

# Technical Data Sheet

ZINC OXIDE (ZnO)

GRADE: CR-4 USP 2

**G.H. CHEMICALS LTD.**

PRODUITS CHIMIQUES G.H. LTÉE

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## Physical Properties

	Unit	Target	Min.	Max.
Specific Surface	(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

## Chemical Properties

	Unit	Min.	Max.
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 3 N hydrochloric acid.		Conforms
Alkalinity :	if a red color is produced, not more than 0.30 mL of 0.10 N 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 :	Not more than 6 ppm	(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 20
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

CR-4 USP 2 is produced to comply with the most current USP requirements for zinc oxide

TDS0019 Version 2

