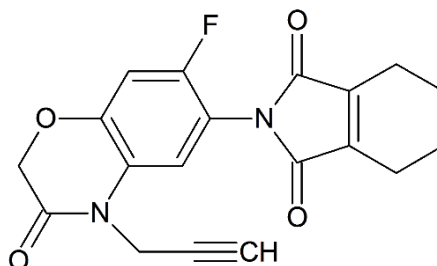


FLUMIOXAZIN
578



<i>ISO common name</i>	Flumioxazin
<i>Chemical name</i>	<i>N</i> -(7-fluoro-3,4-dihydro-3-oxo-4-prop-2-ynyl-2 <i>H</i> -1,4-benzoxazin-6-yl)cyclohex-1-ene-1,2-dicarboximide (IUPAC); 2-[7-fluoro-3,4-dihydro-3-oxo-4-(2-propynyl)-2 <i>H</i> -1,4-benzoxazin-6-yl]-4,5,6,7-tetrahydro-1 <i>H</i> -isoin-1,3(2 <i>H</i>)-dione (CA)
<i>CAS No.</i>	103361-09-7
<i>Empirical formula</i>	C ₁₉ H ₁₅ FN ₂ O ₄
<i>RMM</i>	354.3
<i>v.p.</i>	3.2 x 10 ⁻³ Pa (22°C)
<i>Solubility</i>	In water, 1.79 mg/l; acetone, 17 g/l; acetonitrile, 32.3 g/l; methanol, 1.6 g/l; ethyl acetate, 17.8 g/l; dichloromethane, 191 g/l; <i>n</i> -hexane, 1.6 g/l
<i>Description</i>	White to yellowish brown crystalline powder

FLUMIOXAZIN SUSPENSION CONCENTRATES

***578/SC/m/-**

1 Sampling. Take at least 100g.

2 Identity tests

2.1 HPLC. As for **578/TC/m/2.1**

2.2 Infrared. Extract the sample with a suitable solvent, filter and evaporate the solvent with a stream of clean dry air. Proceed as for **578/TC/m/2.2**

3 FLUMIOXAZIN. As for **578/TC/m/3** except:

change 'PROCEDURE (d) Preparation of sample solution.' as follows:

(d) Preparation of sample solution. Weigh in duplicate (to the nearest 0.1 mg) sufficient sample to contain about 50 mg (*w* mg) of flumioxazin into separate volumetric flasks (100 ml). Add acetonitrile (about 80 ml) and place the flasks in an ultrasonic bath for 10 min. Allow to cool to room temperature, dilute to volume with acetonitrile. Mix thoroughly. Filter a portion of each sample solution through a 0.45 µm filter prior to analysis (Solutions S_A and S_B).

Repeatability r = g/kg at g/kg active ingredient content

Reproducibility R = g/kg at g/kg active ingredient content

FLUMIOXAZIN WATER DISPERSIBLE GRANULES

***578/WG/m/-**

1 Sampling. Take at least 100g.

2 Identity tests

2.1 HPLC. As for **578/TC/m/2.1**

2.2 Infrared. Extract the sample with a suitable solvent, filter and evaporate the solvent with a stream of clean dry air. Proceed as for **578/TC/m/2.2**

* CIPAC method 2012. Based on a method supplied by Sumitomo Chemical Co., Ltd. Japan

3 FLUMIOXAZIN. As for **578/TC/m/3** except:

change 'PROCEDURE (d) Preparation of sample solution.' as follows:

(d) *Preparation of sample solution.* Weigh in duplicate (to the nearest 0.1 mg) sufficient sample to contain about 50 mg (*w* mg) of flumioxazin into separate volumetric flasks (100 ml). Add acetonitrile (about 80 ml) and place the flasks in an ultrasonic bath for 10 min. Allow to cool to room temperature, dilute to volume with acetonitrile. Mix thoroughly. Filter a portion of each sample solution through a 0.45 µm filter prior to analysis (Solutions S_A and S_B).

