

Fludioxonil

**NOTIFICATION OF AN ACTIVE
SUBSTANCE UNDER COMMISSION
REGULATION (EU) 844/2012**

DOCUMENT N3

**SUBSTANCES AND METABOLITES;
STRUCTURES, CODES, SYNONYMS**

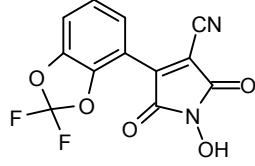
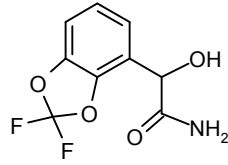
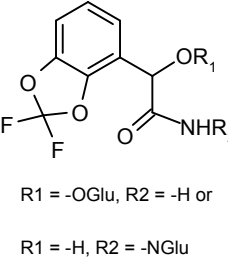
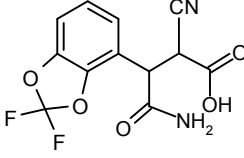
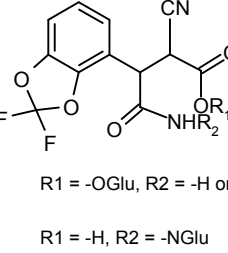
Version history¹

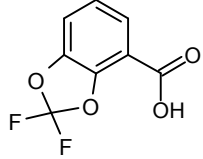
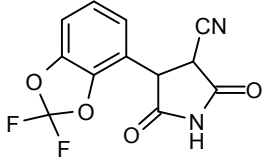
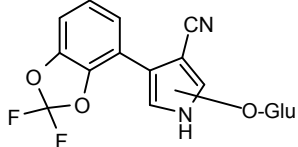
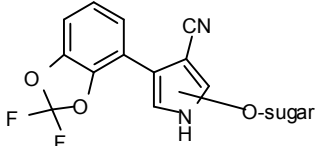
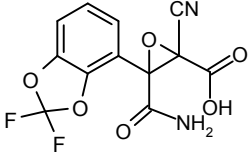
Date	Data points containing amendments or additions and brief description	Document identifier and version number

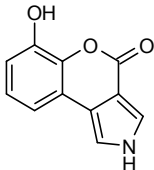
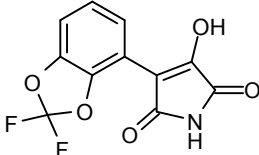
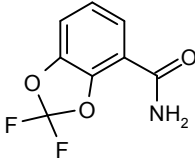
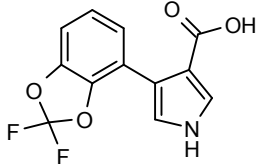
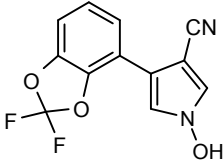
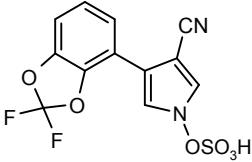
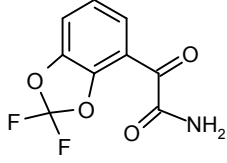
¹ It is suggested that applicants adopt a similar approach to showing revisions and version history as outlined in SANCO/10180/2013 Chapter 4 How to revise an Assessment Report

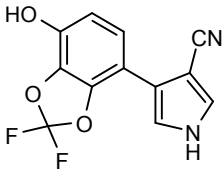
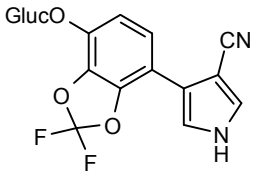
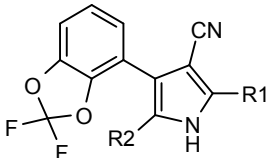
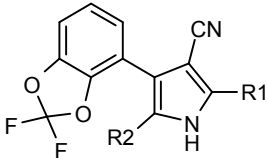
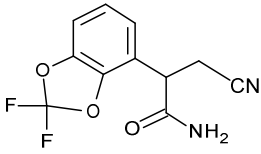
Table 1: Substances and metabolites; structures, codes, synonyms

