



## TECHNICAL DATA SHEET

# ZINC OXIDE

# GRADE 500

### Description

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

Grade 500 is a popular general use high quality lower lead (Pb) zinc oxide. Grade 500 meets GMP 21CFR110, 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 500 also meets the requirements of ASTM specification D79, 2000/53/EC End of Life Vehicles (ELV Directive), 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.

The product is also available in pelleted form (grade 500P), and with around up to 0.1% processing aid/surface treatment (grade 500T) for some rubber mixers.

### Uses

This grade is widely used in tire and rubber, paint and coatings, in applications requiring an FDA approved substance, and in all other 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	99.7 min	99.9	Supplier (calculation)
Lead (Pb) *	0.05 max	0.01	ASTM D4075
Cadmium (Cd) *	0.01 max	0.001	ASTM D4075
Iron (Fe)	0.003 max	0.001	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 (%) *	0.03 max	0.01	ASTM D185
(Fineness passing through 325 mesh (%))	99.97 min	99.99	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.