Repeatability r = 9 g/kg at 516 g/kg active ingredient content

Reproducibility R = 11 g/kg at 516 g/kg active ingredient content

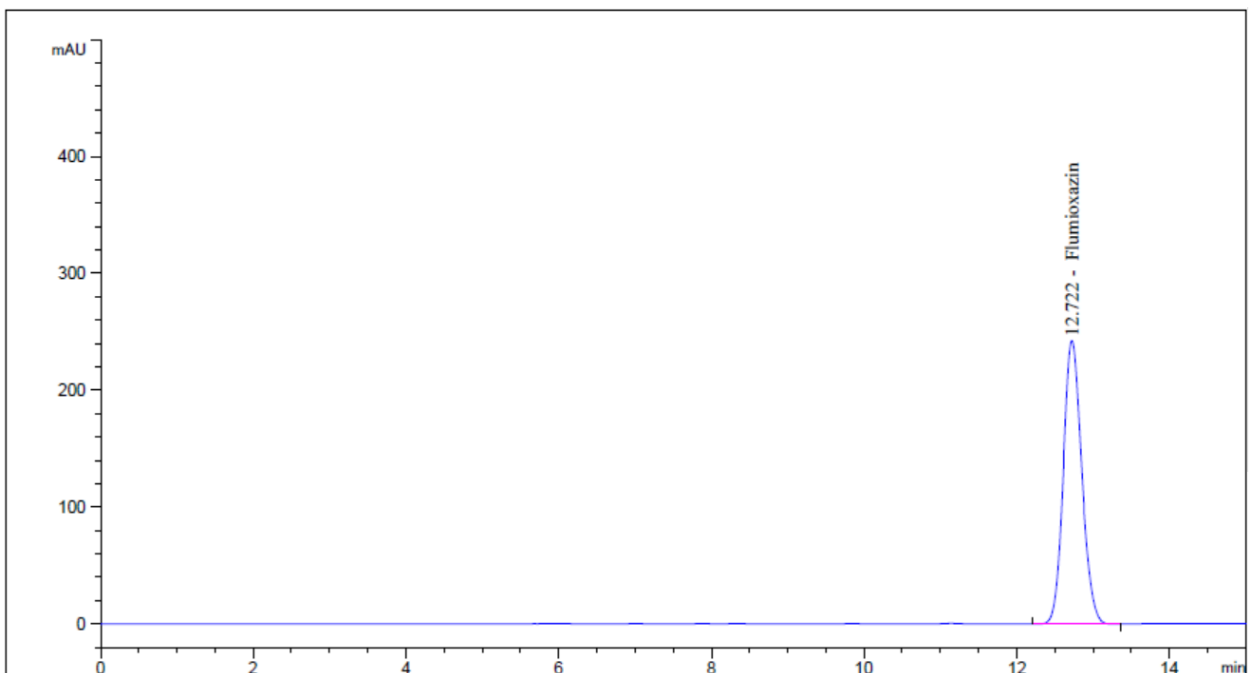


Fig 1: Example of Liquid Chromatogram of Flumioxazin standard

