76-78).

8. Information on studies with claimed data protection

For information of any interested parties, the rapporteur Member State will keep available a document which gives information about the studies for which the main data submitter has claimed data protection and which during the re-evaluation process were considered as essential with a view to annex I inclusion. This information is only given to facilitate the operation of the provisions of Article 13 of Directive 91/414/EEC in the Member States. It is based on the best information available but it does not prejudice any rights or obligations of Member States or operators with regard to its uses in the implementation of the provisions of Article 13 of the Directive 91/414/EEC and neither does it commit the Commission.

9. Updating of this review report

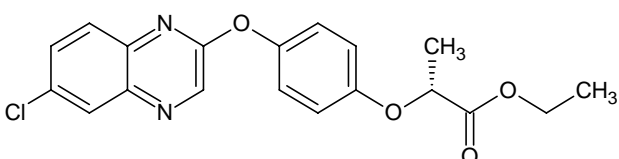
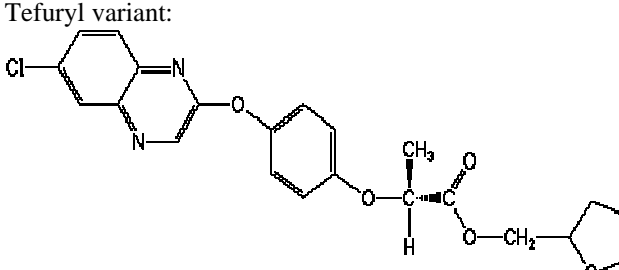
The information in this report may require to be updated from time to time in order to take account of technical and scientific developments as well as of the results of the examination of any information referred to the Commission in the framework of Articles 7, 10 or 11 of Directive 91/414/EEC. Any such adaptation will be finalised in the Standing Committee on the Food Chain and Animal Health, in connection with any amendment of the inclusion conditions for Quizalofop-P in Annex I of the Directive.

⁶ On 9 July 2010 the Standing Committee on the Food Chain and Animal Health has taken note of the revision of the review report after the finalisation of the reference specification.

APPENDIX I

Identity

QUIZALOFOP-P

Common name (ISO)	Quizalofop-P
Chemical name (IUPAC)	Ethyl variant: ethyl (R)-2-[4-(6-chloroquinoxalin-2-yloxy)phenoxy] propionate Tefuryl variant: (RS)-Tetrahydrofurfuryl (R)-2-[4-(6-chloroquinoxalin-2-yloxy)phenoxy]propionate
Chemical name (CA)	Ethyl variant: propanoic acid, 2-[4-[(6-chloro-2-quinoxalinyloxy)phenoxy]-, ethyl ester, (R)- (9CI) Tefuryl variant: (RS)-Tetrahydrofurfuryl (R)-2-[4-[(6-chloro-2-quinoxalinyloxy)phenoxy]propanoate
CIPAC No	641 (Quizalofop-P) 641.202 (Quizalofop-P-ethyl) 641.226 (Quizalofop-P-tefuryl)
CAS No	Ethyl variant: 100646-51-3 Tefuryl variant: 119738-06-6
EEC No	Ethyl variant: not available Tefuryl variant: 94-06-0565-00
FAO SPECIFICATION	None
Minimum purity	Ethyl variant: 950 g/kg, Tefuryl variant: 795 g/kg, racemic, RR/SR ratio 50/50
Molecular formula	Ethyl variant: C ₁₉ H ₁₇ ClN ₂ O ₄ Tefuryl variant: C ₂₂ H ₂₁ ClN ₂ O ₅
Molecular mass	Ethyl variant: 372.81 g/mol Tefuryl variant: 428.9
Structural formula	Ethyl variant:  Tefuryl variant: 

APPENDIX II

List of uses supported by available data

QUIZALOFOP-P

Summary of representative uses evaluated (quizalofop-P-ethyl)

