

Evaluation Report for Category B, Subcategory 1.1 Application

Application Number: 2016-4513

Application: Changes to Technical Grade Active Ingredient product Chemistry –

New Source (site) same registrant

Product: Lord's Zinc Borate

Registration Number: 30429 **Active ingredient (a.i.):** Zinc Borate **PMRA Document Number:** 2780858

Purpose of Application

The purpose of this application was to add manufacturing sites to the technical grade active ingredient Lord's Zinc Borate.

Chemistry Assessment

Common Name: zinc borate

IUPAC* Chemical Name: Zinc Borate 2ZnO·3B₂O₃·3.5H₂O

CAS† Chemical Name: Boron zinc hydroxide oxide $(B_{12}Zn_4(OH)_{14}O_{15})$

* International Union of Pure and Applied Chemistry

† Chemical Abstracts Service

Lord's Zinc Borate has the following properties:

Property	Result
Colour and physical state	White powder
Nominal concentration	99.3%
Odour	Odourless
Density	0.73-0.81 g/mL
рН	7.7-8.5
Solubility in water	<2.2-3.2 mg/L
n-Octanol/water partition coefficient	Not applicable – the product is an inorganic salt.

The required chemistry data for Lord's Zinc Borate have been provided, reviewed, and found to be acceptable.



Health Assessments

Given the provided information, zinc borate does not represent an increase in toxicological hazard relative to currently registered sources.

Occupational and dietary exposure assessments were not required for this application.

Environmental and Value Assessments

Environmental and value assessments were not required for this application.

Conclusion

The Pest Management Regulatory Agency has completed a review of the available information in support of Lord's Zinc Borate and has found it sufficient to add the manufacturing sites.

References

PMRA	References
Document	
Number	
1969760	2005, Study of Storage Stability & Corrosion of Lords ZB-SHIELD for a duration
	of one year, DACO: 2.14.14 CBI
2667485	2016, Chemistry Data Requirements for Registration, DACO: 2.1,2.14.10,2.14.11,
	2.14.12,2.14.13,2.14.4,2.14.5,2.14.6,2.14.8,2.14.9,2.2,2.3,2.4,2.5,2.6,2.7,2.8,2.9
2667486	2016, Manufacturing Summary, DACO: 2.11,2.11.1,2.11.2,2.11.3,2.11.4 CBI
2667488	2015, Study of Color, Odor, Physical State, pH Density, Solubility, and Analysis
	for Zinc, Boron, Bound Water, and Water Loss of Lords Zinc Borate, DACO:
	2.13,2.13.1,2.13.2,2.13.3,2.14.1,2.14.2,2.14.3,2.14.6,2.14.7
2667489	2015, Study of Color, Odor, Physical State, Density, Solubility and Analysis for
	Zinc, Boron, Bound Water and Moisture of Lords Zinc Borate, DACO: 2.13,
	2.13.1,2.13.2,2.13.3,2.14.1,2.14.2,2.14.3,2.14.6,2.14.7
2667490	2010, Study of Color, Odor, Physical State, Density, Solubility, and Analysis of
	Zinc, Boron, Bound Water, and Moisture of Lords Zinc Borate, DACO: 2.13,
	2.13.1,2.13.2,2.13.3,2.14.1,2.14.2,2.14.3,2.14.6,2.14.7
2770269	2017, Study of [CBI removed], DACO: 2.13.4
2770270	2017, Study of [CBI removed], DACO: 2.13.4

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