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OF VETERINARY MEDICINES

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ATI 310

Request

From: [Redacted under section 40 of the FOIA]

Sent: 3 September 2014

Subject: FOI request for ecotoxicological data

To Whom it may concern,

The Vim Spectrum Hungary Ltd Company would like to submit a request under the FOI act for the available ecotoxicological data concerning the active substance doxycycline, when used in powders for drinking water.

VMD Reply

Sent: 30 September 2014

To: [Redacted under section 40 of the FOIA]

Subject: FOI request for ecotoxicological data

Your Request

Thank you for your email to the VMD, dated 3 September 2014.

We are dealing with your request under the Freedom of Information Act 2000 (FOIA).

You asked for the ecotoxicological data concerning the active substance doxycycline, when used in powders for drinking water.

Our Reply

We have placed the data we hold [below].

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Our Service

If you are unhappy with the service you have received in relation to your request and wish to make a complaint, you may request an internal review within two calendar months of the date of this e-mail. If you would like to request an internal review please write to [Redacted under section 40 of the FOIA] at the VMD via ati@vmd.defra.gsi.gov.uk. If you are not content with the outcome of the internal review you have the right to apply directly to the Information Commissioner for a decision. The Information Commissioner can be contacted at: Information Commissioner's Office
Wycliffe House
Water Lane
Wilmslow
Cheshire
SK9 5AF

Ecotoxicological information - Doxycycline

Study	Results ¹		
	Data set 1	Data set 2	Data set 3
n-octanol/water partition coefficient OECD 107, 117 or 123	OECD 107: Log Pow: pH2 = -0.16; pH7 = -0.12; pH10 = -1.65	OECD 107: Log Pow: pH2.5 = -0.2; pH7 = -0.0; pH9 = -1.6	-0.02 (EpiSuite database)
Soil adsorption/desorption OECD 106	OECD 106 Koc: 47246; 93926; 237225	OECD 106 Koc: 137460; 74682; 175928; 99025; 315188	OECD 106 Koc: 71177; 106087; 221722
Soil degradation OECD 307	OECD 307 DT ₅₀ : 27 d ; 31 d	OECD 307 DT ₅₀ : 69 d ; 50 d (indicative only)	OECD 307 DT50 <30 days in 2 soils
Nitrogen transformation OECD 216	OECD 216 No effect 86.9 mg/kg	OECD 216 No effects >10 mg/kg	OECD 216 No effects 8.04 mg/kg
Terrestrial plants OECD 208	OECD 208 EC ₅₀ >150 mg/kg ²	OECD 208 lowest EC ₅₀ 66.3 mg/kg	OECD 208 EC ₅₀ >1000 mg/kg ²
Earthworm subacute/reproduction OECD 220/222	OECD 222 NOEC 925 mg/kg	OECD 222 NOEC 160 mg/kg	OECD 222 NOEC 1000 mg/kg
Algal growth inhibition OECD 201	OECD 201 Anabaena 72 h EC ₅₀ 175 µg/l	OECD 201 Pseudokircheriella 72 h EC ₅₀ 87.74 µg/l	OECD 201 <i>Synechococcus leopoliensis</i> 72 h EC ₅₀ 145 µg/l
<i>Daphnia magna</i> immobilisation OECD 202	OECD 202 48 h EC ₅₀ >161 mg/l	OECD 202 48 h EC ₅₀ >100 mg/l	OECD 202 48 h EC ₅₀ >68.1 mg/l
Fish acute toxicity OECD 203	OECD 203 96 h LC ₅₀ >97.55 mg/l	OECD 203 96 h LC ₅₀ >129.8 mg/l	OECD 203 96 h LC ₅₀ >90.6 mg/l

¹ All applications for a Marketing Authorisation are required to provide their own environmental risk assessment which leads more than one set of data for some active substances. Different results in the same test will be due to a number of factors including inherent biological variation and inter laboratory differences.

² All species tested (n=3)

Fate and effects information - Amoxicillin

Study	Result
Soil adsorption/desorption OECD 106	OECD 106 Koc: 40.4; 237.8; 65.4; 217.1; 51.2
Soil degradation OECD 307	OECD 307 DT ₅₀ : 0.41 hr; 0.85 hr; 1.49 hr; 1.26 hr

We hold no effects data for amoxicillin.