Crop and/ or situation (a)	Member State or Country	Product name	F G or I (b)	Pests or Group of pests controlled (c)	Preparation		Application				Application rate per treatment			PHI (days) (m)	Remarks
					Type (d-f)	Conc. of as (i)	method kind (f-h)	growth stage & season (j)	number min/ max (k)	interval between applications (min)	g as/hL min – max (l)	water L/ha min – max	g as/ha min – max (l)		
Sugar beet	Southern EU	Targa Super	F	Annual grasses	EC	50 g/L	Spray	BBCH 13-39	1	-	12.5- 62.5	200- 400	50-125	60	
Sugar beet	Northern EU	Targa Super	F	Annual grasses	EC	50 g/L	Spray	BBCH 13-39	1	-	12.5- 62.5	200- 400	50-125	110	
Sugar beet	Southern EU	Targa Super	F	Perennial grasses	EC	50 g/L	Spray	BBCH 13-39	1	-	25-100	200- 400	100-200	60	
Sugar beet	Northern EU	Targa Super	F	Perennial grasses	EC	50 g/L	Spray	BBCH 13-39	1	-	25-100	200- 400	100-200	110	

Summary of intended uses evaluated (quizalofop-P-tefuryl)

Crop and/or situation (a)	Member State or Country	Product name	F G or I (b)	Pests or Group of pests controlled (c)	Preparation		Application				Application rate per treatment			PHI (days) (m)	Remarks
					Type (d-f)	Conc. of as (i)	method kind (f-h)	growth stage & season (j)	number min/max (k)	interval between applications (min)	kg as/ha min – max (l)	water l/ha min – max	kg as/ha min – max (l)		
Winter sown oilseed rape	North and South Europe	Pantera/ Panarex	F	Volunteer Cereals Cereals cover crops drilled to provide protection from 'Wind Blow'	EC	36.5 g/l	Spraying Tractor-mounted	2 leaves (GS12) to stem elongation (GS 39) Autumn to Summer	1	Not applicable	0.0050 - 0.015	200 - 400	0.02 – 0.03	60	
				Blackgrass Wild Oats	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Autumn to Summer	1	Not applicable	0.0075 - 0.025	200 - 400	0.03 – 0.05	60	
				Perennial Rye Grass from Seed	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to late tillering (GS 29) Autumn to Summer	1	Not applicable	0.0075 - 0.025	200 - 400	0.03 – 0.05	60	
				Bentgrass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 29) Autumn to Summer	1	Not applicable	0.015 – 0.035	200 - 400	0.06 – 0.07	60	
				Italian Rye Grass Perennial Rye Grass (established plants)	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Autumn to Summer	1	Not applicable	0.0150 – 0.04	200 - 400	0.06 – 0.08	60	
				Common Couch Grass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Autumn to Summer	1	Not applicable	0.0175 – 0.05	200 - 400	0.07 – 0.10	60	

Crop and/or situation (a)	Member State or Country	Product name	F G or I (b)	Pests or Group of pests controlled (c)	Preparation		Application				Application rate per treatment			PHI (days) (m)	Remarks
					Type (d-f)	Conc. of as (i)	method kind (f-h)	growth stage & season (j)	number min/max (k)	interval between applications (min)	kg as/hl min – max (l)	water l/ha min – max	kg as/ha min – max (l)		
				Onion Couch	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Autumn to Summer	1	Not applicable	0.0125 – 0.03	200 – 400	0.05 – 0.06	60	
Spring sown oilseed rape	North and South Europe	Pantera/Panarex	F	Volunteer Cereals Cereals cover crops drilled to provide protection from 'Wind Blow'	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Spring & Summer	1	Not applicable	0.0050 – 0.015	200 – 400	0.02 – 0.03	60	
				Blackgrass Wild Oats	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Spring & Summer	1	Not applicable	0.0075 – 0.025	200 – 400	0.03 – 0.05	60	
				Perennial Rye Grass from Seed	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to late tillering (GS 29) Spring & Summer	1	Not applicable	0.0075 – 0.025	200 – 400	0.03 – 0.05	60	
				Bentgrass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.015 – 0.035	200 – 400	0.06 – 0.07	60	
				Italian Rye Grass Perennial Rye Grass (established plants)	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0150 – 0.040	200 – 400	0.06 – 0.08	60	
				Common Couch Grass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0175 – 0.050	200 – 400	0.07 – 0.10	60	
				Onion Couch	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0125 – 0.030	200 – 400	0.05 – 0.06	60	

