



Draft Assessment Report

Evaluation of Active Substances

Plant Protection Products

Prepared according to **Regulation (EC) 1107/2009**
as it applies in Great Britain

Pydiflumetofen

Volume 3 – B.2 (AS)

Physical & Chemical Properties

Great Britain

June 2023

Version History

When	What
October 2022	Initial DAR
June 2023	Post Expert Committee on Pesticides (ECP) Independent Scientific Advice (ISA)

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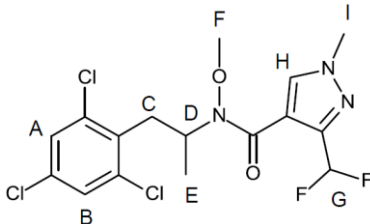
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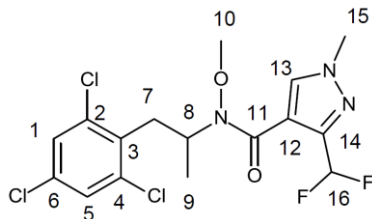
B.2. PHYSICAL AND CHEMICAL PROPERTIES OF THE ACTIVE SUBSTANCE

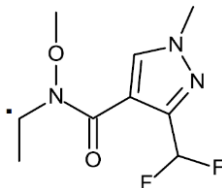
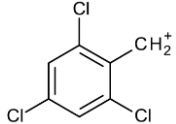
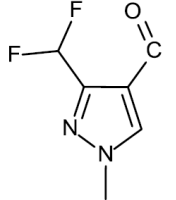
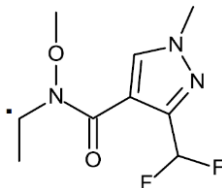
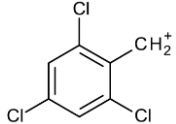
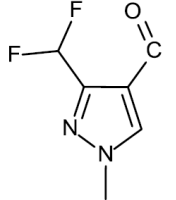
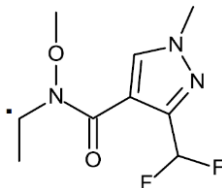
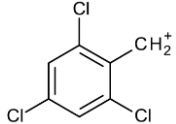
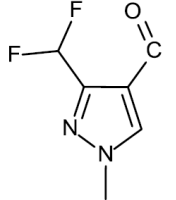
Active substance = Pydiflumetofen = SYN545974

Test or Study Annex Point	Guideline and method	Test material purity and specification	Used methods / Results	Comments (Acceptable / Non acceptable)	GLP	Reference
B.2.1. MELTING POINT AND BOILING POINT						
Melting, freezing or solidification point B.2.1/01	OECD Test Guideline 102 (DSC)	Pydiflumetofen (pure) Batch number: AMS 1432/1 Purity: 99.5%	The mean melting temperature of the test item was determined to be 112.7 °C (385.8 K), with a relative standard deviation of 0.07% from the four determinations performed. Identical endotherm profiles were obtained under both air and nitrogen atmospheres.	Acceptable. Pydiflumetofen is a solid with a melting point of 112.7°C.	Y	Study Report Number: 41203898 [REDACTED] 2012
Boiling point B.2.1/02	OECD Test Guideline 103 (DSC)	Pydiflumetofen (pure) Batch number: AMS 1432/1 Purity: 99.5%	The test item decomposed on heating from approximately 283 °C (557 K), both in air and under a nitrogen atmosphere. Therefore, the boiling temperature could not be determined.	Acceptable. Pydiflumetofen decomposes above 283 °C.	Y	Study Report Number: 41203899 [REDACTED] 2012a
Decomposition / Sublimation temperature B.2.1/03	-	-	-	See B.2.1/02 above. Acceptable.	-	-
B.2.2. VAPOUR PRESSURE, VOLATILITY						
Vapour pressure B.2.2/01	OECD Test Guideline 104 (Gas saturation method)	Pydiflumetofen (pure) Batch number: AMS 1432/1 Purity: 99.5%	Log p (Pa)= -8045 x 1/T + 19.707 From a fit of measurements between 60 °C and 80 °C (r = 0.993224) Vapour pressure at 20 °C: 0.18 µPa Vapour pressure at 25 °C : 0.53 µPa (by extrapolation from the vapour pressure curve) Samples analysed using method SD-1643/1 (see Vol3CA B.5.1.2.7.)	Acceptable.	Y	Study Report Number: SMG11739 + Amendments 1&2 [REDACTED] 2017
Volatility (Henry's Law constant) B.2.2/02	Calculation	-	$H = 5.30 \times 10^{-10} * 426.7 / 1.5 = 1.51 \times 10^{-7} \text{ kPa.m}^3/\text{mol}$	Calculated from vapour pressure and for water solubility at 25°C.	-	-

