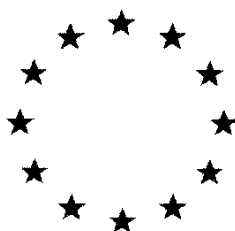


# ***European Commission***



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

## **FLUFENACET**

### **Volume 3 – B.5 (PPP)**

**Di flufenican + Flufenacet SC 600  
(200+400 g/L)**

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

### Version History

When	What
August 1997	Initial assessment. <b>Draft Assessment Report</b> for first inclusion to Annex I. RMS: FR
April 2016	<b>Draft Renewal Assessment Report</b> prepared according to the Commission; Regulation (EU) N° 1107/2009; RMS: PL; Co-RMS: FR
My 2017	Revision after Co-RMS comments

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## B.5. METHODS OF ANALYSIS

This dossier contains study reports already submitted by Bayer CropScience for the Annex I inclusion of flufenacet, as well as new data, not yet evaluated at EU level and that was considered by the applicant to be necessary for the renewal of flufenacet.

### B.5.1. METHODS USED FOR THE GENERATION OF PRE-AUTHORISATION DATA

The references of all risk assessment methods were located in the respective sections. Please note that the reliabilities of the corresponding methods are considered in the relevant sections of the risk assessment, if necessary.

#### B.5.1.1. Analysis of the plant protection product

##### B.5.1.1.1. Methods for the determination of the active substance and/or variant in the plant protection product

Report:	CP 5.1.1 /01; Seidel, E.; 1996; M-002450-01
Title:	Determination of FOE 5043 and diflufenican in formulations Assay – HPLC – external standard
Report No:	M-002450-01-2
Document No:	M-002450-01-2
Guidelines:	EU Directive 96/46/EEC SANCO/3030/99 rev.4
GLP/GEP:	no

Report:	CP 5.1.1 /02; Michel, A.; 2007; M-294030-01
Title:	Validation of the analytical method 2001-0043101-96 for the determination of diflufenican (AE F088657) and flufenacet (FOE 5043) in diflufenican+flufenacet SC 600 g/l formulations by liquid chromatography (HPLC)
Report No:	M-294030-01-1
Document No:	M-294030-01-1
Guidelines:	EU 91/414/EEC, Annex III 5.1
GLP/GEP:	no

The HPLC method 2001-0043101-96 is applicable for the determination of flufenacet and diflufenican in formulations (e.g. diflufenican + flufenacet SC 600 (200+400 g/L)).

#### Material and Methods:

A sample of formulated product (containing the active substances at the concentration used for the calibration) is dissolved in a 100 mL volumetric flask with 50 mL of acetonitrile. An ultrasonic bath is used to complete the dissolving of the sample. 5 µL of this solution is injected onto the HPLC column.

The active substances are separated by HPLC chromatography using a C18 stationary phase (LiChrospher RP18, particle size 5 µm, stainless steel column 250\*4 mm) at 40 °C. Active substances are detected by UV absorption at 230 nm after gradient elution with a mixture acetonitrile/water 70/30 (v/v) at a flow-rate of 2.0 mL/min.

Quantification is carried out by comparison of the peak area of the sample with that of the corresponding reference substances (external standard quantification).

Method 2001-0043101-96 has been validated on the formulated product diflufenican + flufenacet SC 600 (200+400 g/L) by checking the parameters linearity, accuracy, precision and specificity (see Table 5.1.1.1-1).

**Table 5.1.1.1-1: Validation parameters**

Linearity	For determination of the linear working range for diflufenican and flufenacet, 6 (diflufenican) respectively 7 (flufenacet) concentrations of the reference substances were prepared so that the working range for diflufenican and flufenacet was included.	
	Compound	Linearity (working range) mg/50 mL
	diflufenican	15.2 – 42.6 $Y = 1.82867x + 0.47709$ $R^2 = 0.99998$
	flufenacet	21.1 – 82.1 $Y = 9.66476 \cdot 10^{-1}x + 0.59918$ $R^2 = 0.99996$
Accuracy	Accuracy was determined by analysis of 5 independent solutions in which known amounts of the reference substances diflufenican and flufenacet were added to a blank formulation. The accuracy result is expressed as the recovery rate as well as the relative standard deviation for diflufenican and flufenacet.	
	Compound	Accuracy (recovery / RSD)
	diflufenican	99.8 % / 0.2 % (5 solutions, no outlier)
	flufenacet	99.3 % / 0.5 % (5 solutions, no outlier)
Precision	Repeatability was evaluated by analysing 5 independent preparations of diflufenican and flufenacet in the formulated product.	
	Compound	Repeatability (RSD)
	diflufenican	0.3 % (5 solutions, no outlier)
	flufenacet	0.4 % (5 solutions, no outlier)
Specificity	Reference substances of diflufenican and flufenacet, solutions of the blank formulation were run to the method conditions to determine any co-elutions and to demonstrate the specificity of the method. There was no evidence of interference (< 0.3%) with the quantification of the active ingredient in the formulation.	
Interference	No interferences with the analytical method were observed.	