Crop and/or situation (a)	Member State or Country	Product name	F G or I (b)	Pests or Group of pests controlled (c)	Preparation		Application				Application rate per treatment			PHI (days) (m)	Remarks
					Type (d-f)	Conc. of as (i)	method kind (f-h)	growth stage & season (j)	number min/max (k)	interval between applications (min)	kg as/hl min – max (l)	water l/ha min – max	kg as/ha min – max (l)		
Sugar & Fodder Beet	North and South Europe	Pantera/ Panarex	F	Volunteer Cereals Cereals cover crops drilled to provide protection from 'Wind Blow'	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Spring & Summer	1	Not applicable	0.0050 - 0.015	200 - 400	0.02 – 0.03	60	
				Blackgrass Wild Oats	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Spring & Summer	1	Not applicable	0.0075 - 0.025	200 - 400	0.03 – 0.05	60	
				Perennial Rye Grass from Seed	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to late tillering (GS 29) Spring & Summer	1	Not applicable	0.0075 - 0.025	200 - 400	0.03 – 0.05	60	
				Bentgrass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0150 - 0.035	200 - 400	0.06 – 0.07	60	
				Italian Rye Grass Perennial Rye Grass (established plants)	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0150 - 0.040	200 - 400	0.06 – 0.08	60	
				Common Couch Grass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0175 - 0.050	200 - 400	0.07 – 0.10	60	
				Onion Couch	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0125 - 0.030	200 - 400	0.05 – 0.06	60	
Potatoes	North and South Europe	Pantera/ Panarex	F	Volunteer Cereals Cereals cover crops drilled to provide protection from 'Wind Blow'	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Spring & Summer	1	Not applicable	0.0050 - 0.015	200 - 400	0.02 – 0.03	60	

Crop and/or situation (a)	Member State or Country	Product name	F G or I (b)	Pests or Group of pests controlled (c)	Preparation		Application				Application rate per treatment			PHI (days) (m)	Remarks
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				Blackgrass Wild Oats	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Spring & Summer	1	Not applicable	0.0075 - 0.025	200 - 400	0.03 – 0.05	60	
				Perennial Rye Grass from Seed	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to late tillering (GS 29) Spring & Summer	1	Not applicable	0.0075 - 0.025	200 - 400	0.03 – 0.05	60	
				Bentgrass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0150 - 0.035	200 - 400	0.06 – 0.07	60	
				Italian Rye Grass Perennial Rye Grass (established plants)	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0150 - 0.040	200 - 400	0.06 – 0.08	60	
				Common Couch Grass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0175 - 0.050	200 - 400	0.07 – 0.10	60	
				Onion Couch	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0125 - 0.030	200 - 400	0.05 – 0.06	60	
Combining peas	North and South Europe	Pantera/ Panarex	F	Volunteer Cereals Cereals cover crops drilled to provide protection from 'Wind Blow'	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Autumn to Summer	1	Not applicable	0.0050 - 0.015	200 - 400	0.02 – 0.03	60	
				Blackgrass Wild Oats	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Autumn to Summer	1	Not applicable	0.0075 - 0.025	200 - 400	0.03 – 0.05	60	