Test or Study Annex Point	Guideline and method	Test material purity and specification	Used methods / Results	Comments (Acceptable / Non acceptable)	GLP	Reference
B.2.3. APPEARANCE (PHYSICAL STATE, COLOUR)						
Physical state and colour B.2.3/01	Visual inspection	Pydiflumetofen (pure) Batch number: AMS 1432/1 Purity: 99.5%	White opaque solid in the form of a fine, non-free flowing powder, at 25.0 ± 0.5 °C. Odour was not directly assessed, but no odour was detected during handling of the test item.	Acceptable.	Y	Study Report Number: 41203897 [REDACTED] 2012b
Physical state and colour B.2.3/02	Visual inspection	Pydiflumetofen (Technical) Batch number: SMU2EP12007 Purity: 98.5%	Off-white opaque solid in the form of a fine, non-free flowing powder, containing soft aggregates, at 25.0 ± 0.5 °C. Odour was not directly assessed, but no odour was detected during handling of the test item.	Acceptable.	Y	Study Report Number: 41203900 [REDACTED] 2012c
B.2.4. SPECTRA (UV/VIS, IR, NMR, MS), MOLAR EXTINCTION AT RELEVANT WAVELENGTHS, OPTICAL PURITY						
Ultraviolet/visible (UV/VIS) B.2.4/01	OECD Test Guideline 101	Pydiflumetofen (pure) Batch number: AMS 1432/1 Purity: 99.5%	Samples were prepared in methanol. In line with OECD Test Guideline 101, acidic and basic solutions were prepared by adding 10% (v/v) 1 M HCl and 1 M NaOH respectively.	Acceptable.	Y	Study Report Number: CHMU140550 [REDACTED] with amendments 1, 2 and 3; 2016