**Conclusion**

The method 2001-0043101-96 for the determination of diflufenican and flufenacet in the formulation was found to be valid and meets the requirements.

**B.5.1.1.2. Applicability of existing CIPAC methods**

A CIPAC method for the combined determination of diflufenican and flufenacet in formulations is not available.

Diflufenican:

A CIPAC method is usable for the determination of the active substance diflufenican in the formulation.

The CIPAC method 462/SC/M3 is validated by an international collaborative CIPAC trial with acceptable

repeatability and reproducibility results.

The method is valid and suitable for determination of diflufenican in the different technical and formulated active substances.

**B.5.1.1.3. Methods for determination of relevant impurities identified in the technical material or which may be formed during manufacture of the plant protection product or from degradation of the plant protection product during storage**

No analytical methods for determination of the organic impurities were developed for the formulated product since toxicologically or eco-toxicologically relevant impurities have neither been identified in the technical material nor expected to be formed during the formulation process.

**B.5.1.1.4. Methods for the determination of relevant co-formulants or components of co-formulants, where required by the national competent authorities**

With respect to toxicological, eco-toxicological or environmental aspects the product does not contain any relevant formulants. Therefore, a special analytical method and validation is not needed.

**B.5.1.2. METHODS FOR PRE-APPROVAL CONTROL AND MONITORING PURPOSES**

Following guidance from SANCO/12592/2012 'Template Assessment Report' and SANCO/10181/2013 cross reference as appropriate is made to the supplemental active substance dossier CA Section B.5 (analytical methods) for flufenacet or the relevant sections: for toxicology CA Section B.6, for fate and behaviour CA Section B.8, and for ecotoxicology CA Section B.9.

**B.5.1.2.1. Methods in soil, water, sediment, air and any additional matrices used in support of environmental fate studies**

See above.

**B.5.1.2.2. Methods in soil, water and any additional matrices used in support of efficacy studies**

See above.

**B.5.1.2.3. Methods in feed, body fluids and tissues, air and any additional matrices used in support of toxicological studies**

See above.

**B.5.1.2.4. Methods in body fluids, air, and any additional matrices used in support of operator, worker, resident and bystander exposure studies**

See above.

**B.5.1.2.5. Methods in or on plants, plant products, processed food commodities, food of plant and animal origin, feed and any additional matrices used in support of residues studies**

Flufenacet

In the scope of the EU review process analytical methods were evaluated for the determination of flufenacet in plant and animal products. In order to capture all the metabolites including the common moiety a residue analytical method was developed which is based on the conversion of the metabolites to a common chemical fragment (4-fluorophenyl-*N*-isopropyl benzamine) to be determined as *N*-isopropyl-4-fluoro-benzamine trifluoroacetamide after derivatisation by GC-MS. The residue analytical method for plant materials is referred to as method 00346 (Seym, M.; 1995; M-018864-02-1) for plant materials and 00418 (Gould, T. J.; et al.; 1995; M-019605-01 ) and 00418/M001 Seym, M.; 1995;M-019614-01-1\_) for products of animal origin. The methods were considered appropriate for data generation and enforcement purpose.

Subsequent to the EU peer review process several extensions to the basic analytical method were developed and used for residue analysis in various crops. Making use of the HPLC-MS/MS technologies and the acceptability to

use this technique for enforcement purposes more recent methods were developed which allow for direct determination of the fluorophenyl-isopropyl amine moiety without the need for derivatisation. The procedure for extraction of residues from the matrices remains unchanged in the simplified methods.

The following Table 5.1.2.5-1 provides an overview on supplementary data generation methods provided in active substance dossier CA Volume 3 Section B.5. (AS) point 5.1.2.