Crop and/ or situation (a)	Member State or Country	Product name	F G or I (b)	Pests or Group of pests controlled (c)	Preparation		Application				Application rate per treatment			PHI (days) (m)	Remarks
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				Italian Rye Grass Perennial Rye Grass (established plants)	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Autumn to Summer	1	Not applicable	0.0150 - 0.040	200 - 400	0.06 – 0.08	60	
				Common Couch Grass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Autumn to Summer	1	Not applicable	0.0175 - 0.050	200 - 400	0.07 – 0.10	60	
				Onion Couch	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Autumn to Summer	1	Not applicable	0.0125 - 0.030	200 - 400	0.05 – 0.06	60	
Winter sown Field Beans	North and South Europe	Pantera/ Panarex	F	Volunteer Cereals Cereals cover crops drilled to provide protection from 'Wind Blow'	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Autumn to Summer	1	Not applicable	0.0050 - 0.015	200 - 400	0.02 – 0.03	60	
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Crop and/or situation (a)	Member State or Country	Product name	F G or I (b)	Pests or Group of pests controlled (c)	Preparation		Application				Application rate per treatment			PHI (days) (m)	Remarks
					Type (d-f)	Conc. of as (i)	method kind (f-h)	growth stage & season (j)	number min/max (k)	interval between applications (min)	kg as/ha min – max (l)	water l/ha min – max	kg as/ha min – max (l)		
				Bentgrass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 29) Autumn to Summer	1	Not applicable	0.0150 - 0.035	200 - 400	0.06 – 0.07	60	
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				Common Couch Grass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Autumn to Summer	1	Not applicable	0.0175 - 0.050	200 - 400	0.07 – 0.10	60	
				Onion Couch	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Autumn to Summer	1	Not applicable	0.0125 - 0.030	200 - 400	0.05 – 0.06	60	
Spring sown Field Beans	North and South Europe	Pantera/ Panarex	F	Volunteer Cereals Cereals cover crops drilled to provide protection from 'Wind Blow'	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Spring & Summer	1	Not applicable	0.0050 - 0.015	200 - 400	0.02 – 0.03	60	
				Blackgrass Wild Oats	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Spring & Summer	1	Not applicable	0.0075 - 0.025	200 - 400	0.03– 0.05	60	
				Perennial Rye Grass from Seed	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to late tillering (GS 29) Spring & Summer	1	Not applicable	0.0075 - 0.025	200 - 400	0.03 – 0.05	60	
				Bentgrass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0150 - 0.035	200 - 400	0.06 – 0.07	60	

Crop and/or situation (a)	Member State or Country	Product name	F G or I (b)	Pests or Group of pests controlled (c)	Preparation		Application				Application rate per treatment			PHI (days) (m)	Remarks
					Type (d-f)	Conc. of as (i)	method kind (f-h)	growth stage & season (j)	number min/max (k)	interval between applications (min)	kg as/hl min – max (l)	water l/ha min – max	kg as/ha min – max (l)		
				Italian Rye Grass Perennial Rye Grass (established plants)	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0150 - 0.040	200 - 400	0.06 – 0.08	60	
				Common Couch Grass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0175 - 0.050	200 - 400	0.07 – 0.10	60	
				Onion Couch	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0125 - 0.030	200 - 400	0.05 – 0.06	60	
Winter sown linseed and sunflowers	North and South Europe	Pantera/ Panarex	F	Volunteer Cereals Cereals cover crops drilled to provide protection from 'Wind Blow'	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Autumn to Summer	1	Not applicable	0.0050 - 0.015	200 - 400	0.02 – 0.03	60	
				Blackgrass Wild Oats	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Autumn to Summer	1	Not applicable	0.0075 - 0.025	200 - 400	0.03 – 0.05	60	
				Perennial Rye Grass from Seed	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to late tillering (GS 29) Autumn to Summer	1	Not applicable	0.0075 - 0.025	200 - 400	0.03 – 0.05	60	
				Bentgrass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 29) Autumn to Summer	1	Not applicable	0.0150 - 0.035	200 - 400	0.06 – 0.07	60	
				Italian Rye Grass Perennial Rye Grass (established plants)	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Autumn to Summer	1	Not applicable	0.0150 - 0.040	200 - 400	0.06 – 0.08	60	