FLUMIOXAZIN 578

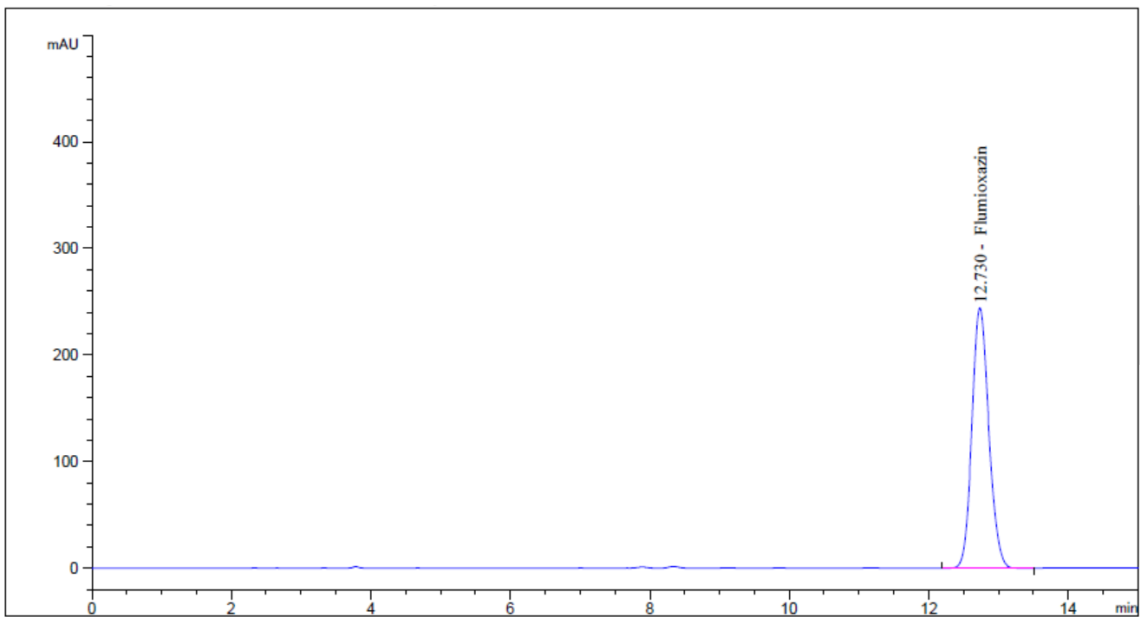


Fig 2: Example of Liquid Chromatogram of Flumioxazin SC

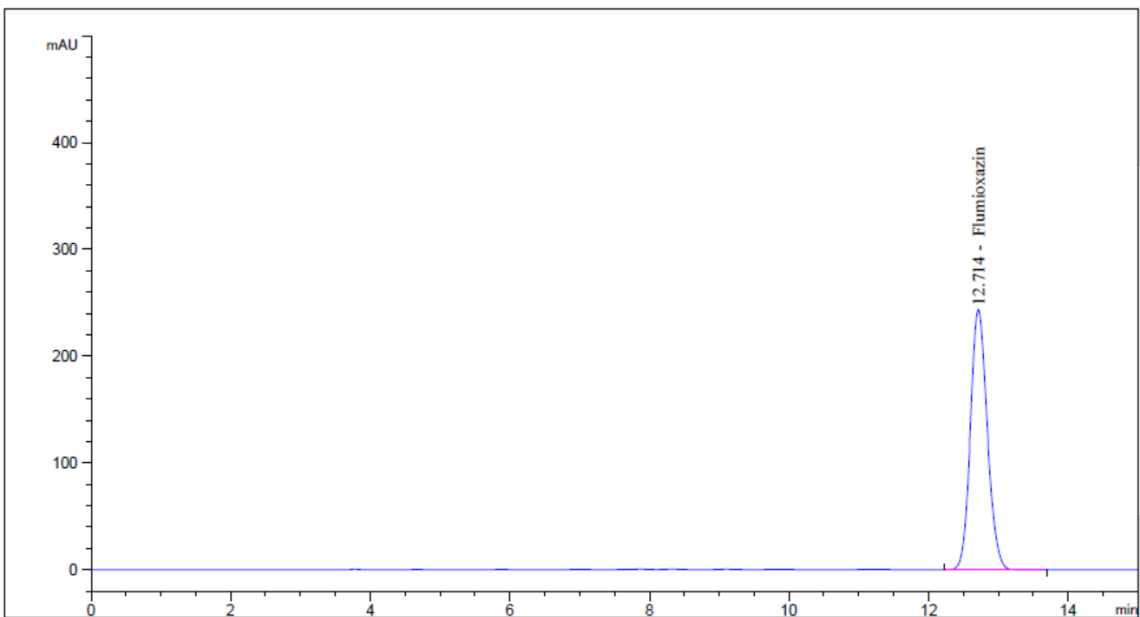


Fig 3: Example of Liquid Chromatogram of Flumioxazin WG