**Table 5.1.2.5-1: Supplementary analytical methods for residues of flufenacet in plants (CA 4.1.2)**

Method No.	Matrix	Analytes	Matrix LOQ (mg/kg)	Technique	Author Doc. No. Report No.
00346/E001	Potato tuber	(1) flufenacet (2) FOE-oxalate (3) FOE sulfonic acid (4) FOE thioglycolate sulfoxide mixture of 1-4	0.05 mg/kg	GC/MS	Seym, M.; 1997; M-018872-01 [report MR-388/96]
00346/E002*	Soybean plant Tomato fruit	(1) flufenacet (2) FOE-oxalate (3) FOE sulfonic acid (4) FOE thioglycolate sulfoxide mixture of 1-4	0.05 mg/kg	GC/MS	Seym, M.; 1998; M-018878-01 [report MR-400/98]
00346/E004	Rice grain	(1) flufenacet (2) FOE-oxalate hydrate (3) FOE sulfonic acid sodium salt (4) FOE thioglycolate sulfoxide	0.01 mg/kg	GC-MS	Rzepka, S.; 2006; M-277805-01 [report BAY 0610V]
01179*	Cereal (wheat and barley) straw green material grain	(1) flufenacet (2) FOE-oxalate hydrate (3) FOE sulfonic acid sodium salt (4) FOE thioglycolate sulfoxide (metabolites fortified as mixture (1/1/1))	0.01 mg cereal grain and green material 0.05 mg/kg cereal straw	HPLC-MS/MS	Class, Th.; Merdian, H.; 2010; M-362716-01 [report B1778G]
01100*	Orange fruit Dry bean seed Rape seed	(1) flufenacet (2) FOE-oxalate hydrate (3) FOE sulfonic acid sodium salt (4) FOE thioglycolate sulfoxide (metabolites fortified as mixture (1/1/1))	0.01 mg/kg (all matrices)	HPLC-MS/MS	Billian, P.; 2010; M-362575-02 [report MR-08/060]
01100/M001*	Cereal (wheat) straw green material grain	(1) flufenacet (2) FOE-oxalate hydrate (3) FOE sulfonic acid sodium salt (4) FOE thioglycolate sulfoxide (metabolites fortified as mixture (1/1/1))	0.01 mg cereal grain and green material 0.05 mg/kg cereal straw	HPLC-MS/MS	Stuke, S.; Bauer, J.; Ruhl, S.; 2012; M-433720-01 [report MR-11/011]
01100/M002	Cereal (wheat) straw green material grain	flufenacet	0.01 mg cereal grain and green material 0.05 mg/kg cereal straw	HPLC-MS/MS	Stuke, S.; Teubner, L.; 2013; M-448503-01 [MR-12/057]

\* This method is also proposed for monitoring purpose (cf. CP 5.2)

Diflufenican

Since the representative formulation is a mixture product (Flufenacet + Diflufenican SC 600) some basic information on the mixing partner is provided here. The representative formulation contains 400 g/L flufenacet and 200 g/L diflufenican. The product 'Flufenacet + Diflufenican SC 600' is intended to be used on cereals (wheat, barley and rye). The product 'Flufenacet + Diflufenican SC 600' was also the representative formulation for evaluation of diflufenican in the EU peer review process.

All the analytical methods used to generate the residue data presented in the Annex CA dossier of diflufenican. They were peer-reviewed and accepted during the EU evaluation of diflufenican. An overview is provided in the table below. The method reports for diflufenican are not submitted with the supplemental product dossier.

**Table 5.1.2.5-2: Analytical methods used to generate residue data for the EU evaluation of diflufenican**

Method No.	Matrix	Analytes	LOQ (mg/kg)	Technique	Doc. No.**	Reference
Plant data generation methods						
Ag 544	Cereal leaves Cereal straw Cereal grain	diflufenican	0.02 in grain 0.02 in leaves 0.04 in straw	GC/ECD	M-159738-01-1 (R001011)	DAR
Multi-residue method DFG S19*	Wheat green plant Wheat straw Wheat grain	diflufenican	0.01 in grain 0.05 in straw and green plant	GC/ECD (GC/MSD for confirmation)	M-204413-01-1 (C013331)	DAR

\* This method is also proposed for monitoring purpose (cf. CP 5.2)

\*\* The Document No. which is into parenthesis corresponds to a former document numbering. In the DAR written by Rapporteur Member State, this former document numbering was used.

### Conclusion

The above methods for the determination of residues for flufenacet and diflufenican in plants were found to be valid and meets the requirements.

