

Evaluation Report for Category B, Subcategory 1.1 Application

Application Number:	2014-0491
Application:	New / Changes TGAI Chemistry-New Source (site) same
	registrant
Product:	Clothianidin Technical Insecticide
Registration Number:	27445
Active ingredients (a.i.):	Clothianidin
PMRA Document Number	: 2474347

Purpose of Application

The purpose of this application was to add a new manufacturing site to Clothianidin Technical Insecticide.

Chemistry Assessment

Common Name:	Clothianidin
IUPAC* Chemical Name:	(E)-N-[(2-chloro-1,3-thiazol-5-yl)methyl]-N'-methyl-N"-
	nitroguanidine
CAS† Chemical Name:	[C(E)]-N-[(2-chloro-5-thiazolyl)methyl]-N'-methyl-N"
nitroguanidine	

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Clothianidin Technical Insecticide has the following properties:

Property	Result
Colour and physical state	Clear and colourless solid
Nominal concentration	97.5%
Odour	Odourless
Density	1.61 g/mL
Vapour pressure	$1.3 imes 10^{-10}$ Pa at 25° C
	3.8×10^{-11} Pa at 20° C
рН	6.2 (1% suspension)
Solubility in water	0.327 g/L at 20°C
n-Octanol/water partition coefficient	$\log K_{ow} = 0.7 (K_{ow} = 5)$



The chemistry requirements for Clothianidin Technical Insecticide have been fulfilled.

Health, Environmental, and Value Assessments

Health, value and environmental assessments were not required for this application.

Conclusion

The PMRA has completed an assessment of the information provided and is able to support the addition of a new manufacturing site for Clothianidin Technical Insecticide.

References

2391173	2013, Clothianidin - Description of the manufacturing process of the technical grade active substance for USA and Canada, DACO: 2.11.1, 2.11.2, 2.11.3, 2.2 CBI
2391174	2013, Clothianidin technical grade active substance - Discussion of formation of impurities, DACO: 2.11.4 CBI
2391175	2013, Clothianidin technical grade active substance - Justification of certified limits, DACO: 2.12.1 CBI
2391176	2013, Clothianidin (TI 435) - Determination of technical grade active substance HPLC - internal standard, DACO: 2.13.1 CBI
2391177	2013, Validation of AM022813MP1 - Clothianidin (TI 435) - Determination of technical grade active substance - HPLC - internal standard, DACO: 2.13.1 CBI
2391178	2006, Identification of substances by <cbi removed="">, DACO: 2.13.1 CBI</cbi>
2391179	2013, Clothianidin (TI 435) - Impurities in technical grade active substance <cbi removed="">, DACO: 2.13.1 CBI</cbi>
2391180	2013, Validation of <cbi removed="">, - Clothianidin (TI 435) - Determination of impurities in technical grade active substance <cbi removed="">, DACO: 2.13.1 CBI</cbi></cbi>
2391181	2013, Clothianidin (TI 435) - Determination of <cbi removed="">, in technical grade active substance <cbi removed="">, DACO: 2.13.1 CBI</cbi></cbi>
2391182	2013, Validation of GLC-method AM023013MP1 - Determination of <cbi Removed>, in technical grade active substance <cbi removed="">, DACO: 2.13.1 CBI</cbi></cbi
2391183	2012, Analytical method - <cbi removed="">- Determination of <cbi removed="">, on the basis of <cbi removed="">, DACO: 2.13.1 CBI</cbi></cbi></cbi>
2391184	2012, Determination of <cbi removed="">, in clothianidin - <cbi removed="">, DACO: 2.13.1 CBI</cbi></cbi>
2391185	2012, Validation of <cbi removed="">, Determination of <cbi removed="">, in clothianidin - <cbi removed="">, DACO: 2.13.1 CBI</cbi></cbi></cbi>
2391186	2013, Analytical procedure for the <cbi removed="">, DACO: 2.13.1 CBI</cbi>
2391187	2013, Material accountability of technical clothianidin (TI 435, AE 1283742) - Five batches of technical clothianidin, DACO: 2.13.2,2.13.3 CBI

ISSN: 1911-8082

[®] Her Majesty the Queen in Right of Canada, represented by the Minister of Public Works and Government Services Canada 2016

All rights reserved. No part of this information (publication or product) may be reproduced or transmitted in any form or by any means, electronic, mechanical photocopying, recording or otherwise, or stored in a retrieval system, without prior written permission of the Minister of Public Works and Government Services Canada, Ottawa, Ontario K1A 0S5.