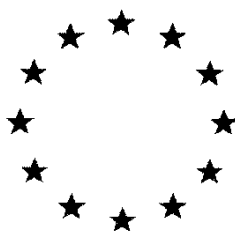


European Commission



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

FLUFENACET

**Volume 3 – B.3 (PPP) –
Diflufenican+Flufenacet SC600
(200+400 g/L)**

Rapporteur Member State: Poland
Co-Rapporteur Member State: France

Version History

When	What
August 1997	Initial assessment. Draft Assessment Report for first inclusion to Annex I. RMS: FR
April 2016	Draft Renewal Assessment Report prepared according to the Commission; Regulation (EU) N° 1107/2009; RMS: PL; Co-RMS: FR

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B.3. DATA ON APPLICATION AND EFFICACY

B.3.1. FIELD OF USE ENVISAGED

Agriculture

B.3.2. EFFECTS ON HARMFUL ORGANISMS

Flufenacet combined with Diflufenican is extensively used as a strong herbicide in autumn being applied from pre to early post emergence of the crop for the control of a wide range of annual grass and broad-leaved weeds. Flufenacet has mainly an action on grasses whereas Diflufenican controls broadleaf weeds.

B.3.3. DETAILS OF INTENDED USE

GAP rev

PPP (product name/code) **HEROLD SC**
active substance 1 **Diflufenican**
active substance 2 **Flufenacet**

Formulation type: **SC**
Conc. of as 1: **200**
Conc. of as 2: **400**

safener -
synergist -

Conc. of safener: -
Conc. of synergist: -

Applicant: **Bayer CropScience**
Zone(s): **Northern Central and southern /EU**

professional use ☒
non professional use

Verified by MS: j/n

Crop and/or situation (a)	Country	Product name	F G or I (b)	Pests or Group of pests controlled (c)	Formulation		Application				Application rate per treatment			PHI (days) (l)	Remarks: (m)
					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	water L/ha min max	kg as/ha min max		
Winter wheat, Winter barley, Winter rye	(e.g. Germany)	Herold SC	F	Annual dicot weeds, ALOMY, APESV, POAAN	SC	DFF: 200 g/L FFA: 400 g/L	Tractor mounted boom spraying	Post-emergence BBCH 10-13	1		DFF: 0.06 – 0.03 FFA: 0.12 – 0.06	200 – 400	DFF: 0.12 FFA: 0.24	n-a.	0.6 L/ha Autumn use only

Crop and/ or situation (a)	Country	Product name	F G or I (b)	Pests or Group of pests controll ed (c)	Formulation		Application				Application rate per treatment			PHI (days)	Remarks:
					Type	Conc. of as	method kind	growth stage & season (j)	number min max	interval between applications (min)	kg as/hL	water L/ha	kg as/ha	(l)	(m)
					(d-f)	(i)	(f-h)				min max	min max	min max		
Wheat, Winter barley	(e.g. France)	Fosburi	F	Annual dicot weeds, GGGGG, GRA	SC	DFF: 200 g/L FFA: 400 g/L	Tractor mounted boom spraying	Post- emergence BBCH 11-13	1		DFF: 0.15 – 0.04 FFA: 0.3 – 0.08	80 - 400	DFF: 0.12 FFA: 0.24	n-a.	0.6 L/ha
Winter wheat, Winter barley, Winter rye	(e.g. Ireland)	Firebird	F	ANTCO, AVEFA, CAPBP, CERSS, GALAP, GGGAN LAMAM , LAMSS, VERHE, VERSS	SC	DFF: 200 g/L FFA: 400 g/L	Tractor mounted boom spraying	Pre- emergence & Post- emergence BBCH 0-22	1		DFF: 0.015 – 0.03 FFA: 0.03 – 0.06	200 - 400	DFF: 0.06 FFA: 0.12	n-a.	0.3 L/ha
Wheat, Barley	(e.g. Spain)	Herold	F	Annual dicot weeds, ALOMY, APESV, POAAN	SC	DFF: 200 g/L FFA: 400 g/L	Tractor mounted boom spraying	Post- emergence BBCH 11-13	1		DFF: 0.02 – 0.04 FFA: 0.04 – 0.08	200 - 400	DFF: 0.08 FFA: 0.16	n-a.	0.4 L/ha (Approved in Spain : 0.4 L/ha-0.6 L/ha)

*The representative uses listed above derive from existing registrations or on-going re-registrations e.g. Sweden, United Kingdom.

