

# Kalchem International

## Chemicals & Compounding Supplies

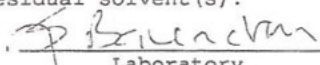
### CERTIFICATE OF ANALYSIS

Date: Monday, February 15, 2016

Product/Lot Number	ZOCO ZINC OXIDE 103USP	101858
Date of Manufacturing	02/12/16	
Expiration Date (USP)	02/13/18	

Parameter	Minimum	Test Value	Maximum	OK
ZnO, % (USP)	99.000	99.910	100.500	Y
Cd, %	---	0.00006	0.00100	Y
*Fe, %	---	0.00010	0.00050	Y
Pb, %	---	0.00020	0.00100	Y
*Cu, %	---	0.00004	0.00050	Y
As, %	---	0.00010	0.00060	Y
Loss @ 500 C, %	---	0.0400	1.0000	Y
Specific Surface, m2/g	---	3.29	3.99	Y
Mean Particle Size, (um)	0.27	0.32	---	Y
+325 Mesh Residue, % (dry)	---	0.0008	0.0100	Y
Color (USP)	---	PASS	---	Y
Alkalinity (USP)	---	PASS	---	Y
Carbonate (USP)	---	PASS	---	Y
Identification A (USP)	---	PASS	---	Y
Identification B (USP)	---	PASS	---	Y
Iron & Heavy Metals (USP)	---	PASS	---	Y
Lead (USP)	---	PASS	---	Y
Arsenic (USP)	---	PASS	---	Y
Appearance (USP)	---	PASS	---	Y

This material conforms to the zinc oxide specifications of both The Pharmacopeia of the United States (Current edition) and the U.S. Food and Drug Administration 21 CFR 73.1991. As well as EP/BP standard (Current edition). Zochem zinc oxide meets the residual solvents standards of the ICH, that is, it does not contain residual solvent(s).

  
 Laboratory Init.

  
 Quality Control Manager Init.

\* Reflective of previous month.

C of A via Fax and Truck.

02/15/2016

Manufactured by Zochem Inc. @ 1 Tilbury Court, Brampton, Ontario

The results reported on this certificate of analysis are based on samples taken during the testing process which is assumed to statistically represent the whole of the product delivered. Results based on statistical samples cannot be guaranteed to accurately reflect all of the delivered product. While Zochem warrants that it makes all reasonable efforts to deliver the product in accordance with buyer specifications, isolated incidents of contaminated or non-specification product may occur initially and over time in non-sample parts of the delivered product, and the buyer and any user of the product accept all risk of loss or damage arising from or associated with any such contamination or non-specification. Furthermore, this certificate is intended solely for the use of the buyer of the product to which it applies and may not be relied upon by any other person.

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