## B.5.2. METHODS FOR POST-APPROVAL CONTROL AND MONITORING PURPOSES

### B.5.2.1. Methods for the determination of residues in or on plants, plant products, processed food commodities, food and feed of plant and animal origin

#### Flufenacet

In the scope of the EU peer review process the residue analytical method for plant materials referred to as method 00346 (Seym, M.; 1995; M-018864-02-1) and 00418 (Gould, T. J.; et al.; 1995; M-Gould, T. J.; et al.; 1995; M-019605-01-01) and 00418/M001 (Seym, M.; 1995; M-019614-01-1 ) for products of animal origin were also evaluated as monitoring methods. The methods were independently validated.

Following the EU peer review process several extensions to the basic analytical method 00346 were developed to be used in additional matrix groups as monitoring methods.

In addition, using HPLC-MS/MS technologies and due to the acceptability to use this technique for enforcement purposes, more recent methods were developed which allow for direct determination of the common fluorophenyl-isopropyl amine moiety without the need for derivatisation. The procedure for extraction of residues from the matrices remains unchanged (cf. CP 5.1.2). The following table provides an overview on supplementary monitoring methods provided in the active substance dossier CA Section B.5 (analytical methods) for flufenacet or the relevant sections: for toxicology CA Section B.6, for fate and behaviour CA Section B.8, and for ecotoxicology CA Section B.9.

Some of them are also used as data generation methods and therefore included in both tables, Table 5.2.1-1 and Table 5.2.1-2.

**Table 5.2.1-1: Supplementary analytical methods for monitoring of residues of flufenacet in plants and in food of animal origin provided in section CA B.5.2**

Method No.	Matrix	Analytes	Matrix LOQ (mg/kg)	Technique	Author Doc. No., Report No. Dossier reference
Plant monitoring method					
00346 (ILV)	Wheat grain	(1)flufenacet (2) FOE-oxalate (3) FOE sulfonic acid (4) FOE thioglycolate sulfoxide	0.05 mg/kg	GC-MS	Class, T.; 2004; M-072609-01 [report P740G]
00346	Apple	(1)flufenacet (2) FOE-oxalate (3) FOE sulfonic acid (4) FOE thioglycolate sulfoxide	0.01 mg/kg	GC-MS	Klimmek, S.; 2005; M-088233-02 [report BAY-0408V]
00346/E002 (cf. Table 5.1.2-1)	Soybean plant Tomato fruit	(1)flufenacet (2) FOE-oxalate (3) FOE sulfonic acid (4) FOE thioglycolate sulfoxide mixture of 1-4	0.05 mg/kg	GC-MS	Seym, M.; 1998; M-018878-01 [report MR-400/98]
01179 (cf. Table 5.1.2-1)	Cereal (wheat and barley) straw green material grain	(1)flufenacet (2) FOE-oxalate hydrate (3) FOE sulfonic acid sodium salt (4) FOE thioglycolate sulfoxide (metabolites fortified as mixture (1/1/1))	0.01 mg cereal grain and green material 0.05 mg/kg cereal straw	HPLC-MS/MS	Class, Th.; Merdian, H.; 2010; M-362716-01 [report B1778G]
01100 (cf. Table 5.1.2-1)	Orange fruit Dry bean seed Rape seed	(1)flufenacet (2) FOE-oxalate hydrate (3) FOE sulfonic acid sodium salt (4) FOE thioglycolate sulfoxide (metabolites fortified as mixture (1/1/1))	0.01 mg/kg (all matrices)	HPLC-MS/MS	Billian, P.; 2010; M-362575-02 [Report MR-08/060]
01100/M001 (cf. Table 5.1.2-1)	Cereal (wheat) straw green material grain	(1)flufenacet (2) FOE-oxalate hydrate (3) FOE sulfonic acid sodium salt (4) FOE thioglycolate sulfoxide (metabolites fortified as mixture (1/1/1))	0.01 mg cereal grain and green material 0.05 mg/kg cereal straw	HPLC-MS/MS	Stuke, S., Bauer, J.; Ruhl, S.; 2012; M-433720-01 [Report MR-11/011]
01100 and 01179 (ILV)	Cereal green material (foliage) Rape seed Orange fruit Dry bean seed	(1)flufenacet (2) FOE-oxalate hydrate (3) FOE sulfonic acid sodium salt (4) FOE thioglycolate sulfoxide (metabolites fortified as mixture (1/1/1))	0.01 mg (all matrices)	HPLC-MS/MS	Meyer, M.; 2011; M-405654-01 [Report IF-10/01717126]
Animal monitoring methods					