Test or Study Annex Point	Guideline and method	Test material purity and specification	Used methods / Results	Comments (Acceptable / Non acceptable)	GLP	Reference																																	
Infrared (IR) B.2.4/02	Perkin Elmer Spectrum RX I	Pydiflumetofen (pure) Batch number: AMS 1432/1 Purity: 99.5%	Sample prepared as a KBr Pellet. <table><tr><th>Wavenumber (cm⁻¹)</th><th>Assignment</th></tr><tr><td>ca. 3300</td><td>N-H stretch</td></tr><tr><td>1625</td><td>N-C=O (Amide I)</td></tr><tr><td>1544</td><td>N-C=O (Amide 2)</td></tr><tr><td>1089</td><td>C-Cl</td></tr></table>	Wavenumber (cm ⁻¹)	Assignment	ca. 3300	N-H stretch	1625	N-C=O (Amide I)	1544	N-C=O (Amide 2)	1089	C-Cl	Consistent with the structure of pydiflumetofen. Acceptable.		Study Report Number: CHMU140550 [REDACTED] with amendments 1, 2 and 3; 2016																							
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Nuclear magnetic resonance (NMR) B.2.4/03	Bruker Avance 400 (¹ H 400 MHz)	Pydiflumetofen (pure) Batch number: AMS 1432/1 Purity: 99.5%	Sample prepared in DMSO-d ₆ and analysed at 20 °C. <table><tr><th>Chemical shift (ppm)</th><th>Assignment</th><th>Number of protons</th></tr><tr><td>1.32 – 1.34</td><td>E</td><td>3</td></tr><tr><td>2.50 – 2.52</td><td>From solvent DMSO</td><td>-</td></tr><tr><td>3.14 – 3.30</td><td>C</td><td>2</td></tr><tr><td>3.32</td><td>H₂O from solvent</td><td>-</td></tr><tr><td>3.71</td><td>F</td><td>3</td></tr><tr><td>3.94</td><td>I</td><td>3</td></tr><tr><td>4.73 – 4.82</td><td>D</td><td>1</td></tr><tr><td>7.02, 7.15, 7.29</td><td>G (triplet)</td><td>1</td></tr><tr><td>7.61</td><td>A, B</td><td>2 (1 each)</td></tr><tr><td>8.27</td><td>H</td><td>1</td></tr></table> 	Chemical shift (ppm)	Assignment	Number of protons	1.32 – 1.34	E	3	2.50 – 2.52	From solvent DMSO	-	3.14 – 3.30	C	2	3.32	H ₂ O from solvent	-	3.71	F	3	3.94	I	3	4.73 – 4.82	D	1	7.02, 7.15, 7.29	G (triplet)	1	7.61	A, B	2 (1 each)	8.27	H	1	Consistent with the structure of pydiflumetofen. Acceptable.		Study Report Number: CHMU140550 [REDACTED] with amendments 1, 2 and 3; 2016
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			Sample prepared in DMSO-d ₆ and analysed at 20 °C. <table><thead><tr><th>Chemical Shift (ppm)</th><th>Assignment</th></tr></thead><tbody><tr><td>17.2</td><td>9</td></tr><tr><td>34.0</td><td>7</td></tr><tr><td>38.9-40.2</td><td>15 signals from solvent</td></tr><tr><td>53.2</td><td>8</td></tr><tr><td>64.6</td><td>10</td></tr><tr><td>107.4, 109.8, 112.1</td><td>16</td></tr><tr><td>112.8</td><td>12</td></tr><tr><td>128.1</td><td>1 and 5</td></tr><tr><td>132.3</td><td>13</td></tr><tr><td>133.5</td><td>3</td></tr><tr><td>134.1</td><td>6</td></tr><tr><td>135.8</td><td>2 and 4</td></tr><tr><td>146.0, 146.2, 146.4</td><td>14</td></tr><tr><td>162.6</td><td>11</td></tr></tbody></table> <div></div>	Chemical Shift (ppm)	Assignment	17.2	9	34.0	7	38.9-40.2	15 signals from solvent	53.2	8	64.6	10	107.4, 109.8, 112.1	16	112.8	12	128.1	1 and 5	132.3	13	133.5	3	134.1	6	135.8	2 and 4	146.0, 146.2, 146.4	14	162.6	11	Consistent with the structure of pydiflumetofen. Acceptable.	Y	Study Report Number: CHMU140550 [REDACTED] with amendments 1, 2 and 3; 2016
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Test or Study Annex Point	Guideline and method	Test material purity and specification	Used methods / Results	Comments (Acceptable / Non acceptable)	GLP	Reference									
Mass spectra (MS) B.2.4/04	DSQ instrument with EI ionisation and quadrupole detection	Pydiflumetofen (pure) Batch number: AMS 1432/1 Purity: 99.5%	Electron impact ionisation energy set to 70 eV. Quadrupole mass analyser in scanning mode.	Consistent with the structure of pydiflumetofen. Acceptable.	Y	Study Report Number: CHMU140550 [REDACTED] with amendments 1, 2 and 3; 2016									
<table><thead><tr><th>m/z</th><th>Fragment ion</th></tr></thead><tbody><tr><td>425</td><td>M⁺ (molecular ion) not visible</td></tr><tr><td>232</td><td></td></tr><tr><td>193</td><td></td></tr><tr><td>159</td><td></td></tr></tbody></table>			m/z				Fragment ion	425	M ⁺ (molecular ion) not visible	232		193		159	
m/z			Fragment ion												
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232															
193															
159															
Spectra for impurities B.2.4/05	-	-	-	-	-										
B.2.5. SOLUBILITY IN WATER															
Solubility in water B.2.5/01	OECD Test Guideline 105	Pydiflumetofen (pure) Batch number: AMS 1432/1 Purity: 99.5%	1.5 mg/L at 25 °C, pH 6.6 Analysed using HPLC-UV method SD-1640/1. (see Vol3CA B.5.1.2.7.)	Slightly soluble. Acceptable.	Y	Study Report Number: SMG11737 [REDACTED] 2012									