Crop and/or situation (a)	Member State or Country	Product name	F G or I (b)	Pests or Group of pests controlled (c)	Preparation		Application				Application rate per treatment			PHI (days) (m)	Remarks
					Type (d-f)	Conc. of as (i)	method kind (f-h)	growth stage & season (j)	number min/max (k)	interval between applications (min)	kg as/hl min – max (l)	water l/ha min – max	kg as/ha min – max (l)		
				Common Couch Grass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Autumn to Summer	1	Not applicable	0.0175 - 0.050	200 - 400	0.07 – 0.10	60	
				Onion Couch	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Autumn to Summer	1	Not applicable	0.0125 - 0.030	200 - 400	0.05 – 0.06	60	
Spring sown linseed and sunflowers	North and South Europe	Pantera/ Panarex	F	Volunteer Cereals Cereals cover crops drilled to provide protection from 'Wind Blow'	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Spring & Summer	1	Not applicable	0.0050 - 0.015	200 - 400	0.02 – 0.03	60	
				Blackgrass Wild Oats	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Spring & Summer	1	Not applicable	0.0075 - 0.025	200 - 400	0.03 – 0.05	60	
				Perennial Rye Grass from Seed	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to late tillering (GS 29) Spring & Summer	1	Not applicable	0.0075 - 0.025	200 - 400	0.03 – 0.05	60	
				Bentgrass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0150 - 0.035	200 - 400	0.06 – 0.07	60	
				Italian Rye Grass Perennial Rye Grass (established plants)	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0150 - 0.040	200 - 400	0.06 – 0.08	60	
				Common Couch Grass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0175 - 0.050	200 - 400	0.07 – 0.10	60	

Crop and/ or situation (a)	Member State or Country	Product name	F G or I (b)	Pests or Group of pests controlled (c)	Preparation		Application				Application rate per treatment			PHI (days) (m)	Remarks
					Type (d-f)	Conc. of as (i)	method kind (f-h)	growth stage & season (j)	number min/ max (k)	interval between applications (min)	kg as/hl min – max (l)	water l/ha min – max	kg as/ha min – max (l)		
				Onion Couch	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0125 - 0.030	200 - 400	0.05 – 0.06	60	
Other Pulse crops	North and South Europe	Pantera/ Panarex	F	Volunteer Cereals Cereals cover crops drilled to provide protection from 'Wind Blow'	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Spring & Summer	1	Not applicable	0.0050 - 0.015	200 - 400	0.02 – 0.03	60	
				Blackgrass Wild Oats	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 39) Spring & Summer	1	Not applicable	0.0075 - 0.025	200 - 400	0.03– 0.05	60	
				Perennial Rye Grass from Seed	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to late tillering (GS 29) Spring & Summer	1	Not applicable	0.0075 - 0.025	200 - 400	0.03 – 0.05	60	
				Bentgrass	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS12) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0150 - 0.035	200 - 400	0.06 – 0.07	60	
				Italian Rye Grass Perennial Rye Grass (established plants)	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0150 - 0.040	200 - 400	0.06 – 0.08	60	
				Common Couch Grass	EC)	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0175 - 0.050	200 - 400	0.07 – 0.10	60	
				Onion Couch	EC	36.5 g/l	Spraying Tractor mounted	2 leaves (GS14) to stem elongation (GS 29) Spring & Summer	1	Not applicable	0.0125 - 0.030	200 - 400	0.05 – 0.06	60	

- Remarks:**
- (a) For crops, the EU and Codex classifications (both) should be used; where relevant, the use situation should be described
(*e.g.* fumigation of a structure)
 - (b) Outdoor or field use (F), glasshouse application (G) or indoor application (I)
 - (c) *e.g.* biting and suckling insects, soil born insects, foliar fungi, weeds
 - (d) *e.g.* wettable powder (WP), emulsifiable concentrate (EC), granule (GR)
 - (e) GCPF Codes - GIFAP Technical Monograph No 2, 1989
 - (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 plants - type of equipment used must be indicated
 - (i) g/kg or g/l
 - (j) Growth stage at 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) The minimum and maximum number of application possible under practical conditions of use must be provided
 - (l) PHI - minimum pre-harvest interval
 - (m) Remarks may include: Extent of use/economic importance/restrictions