0418 and 00418/M001 (ILV)	Bovine meat, fat liver milk egg	(1) flufenacet (2) FOE-oxalate hydrate (3) FOE sulfonic acid sodium salt (4) FOE thioglycolate sulfoxide	0.05 mg/kg meat, fat, egg 0.02 mg/kg liver 0.01 mg/kg milk	GC-MS	Klimmek, S.; et al.; 2013; M-461242-01 [Report S12-00052]
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In the EFSA reasoned opinion on existing MRLs for flufenacet (EFSA Journal 2012;10(4):2689), EFSA considered that the ‘common moiety residue definition’ might not be the most adequate for enforcement purposes for plants and therefore proposed to investigate the option to include six individual metabolites in a multi-residue method. In active substance dossier CA Section B.5 a justification is provided where it is concluded that the established residue definition is still adequate and should be maintained.

#### Diflufenican

The analytical methods provided in the EU review of diflufenican for monitoring residues of in food of plant or animal origin are summarised in the Table 5.2.1-2. All of these analytical methods were considered adequate. The method reports for diflufenican are not submitted with the supplemental product dossier.

**Table 5.2.1-2: EU conclusions: Analytical methods for residues of diflufenican in plants and in food of animal origin**

Method No.	Matrix	Analytes	LOQ (mg/kg)	Technique	Doc. No.*	Reference
Plant monitoring method						
Multi-residue method DFG S19	Wheat green plant Wheat straw Wheat grain	diflufenican	0.01 in grain 0.05 in straw and green plant	GC/ECD (GC/MSD for confirmation)	M-204413-01-1 (C013331)	EFSA Scientific Report (2007) 122
	Apple Whole orange Olive	diflufenican	0.01 in apple and orange 0.02 in olive	GC/ECD (GC/MSD for confirmation)	M-214791-01-1 (C028188)	
ILV DFG S19	Wheat green plant Wheat straw Wheat grain	diflufenican	0.01 in grain 0.05 in straw and green material	GC/ECD	M-205844-01-1 (C018307)	
	Apple Whole orange Sunflower seed	diflufenican	0.01	GC/ECD (GC/MSD for confirmation)	M-229717-01-1 (C031483)	
Animal monitoring methods						
Multi-residue method DFG S19	Whole milk Bovine meat	diflufenican	0.01 in milk 0.02 in meat	GC/MSD (GC/MS/MS for confirmation)	M-166075-01-1 (R004321)	EFSA Scientific Report (2007) 122
ILV DFG S19	Whole milk Beef meat Chicken liver Egg Chicken fat	diflufenican	0.01 in milk 0.02 in all other sample material	GC/MSD (using 3 fragment ions of m/z>100)	M-212932-01-1 (C022357)	

\* The Document No. which is into parenthesis corresponds to a former document numbering. In the DAR written by Rapporteur Member State, this former document numbering was used.

Furthermore, in the meantime the multi-residue method QuEChERS was also validated for the determination of diflufenican in various plant matrices. In the EFSA reasoned opinion (EFSA Journal 2013; 11(6):3281) it is concluded that diflufenican can be enforced in food of plant origin with an LOQ of 0.01 mg/kg in high water content, high fat content, acidic and dry commodities.

## Conclusion

The above methods for the determination of residues for flufenacet and diflufenican in plants, food of plant and animal origin were found to be valid and meets the requirements under the existing residue definition for both active substances.

### B.5.2.2 Methods for the determination of residues in body fluids and tissues

Please refer to the respective studies in the analytical section; Vol3 B5 (AS).

### B.5.2.3. Methods for the determination of residues in soil

#### Flufenacet

The relevant methods to determine the residues in soil are provided in the active substance dossier CA Section B.5.

#### Diflufenican

The agreed European residue definition for diflufenican for monitoring in soil is diflufenican only.

The analytical methods for post-approval control and monitoring purposes in soil are included with the active substance data, fully described in Section 2 Point 4.2.2 of the respective CA dossier for diflufenican, which was provided during the EU Review of the active substance and was considered as adequate. The following analytical methods for the determination of diflufenican in soil are included in the CA dossier for diflufenican:

**Table 5.2.3-1: EU conclusions: Analytical methods for residues of diflufenican in soil**

Method No.	LOQ [mg/kg]	Technique	Author(s)	Year	Reference
B 591 G	0.002	HPLC-MS/MS	Bacher, R.	2002	EFSA Scientific Report (2007) 122
AM 01/03*	0.002	GC/MSD (using 3 fragment ions of m/z >100)	Doran, A. M.; McGuire, G. M.	2002	

\* Although metabolites AE B107137 (M&B 38181) and AE 0542291 (M&B 43625) were included in this analytical method, they are not included in the soil residue definition for monitoring.