Test or Study Annex Point	Guideline and method	Test material purity and specification	Used methods / Results	Comments (Acceptable / Non acceptable)	GLP	Reference
B.2.6. SOLUBILITY IN ORGANIC SOLVENTS						
Solubility in organic solvents B.2.6/01	Modified CIPAC method MT 157.3	Pydiflumetofen (technical) Batch number: SMU2EP12007 Purity: 98.5%	<p>Solubility of the TGA1 was tested using a modified version of CIPAC method MT 157.3 (solubility in water). Dispersions of the test item in a range of six solvents were prepared, ensuring saturation. After one and two days, aliquots were taken, centrifuged (48000 G, 40 minutes, 25 °C), and the concentration of pydiflumetofen in the supernatant determined by HPLC-UV. Solubility in dichloromethane was not tested in this way. Solubility >500 g/L was determined visually by solvent addition to the TGA1.</p> <p>acetone 220 g/L methanol 26 g/L dichloromethane > 500 g/L octanol 7.2 g/L ethyl acetate 130 g/L toluene 67 g/L hexane 270 mg/L</p> <p>Analysed using HPLC-UV method SD-1638/1. (see Vol3CA B.5.1.2.7.)</p>	Solubility tested across an appropriate range of solvent types. Acceptable.	Y	Study Report Number: SMG11891 [REDACTED] 2012a
B.2.7. PARTITION COEFFICIENT N-OCTANOL/WATER						
Partition coefficient n-octanol/water B.2.7/01	<i>In silico</i> calculation	Metabolite of pydiflumetofen SYN547897	$\log P_{ow} = 4.1$ at $\text{pH} \leq 4.54$ $\log P_{ow} < 4.1$ at $\text{pH} > 4.54$	Acceptable.	N	Study Report Number: 300104085 [REDACTED] 2018
Partition coefficient n-octanol/water B.2.7/02	<i>In silico</i> calculation	Metabolite of pydiflumetofen SYN548263	$\log P_{ow} = 0.17$ at $\text{pH} \leq 0.99$ $\log P_{ow} < 0.17$ at $\text{pH} > 0.99$	Acceptable.	N	Study Report Number: 300104087 [REDACTED] 2018c
Partition coefficient n-octanol/water B.2.7/03	<i>In silico</i> calculation	Metabolite of pydiflumetofen EXC4915	$\log P_{ow} = 3.6$ at $\text{pH} \leq 4.59$ $\log P_{ow} < 3.6$ at $\text{pH} > 4.59$	Acceptable.	N	Study Report Number: 300104088 [REDACTED] 2018a
Partition coefficient n-octanol/water B.2.7/04	<i>In silico</i> calculation	Metabolite of pydiflumetofen SYN545547	$\log P_{ow} = 3.8$	Acceptable.	N	Study Report Number: 300104089 [REDACTED] 2018b

Test or Study Annex Point	Guideline and method	Test material purity and specification	Used methods / Results	Comments (Acceptable / Non acceptable)	GLP	Reference
Partition coefficient n-octanol/water B.2.7/05	<i>In silico</i> calculation	Metabolite of pydiflumetofen SYN548261	$\log P_{ow} = 0.33$ at $pH \leq 2.17$ $\log P_{ow} < 0.33$ at $pH > 2.17$	Acceptable.	N	Study Report Number: 300104090 [REDACTED] 2018d
Partition coefficient n-octanol/water B.2.7/06	OECD Test Guideline 107 (shake-flask method)	Pydiflumetofen (pure) Batch number: AMS 1432/1 Purity: 99.5%	$\log P_{ow} = 3.8$ at 25 °C Analysed using HPLC method SD-1645/1 (see Vol3CA B.5.1.2.7.)	Acceptable.	Y	Study Report Number: SMG11738 [REDACTED] 2012
Partition coefficient n-octanol/water B.2.7/07	OECD Test Guideline 107 (shake-flask method)	CA4312 Pure reaction intermediate batch: AMS 1234/2 Purity: 99.5%	$\log P_{ow} = -0.50$ at $pH 4.9$ and 25 °C $\log P_{ow} = -2.3$ at $pH 6.8$ and 25 °C $\log P_{ow} = -3.1$ at $pH 8.9$ and 25 °C Analysed using HPLC method SD-1262/1 (see Vol3CA B.5.1.2.7.)	Acceptable.	Y	Study Report Number: SMG10197 [REDACTED] 2009
B.2.8. DISSOCIATION IN WATER						
Dissociation constant B.2.8/01	OECD Test Guideline 112	Pydiflumetofen (pure) Batch number: AMS 1432/1 Purity: 99.5%	Does not dissociate in water between pH 2 and pH 12 at 25 °C.	Acceptable.	Y	Study Report Number : 41206681 [REDACTED] 2013
B.2.9. FLAMMABILITY AND SHELF-HEATING						
Flammability B.2.9/01	EC Test A.10	Pydiflumetofen (TGAI) Batch number: SMU2EP12007 Purity: 98.5%	Not a readily combustible solid.	Not classified as flammable. Acceptable.	Y	Study Report Number: 10514983 [REDACTED] 2012
	ASTM E537 UN Test N.1 (according to CLP regulation)		Heat of decomposition of the test substance : 639 J/g Not classified as flammable solid.		Y	Study Report Number: HT16/546 [REDACTED] 2016