Remarks:	(1)	Flufenacet FLT		(h)	Kind, e.g. overall, broadcast, aerial spraying, row, individual plant, between the plants
	(2)	Diflufenican DFF			- type of equipment used must be indicated
	(a)	For crops, Codex (or other, e.g. EU) classifications should be used; where the use situation should be described (e.g. fumigation of a structure)	relevant,	(i)	g/kg or g/L
	(b)	Outdoor or field use (F), glasshouse application (G) or indoor application(I)		(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
	(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		(k)	The minimum and maximum number of application possible under practical conditions of use must be provided
	(f)	All abbreviations used must be explained		(l)	PHI - minimum pre-harvest interval
	(g)	Method, e.g. high volume spraying, low volume spraying, spreading, dusting, drench		(m)	Remarks may include: Extent of use/economic importance/restriction

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

Diflufenican+Flufenacet SC600 (200+400 g/L) is applied with one application of 0.3-0.6 L/ha.

Maximum rate:

- flufenacet: 240 g a.s./ha
- diflufenican: 120 a.s./ha

Maximum concentration:

- flufenacet: 300 g a.s./hL
- diflufenican: 150 a.s./hL

B.3.5. METHOD OF APPLICATION

Diflufenican+Flufenacet SC600 (200+400 g/L), like most herbicides, is applied over the field as water-based sprays using ground equipment which booms, are commonly achieving 18 to 24 m width and equipped with flat-fan nozzles spaced about every 50 cm. A standard water volume can be in the range of 80 to 400 L/ha.

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

Number of applications and their timings:

Pre-emergence or early post emergence one application (BBCH:00-22).

The autumn-application of Diflufenican+Flufenacet SC600 (200+400 g/L) provides season-long control of germinating weeds. It can be applied also in winter and spring.

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

The use of Flufenacet + Diflufenican SC 600' in cereals is not likely to result in significant uptake of residues by succeeding crops. Thus, it is not necessary to set a waiting period between last application and sowing or planting succeeding crops beyond those relevant to agricultural practice.

B.3.8. PROPOSED INSTRUCTIONS FOR USE

Please refer to the information on the label and leaflet.

B.3.9. EFFECTIVENESS

Flufenacet contained in product HEROLD SC has been tested in field development trials which demonstrated efficacious activity.

B.3.10. INFORMATION ON THE DEVELOPMENT OF RESISTANCE

Flufenacet is grouped into the oxyacetamide chemical group. The mode of action is based on the inhibition of the biosynthesis of very long chain fatty acids (VLCFAs) resulting in inhibition of cell division and cell growth (HRAC group: K3). This group of herbicides is quite well known and has been applied commercially for decades without weed resistance development. Hence, no occurrence of resistant weeds has ever been reported during years of commercial application of the oxyacetamid mefenacet in rice, for instance.

B.3.11. ADVERSE EFFECTS ON TREATED CROPS

In case of difficult growth conditions, the crop may suffer from a treatment with Flufenacet. Selectivity is based on position so that if the crop seed are well covered with soil they might suffer damage in relation with its mode of action. The symptoms observed are yellowing and in more severe case thinning of the crop, recovery is generally good.

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

Flufenacet being applied early in the growth cycle has no impact on the following crops and as the active ingredient is tight to the soil no effect on the neighboring crop are to be expected.

B.3.13. REFERENCES RELIED ON**Literature search:**

Not relevant for this section.

Data Point	Author(s)	Year	Title Compagny Report No. Source (where different from company) GLP or GEP status Published or not	Vertebrate study Y/N	Data protection claimed Y/N	Justification if data protection is claimed	Owner	Previous evaluation
-	-	-	-	-	-	-	-	-