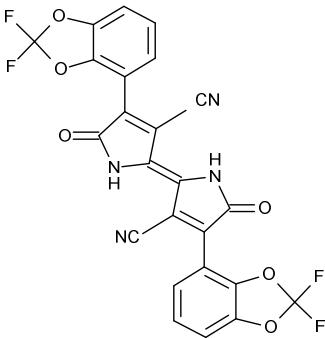
Code Number and Synonyms	Description	Compound found in:	Structure
Fludioxonil CGA173506 II ₄ (grape) III ₄ (tomato) P19 (peach) A: peak 11 (green onion) I ₁₅ (lettuce) I ₁₂ /II ₄ (potato) II ₄ (wheat) C (goat) E1 (hen)	4-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-1H-pyrrole-3-carbonitrile	Soil (aerobic, anaerobic photolysis) Aquatic (water/sediment, aqueous photolysis) Crop (grape, tomato, peach, green onion, lettuce, potato, wheat, rotated crops) Livestock (goat, hen) Rat	
N-lactic acid conjugate of CGA173506 I _{4b} + I _{4c} (lettuce)	N-lactic acid conjugate of 4-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-1H-pyrrole-3-carbonitrile	Crop (Lettuce)	
SYN518579 II ₂ (grape) III ₂ (tomato) P15/P16 (peach) P15 (green onion) II ₂ (wheat)	4-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-5-hydroxy-2-oxo-2,5-dihydro-1H-pyrrole-3-carbonitrile or its tautomeric form 4-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-2-hydroxy-5-oxo-2,5-dihydro-1H-pyrrole-3-carbonitrile	Crop (grape, tomato, peach, green onion, wheat)	 R1 = -OH, R2 = =O or R1 = =O, R2 = -OH
CGA265378 CSAA250411 II _{3b} (grape) B: peak 10 (green onion) I ₁₄ (lettuce) II _{3b} (wheat) E2 (hen) B3 (soil photolysis)	4-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-2,5-dioxo-2,5-dihydro-1H-pyrrole-3-carbonitrile	Soil (photolysis) Crop (grape, green onion, lettuce, rotated crops) Livestock (hen)	
SYN518581 I _{3b} (grape) I _{3b} (tomato)	2-cyano-3-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-3-hydroxy-succinamic acid	Crop (grape, tomato)	

Code Number and Synonyms	Description	Compound found in:	Structure
SYN518580 II _{3a} (grape) III ₃ (tomato) II ₃ (wheat)	4-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-1-hydroxy-2,5-dioxo-2,5-dihydro-1H-pyrrole-3-carbonitrile	Crop (grape, tomato, wheat)	
CGA308103 I ₁₁ (grape) P14 (peach) E: peak 4 (green onion) I ₁₁ (lettuce) I ₁₃ (wheat)	2-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-2-hydroxy-acetamide	Crop (grape, peach, green onion, lettuce, wheat, rotated crops)	
Glucose conjugate of CGA308103 I ₆ (grape) I ₆ (tomato) I ₅ (lettuce)	Glucose conjugate of 2-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-2-hydroxy-acetamide	Crop (grape, tomato, lettuce)	
CGA344623 I ₄ (tomato) P5 (peach) H: peaks 2/3 (green onion) I ₄ (lettuce) I ₄ (wheat) P2/P3 (hen)	2-cyano-3-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-succinamic acid	Aquatic (Irradiated water/sediment) Crop (tomato, peach, green onion, lettuce, wheat, rotated crops) Livestock (hen)	
Glucose conjugate of CGA344623 I ₂ (lettuce)	Glucose conjugate of 2-cyano-3-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-succinamic acid	Crop (Lettuce)	