Test or Study Annex Point	Guideline and method	Test material purity and specification	Used methods / Results	Comments (Acceptable / Non acceptable)	GLP	Reference
Self heating B.2.9/02	EC Test A.16	Pydiflumetofen (TGAI)	Not a self-heating substance.	Not classified as self heating substance. Acceptable.	Y	Study Report Number: 10514983 ██████████ 2012
		Batch number: SMU2EP12007 Purity: 98.5%	The substance has a melting point well below 160°C. UN Test N.4 cannot be applied to this material and no conclusions can be drawn.		Y	Study Report Number: HT16/546 ██████████ 2016
B.2.10. FLASH POINT						
Flash point B.2.10/01	-	-	-	Not required since the active substance has a melting point >40 °C.	-	-
B.2.11. EXPLOSIVE PROPERTIES						
Explosive properties B.2.11/01	EC Test A.14	Pydiflumetofen (TGAI)	Not explosive when exposed to shock, friction or heat.	Not classified as Explosive. Acceptable.	Y	Study Report Number: 10514983 ██████████ 2012
	UN Test.2 (b) & (c)	Batch number: SMU2EP12007 Purity: 98.5%	Not classified as an explosive substance.		Y	Study Report Number: HT16/546 ██████████ 2016
B.2.12. SURFACE TENSION						
Surface tension B.2.12/01	OECD Test Guideline 115	Pydiflumetofen (pure) Batch number: AMS 1432/1 Purity: 99.5%	The average surface tension of duplicate 90% saturated solutions of the test item is 71.5 mN/m at 21.5 ± 0.5 °C.	Not surface active. Acceptable.	Y	Study Report Number: 41402211 ██████████ 2014

Test or Study Annex Point	Guideline and method	Test material purity and specification	Used methods / Results	Comments (Acceptable / Non acceptable)	GLP	Reference
B.2.13. OXIDISING PROPERTIES						
Oxidizing properties B.2.13/01	EC Test A.17	Pydiflumetofen (TGAI) Batch number: SMU2EP12007 Purity: 98.5%	No oxidising properties.	Not classified as an oxidising solid	Y	Study Report Number: 10514983 [REDACTED] 2012
B.2.14. OTHER STUDIES						
	-	-	-	-	-	-

Pydiflumetofen is a white opaque solid in the form of a fine, non-free flowing powder, with a melting point of 113 °C (pure). Pydiflumetofen is not classified as flammable, explosive, or oxidising, and is not a self-heating substance. The pure active substance is slightly soluble in pure water (1.5 mg/L at pH 6.6), with no dissociation observed within the pH range 2 – 12. It has a n-octanol/water partition coefficient log P_{OW} of 3.8 at 25 °C, indicating the potential to bioaccumulate. UV/VIS, IR, NMR, and MS spectra are available for the active substance and are consistent with its structure.

B.2.15. REFERENCES RELIED ON**Literature search**

A literature search was conducted by the applicant (██████, 2021; Doc VV-887827),

The main search was conducted in 2015. The following databases were searched:

MEDLINE	EMBASE	ESBIOBASE
AGRICOLA	BIOSIS	CABA
HCALPLUS	FSTA	FROSTI
GEOREF	TOXCENTER	PQSCITECH
PASCAL	SCISEARCH	ANABST
HICHEMLIST	CROPU	CROPB

A timespan of 45 years prior to the date of the search was covered.

