

Zochem LLC (Zochem South)  
600 Printwood Drive  
Dickson, TN 37055, USA  
[CustomerService@Zochem.com](mailto:CustomerService@Zochem.com)  
PHONE (615) 446-8791  
FAX (615) 446-8789



Zochem ULC (Zochem North)  
1 Tilbury Court, Brampton  
Ontario, L6T 3T4, Canada  
[CustomerCare@Zochem.com](mailto:CustomerCare@Zochem.com)  
PHONE (800) 324-1806  
FAX (905) 453-2920

## TECHNICAL DATA SHEET

# ZINC OXIDE GRADE 104

### Description

Our Zinc Oxide product is a brilliant white powder manufactured by the French (Indirect) Process.

Grade 104 is our popular medium particle size zinc oxide offering high assay and very low impurities.

Grade 104 is approved for pharmaceutical drug use as an excipient, is USFDA approved as GRAS (Generally Recognized As Safe) at 21cfr182.8991 and is authorized by the USFDA for use wherever GRAS is approved including food contact in rubber, plastics, and coatings. Grade 104 also meets the requirements of ASTM specification D79, 2002/95/EC Restriction of Hazardous Substances Directive (RoHS) for heavy metals and Waste Electrical and Electronic Directive (WEEE), and other regulations where high quality zinc oxide is required.

This product is also available in pelleted form (grade 104P), and with around up to 0.1% processing aid/surface treatment (grade 104T) for some rubber mixers.

- Grade 104 replaces grades Zinc Oxide LLC 800, and KADOX 920.
- Grade 104P replaces grades Zinc Oxide LLC 800P, KADOX 920P and KADOX 920H.
- Grade 104T replaces grades ZOCO 172, Zinc Oxide LLC 800-T, and KADOX 920C/920CO.

### Uses

This grade is used where lower impurities are required and is used in the chemical, tire and rubber, paint and coatings, and all applications except when a special product is requested or required.

## REPRESENTATIVE CHEMICAL PROPERTIES

Chemical Analysis (%)	Typical Limit**	Nominal	Test Method
Zinc Oxide (ZnO) ignited basis	99.8 min	99.9	Supplier (calculation)
Lead (Pb) *	0.003 max	0.002	ASTM D4075
Cadmium (Cd) *	0.002 max	0.0003	ASTM D4075
Iron (Fe)	0.002 max	0.0003	ASTM D4075
Copper (Cu)	0.001 max	0.0001	ASTM D4075
Loss at 110°C (moisture)	0.3 max	0.2	ASTM D280

## REPRESENTATIVE PHYSICAL PROPERTIES

Surface Area (m <sup>2</sup> /g) *	4 - 6	5	ASTM D4315
Fineness retained on 325 mesh (%) *	0.02 max	0.005	ASTM D185
(Fineness passing through 325 mesh (%)	99.98 min	99.995	ASTM D185)
Specifications			ASTM D79

\* Regular test item for process & product control and included on COA. Other items are for reference only.

\*\* Zochem can produce zinc oxide to customer specifications superseding the above table.

**Standard Packaging:** 50 lb. Kraft paper bags on 2,000 to 2,500 lb net wt. pallet unit, or 2,000 lb FIBC.