Code Number and Synonyms	Description	Compound found in:	Structure
CGA192155 CSAA794110 I ₁₀ (potato) I ₅ (tomato) P17 (peach) F: peak 1 (green onion) I ₁₀ (lettuce) I ₁₀ (wheat) P1 (hen) B2 (soil photolysis)	2,2-difluoro-benzo[1,3]dioxole-4-carboxylic acid	Soil (photolysis) Aquatic (Irradiated water/sediment, aerobic mineralisation) Crop (potato, tomato, peach, green onion, lettuce, wheat, soybean, rotated crops) Livestock (hen)	
CGA308565 P18 (peach)	4-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-2,5-dioxo-pyrrolidine-3-carbonitrile	Crop (peach, rotated crops)	
Glucose conjugate of singly-oxidised CGA173506 (pyrrole ring) P10a, P10b, P8b (peach)		Crop (peach)	
Sugar conjugate of singly-oxidised CGA173506 P8 (peach)		Crop (peach)	
CGA339833 CSAA424113 P6 (peach) I: peak 5 (green onion) I _{3b} (lettuce) I ₃ (wheat) B1 (soil photolysis)	3-carbamoyl-2-cyano-3-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-oxirane-2-carboxylic acid	Soil (photolysis) Aquatic (Irradiated water/sediment) Crop (peach, green onion, lettuce, wheat, rotated crops)	

Code Number and Synonyms	Description	Compound found in:	Structure
CGA227731	6-hydroxy-2H-chromeno[3,4-c]pyrrol-4-one	Crop (soybean, rotated crops)	
CGA260766	3-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-4-hydroxy-pyrrole-2,5-dione	Soil (anaerobic) Crop (soybean, rotated crops)	
CGA340351	2,2-difluoro-benzo[1,3]dioxole-4-carboxylic acid amide	Crop (soybean, rotated crops)	
CGA257777	4-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-1H-pyrrole-3-carboxylic acid	Crop (rotated crops) Hydrolysis at pH 13	
CGA335892 G (hen)	4-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-1-hydroxy-1H-pyrrole-3-carbonitrile	Livestock (hen)	
Sulphate conjugate of CGA335892 I ₁ (hen)	Sulphate conjugate of 4-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-1-hydroxy-1H-pyrrole-3-carbonitrile	Livestock (hen)	
CGA344624 P7 (hen)	2-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-2-oxo-acetamide	Livestock (hen)	

Code Number and Synonyms	Description	Compound found in:	Structure
SYN518576 F (hen)	4-(2,2-difluoro-7-hydroxy-benzo[1,3]dioxol-4-yl)-1H-pyrrole-3-carbonitrile	Livestock (hen) Rat	
Glucuronide conjugate of SYN518576 Met 4G (rat) B2 (goat)	Glucuronide conjugate of 4-(2',2'-difluoro-7'-hydroxy-1',3'-benzodioxol-4'-yl)-1H-pyrrole-3-carbonitrile	Livestock (goat) Rat	
Glucuronide conjugate of SYN518577 Met 1G (rat) or Glucuronide conjugate of SYN518578 Met 3G (rat) B1, A (goat), D (hen)	Glucuronide conjugate of 4-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-2-hydroxy-1H-pyrrole-3-carbonitrile or Glucuronide conjugate of 4-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-5-hydroxy-1H-pyrrole-3-carbonitrile	Livestock (goat, hen) Rat	 <p>R1 = -Ogluc, R2 = -H or R1 = -H, R2 = -Ogluc</p>
Sulphate conjugate of SYN518577 Met 2G (rat) or Sulphate conjugate of SYN518578 Met 1U (rat) G (goat) I ₂ (hen)	Sulphate conjugate of 4-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-2-hydroxy-1H-pyrrole-3-carbonitrile Or Sulphate conjugate of 4-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-5-hydroxy-1H-pyrrole-3-carbonitrile	Livestock (goat, hen) Rat	 <p>R1 = -OSO₃H, R2 = -H or R1 = -H, R2 = -OSO₃H</p>
CGA344622	3-cyano-2-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-propionamide	decarboxylation product of CGA 344623 formed in mass spectrometer	

Code Number and Synonyms	Description	Compound found in:	Structure
SYN518582 Met 1G(G4) (rat)	4,4'-bis-(2,2-difluoro-benzo[1,3]dioxol-4-yl)-5,5'-dioxo-1,5,1',5'-tetrahydro-[2,2']bipyrrolylidene-3,3'-dicarbonitrile	Rat	
SYN545245	3-cyano-2-(2,2-difluoro-1,3-benzodioxol-4-yl)propanoic acid	Soil (photolysis)	