Search criteria:

- Pydiflumetofen and environmental metabolites
- Environmental metabolites common to pydiflumetofen and other fungicides
- Suitable terms relating to physico-chemical properties

A stepwise process for selection of relevant scientific peer-reviewed open literature was undertaken:

- Duplicate titles from between the data bases were automatically removed from the output.
- A rapid assessment of the titles was conducted to remove any additional duplicates and any obviously irrelevant titles (where enough information was available from the title alone).
- A further rapid assessment was conducted using summary abstracts and any clearly irrelevant titles were removed.
- A detailed assessment of the full-text documents for the remaining titles was conducted using the following criteria for study relevance:
 - Well defined test material (including purity/content)
 - Sufficient experimental information provided to substantiate and evaluate whether the study conclusions and endpoints are robust (e.g., pre-treatment details, characterisation of physico-chemical parameters, replication, statistical methods, and appropriate sampling regime).
 - Study conditions should not differ significantly from recommended protocols* and internationally agreed tests methods (CIPAC MT and OECD methods).
 - Study conditions should not interfere with the interpretation of the study results.
 - Endpoints or positions stated because of the study significantly affect the proposed risk assessment in the dossier.
- Any relevant papers were highlighted and assessed for reliability.

Approximately 2900 references were identified. These were mostly for common moieties and compounds related to the structure of pydiflumetofen (e.g., trichlorophenols) rather than specifically to pydiflumetofen or its metabolites. All references were excluded during the rapid assessment stage.

Conclusion

Regarding the literature search undertaken by the applicant, it is considered that the search is acceptable in terms of databases searched and the search criteria applied. No references of relevance to this assessment were identified

Data Point	Author(s)	Year	Title Company 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
KCA 2.1/01	████████	2012	SYN545974 - Determination of melting temperature Report No. 41203898 Document No. VV-403185, SYN545974_10023 Test Facility Harlan Laboratories Ltd. GLP Unpublished	N	Y	The study is necessary for this regulatory decision and is eligible for data protection	Syngenta	N
KCA 2.1/02	████████	2012a	SYN545974 - Determination of boiling temperature Report No. 41203899 Document No. VV-403186, SYN545974_10024 Test Facility Harlan Laboratories Ltd. GLP Unpublished	N	Y	The study is necessary for this regulatory decision and is eligible for data protection	Syngenta	N
KCA 2.2	████████ █	2017	SYN545974 - Vapour Pressure Report No. SMG11739 + Amendments 1&2 Document No. VV-403324, SYN545974_10038 Test Facility Syngenta Biosciences Pvt. Ltd. GLP Unpublished	N	Y	The study is necessary for this regulatory decision and is eligible for data protection	Syngenta	N
KCA 2.3/01	████████	2012b	SYN545974 - Determination of appearance (color, physical state and odor) Report No. 41203897 Document No. VV-403040, SYN545974_10025 Test Facility Harlan Laboratories Ltd. GLP	N	Y	The study is necessary for this regulatory decision and is eligible for data protection	Syngenta	N

			Unpublished					
KCA 2.3/02	████████	2012c	SYN545974 - Determination of appearance (color, physical state and odor) Report No. 41203900 Document No. VV-403041, SYN545974_10026 Test Facility Harlan Laboratories Ltd. GLP Unpublished	N	Y	The study is necessary for this regulatory decision and is eligible for data protection	Syngenta	N
KCA 2.4/01-04	████████	2016	SYN545974 - Spectra Report No. N/A Document No. VV-725118, SYN545974_10172 Test Facility Syngenta Crop Protection GLP Unpublished	N	Y	The study is necessary for this regulatory decision and is eligible for data protection	Syngenta	N
KCA 2.5	████████ █	2012	SYN545974 - Solubility in water Report No. SMG11737 Document No. VV-402983, SYN545974_10031 Test Facility Syngenta Biosciences Pvt. Ltd GLP Unpublished	N	Y	The study is necessary for this regulatory decision and is eligible for data protection	Syngenta	N
KCA 2.6	████████ █	2012a	SYN545974 - Solubility in Organic Solvents Report No. SMG11891 Document No. VV-402982, SYN545974_10030 Test Facility Syngenta Biosciences Pvt. Ltd GLP Unpublished	N	Y	The study is necessary for this regulatory decision and is eligible for data protection	Syngenta	N
KCA 2.7/01	██████	2018	SYN547897 Metabolite of pydiflumetofen (=SYN545974) Statement on the 1-Octanol / Water Partition Coefficient (calculated from in silico data sources)	N	N	N/A	Syngenta	N

