

**Technical Data Sheet**

**Product: Zinc Oxide (ZnO) Gold Seal**

**Product Code: NGLD CR-4 USP 1**

<b><u>Physical Properties</u></b>				
	<b>Unit</b>	<b>Target</b>	<b>Min.</b>	<b>Max.</b>
Specific Surface Area	m <sup>2</sup> /g	4.5	4.0	5.0
Bulk Density	lb./ft <sup>3</sup>	40	35	45
Specific Gravity		5.6	--	--
Through 325 Mesh	%	--	99.98	100
<b><u>Chemical Properties</u></b>				
	<b>Unit</b>		<b>Min.</b>	<b>Max.</b>
Description:	A very fine, amorphous, white or yellowish powder free from gritty particles.		Conforms	
Identification:	A – When strongly heated, it assumes a yellow color that disappears on cooling.		Conforms	
	B- In the presence of sodium acetate, solutions of zinc salts yield a white precipitate with hydrogen sulfide. This precipitate is insoluble in acetic acid; but is dissolved by 3N hydrochloric acid.		Conforms	
Alkalinity:	If a red color is produced, not more than 0.30 ml of 0.10N hydrochloric acid is required to discharge it.		Conforms	
Loss on Ignition @ 500°C	%		0	1.0
Carbonate and color solution:	No effervescence occurs and the resulting solution is clear and colorless.		Conforms	
Arsenic:	(ppm)	Not more than 6 ppm.	0	6.0
Lead:	The addition of 5 drops of potassium chromate TS produces no turbidity or precipitate.		Conforms	
Lead (A-A analysis)	(ppm)		0	10
Iron and heavy metals:	White precipitates are formed when potassium ferrocyanide TS is added to the first portion and when sodium sulfide TS is added to the second portion.		Conforms	
Assay ZnO:	%		99.0	100.5
Cadmium Content	(ppm)		0	10
Iron (A-A analysis)	(ppm)		0	10
Copper Content:	(ppm)		0	10
Heat Loss @ 110°C:	%		0	0.07
NGLD CR-4 USP 1 is produced to comply with the most current USP requirements for zinc oxide.				
Ref: TDS ZnO-NGLD CR-4 USP 1, Version 001, Date: June 2014				