### B.5.2.4. Methods for the determination of residues in water

#### Flufenacet

The relevant methods to determine the residues in water are provided in the active substance dossier CA Section B.5.

#### Diflufenican

The agreed European residue definition for diflufenican for monitoring in water is diflufenican only.

The analytical methods for post-approval control and monitoring purposes in water are included with the active substance data, fully described in Section 2 Point 4.2.3 of the respective CA dossier for diflufenican, which was provided during the EU Review of the active substance and was considered as adequate. The following analytical method for the determination of diflufenican in water is included in the CA dossier for diflufenican:

**Table 5.2.4-1: EU conclusions: Analytical methods for residues of diflufenican in water**

Method No.	LOQ [µg/L]	Technique	Author(s)	Year	Reference
B 590 G	0.05 <sup>1</sup>	HPLC-MS/MS	Bacher, R.	2002	EFSA Scientific Report (2007) 122
	0.2 <sup>2</sup>				

<sup>1</sup> for drinking (mineral and tap) water

<sup>2</sup> for surface (river) water

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**B.5.2.5. Methods for the determination of residues in air, unless the applicant shows that exposure of operators, workers, residents or bystanders is negligible**


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Based on the results of the exposure assessment presented in the active substance dossier CA Section B.7 there is no unacceptable risk anticipated for operators, workers, residents or bystanders with the intended use of Diflufenican + Flufenacet SC 600 (200+400 g/L) [Herold SC 600], when handling the undiluted or diluted product. Thus, an additional method for the determination of the residues in air is not required.

**Flufenacet**

The relevant methods for post-approval control and monitoring purposes for determination of flufenacet in air are provided in the active substance dossier CA Section B.5.

**Diflufenican**

The agreed European residue definition for diflufenican for monitoring in air is diflufenican only.

The analytical methods for post-approval control and monitoring purposes in air are included with the active substance data, fully described in Section 2 Point 4.2.4 of the respective CA dossier for diflufenican, which was provided during the EU Review of the active substance and was considered as adequate. The following analytical method for the determination of diflufenican in air is included in the CA dossier for diflufenican:

**Table 5.2.5-1: EU conclusions: Analytical methods for residues of diflufenican in air**

Method No.	LOQ [mg/m <sup>3</sup> ]	Technique	Author(s)	Year	Reference
AM02/05	0.0004	HPLC-MS/MS	Bacher, R.	2002	EFSA Scientific Report (2007) 122

**B.5.3. REFERENCES RELIED ON**

Annex point / reference number	Author(s)	Year	Title Source ( <i>where different from company</i> ) Company name, Report No., Date, GLP status ( <i>where relevant</i> ), published or not	Vertebrate study Y/N	Data protection claimed Y/N	Justification if data protection is claimed	Owner
KCP 5.1.1 /01	Seidel, E.	1996	Determination of FOE 5043 and Diflufenican in formulations Bayer AG, Leverkusen, Germany Bayer CropScience, Report No.: 2001-0043101-96, Edition Number: M-002450-01-2 Date: 1996-05-31 GLP/GEP: no, unpublished	N	Y	Guideline requirement	Bayer CropScience
KCP 5.1.1 /02	Michel, A.	2007	Validation of the analytical method 2001-0043101-96 for the determination of diflufenican (AE F088657) and flufenacet (FOE 5043) in diflufenican+flufenacet SC 600 g/l formulations by liquid chromatography (HPLC) Bayer CropScience, Report No.: FTA07/028, Edition Number: M-294030-01-1 Date: 2007-10-29 GLP/GEP: no, unpublished	N	Y	Guideline requirement	Bayer CropScience

The relevant methods for control and monitoring purposes for determination of flufenacet residues in or on plants, plant products, processed food commodities, food and feed of plant and animal origin, body fluids and tissues, soil, water and in air are provided in the active substance dossier CA Section B.5.

The analytical methods for control and monitoring purposes for determination of diflufenican residues in or on plants, plant products, processed food commodities, food and feed of plant and animal origin, body fluids and tissues, soil, water and in air are provided of the respective CA dossier for diflufenican.