			Report No. 300104085 Document No. VV-264157, SYN547897_10001 Test Facility Syngenta Crop Protection Not GLP Unpublished					
KCA 2.7/02	██████	2018c	SYN548263 Metabolite of pydiflumetofen (= SYN545974) Statement on the 1- Octanol / water Partition Coefficient (calculated from in silica data sources) Report No. 300104087 Document No. VV-264158, SYN548263_10000 Test Facility Syngenta Crop Protection Not GLP Unpublished	N	N	N/A	Syngenta	N
KCA 2.7/03	██████	2018a	EXC4915 Metabolite of pydiflumetofen (= SYN545974) Statement on the 1-Octanol / Water Partition Coefficient (calculated from in silico data sources) Report No. 300104088 Document No. VV-264155, SYN545974_10603 Test Facility Syngenta Crop Protection Not GLP Unpublished	N	N	N/A	Syngenta	N
KCA 2.7/04	██████	2018b	SYN545547 Metabolite of pydiflumetofen (= SYN545974) Statement on the 1- Octanol / Water Partition Coefficient (calculated from in silico data sources) Report No. 300104089 Document No. VV-264156 , SYN545547_10012 Test Facility Syngenta Crop Protection Not GLP Unpublished	N	N	N/A	Syngenta	N
KCA 2.7/05	██████	2018d	SYN548261 Metabolite of pydiflumetofen (= SYN545974) Statement on the 1-	N	N	N/A	Syngenta	N

			Octanol / Water Partition Coefficient (calculated from in silico data sources) Report No. 300104090 Document No. VV-264154 , SYN548261_10006 Test Facility Syngenta Crop Protection Not GLP Unpublished					
KCA 2.7/06	██████ █	2012	SYN545974 - Octanol / Water Partition Coefficient Report No. SMG11738 Document No. VV-402984 , SYN545974_10032 Test Facility Syngenta Biosciences Pvt. Ltd. GLP Unpublished	N	Y	The study is necessary for this regulatory decision and is eligible for data protection	Syngenta	N
KCA 2.7/07	██████	2009	CA4312 - Octanol/water partition coefficient Report No. SMG10197 Document No. VV-385571, CA4312_10898 Test Facility Syngenta Biosciences Pvt. Ltd. GLP Unpublished	N	Y	The study is necessary for this regulatory decision and is eligible for data protection	Syngenta	N
KCA 2.8	██████	2013	SYN545974 - Determination of Dissociation Constants in Water Report No. 41206681 Document No. VV-403598 , SYN545974_10050 Test Facility Harlan Laboratories Ltd. GLP Unpublished	N	Y	The study is necessary for this regulatory decision and is eligible for data protection	Syngenta	N
KCA 2.9-11 & 2.13	██████	2012	SYN545974 - Safety Study Report No. 10514983 Document No. VV-403227, SYN545974_10036	N	Y	The study is necessary for this regulatory decision and is eligible for	Syngenta	N

			Test Facility Syngenta Technology & Projects GLP Unpublished			data protection		
KCA 2.9-11 & 2.13		2016	Pydiflumetofen - Safety Study Report No. HT16/546 Document No. VV-466801 , SYN545974_10488 Test Facility Syngenta Technology & Engineering GLP Unpublished	N	Y	The study is necessary for this regulatory decision and is eligible for data protection	Syngenta	N
KCA 2.12		2014	SYN545974 – Determination of Surface Tension Report No. 41402211 Document No. VV-415625 , SYN545974_10382 Test Facility Harlan Laboratories Ltd. GLP Unpublished	N	Y	The study is necessary for this regulatory decision and is eligible for data protection	Syngenta	N