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## TECHNICAL DATA SHEET

# ZINC OXIDE GRADE 102

### Description

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

Grade 102 offers high assay, very low impurities, and fine particle size with the highest French Process m<sup>2</sup>/g surface area ("SA") available.

Grade 102 replaces grades KADOX 911.

This product is also available with processing aid/surface treatment (grade 102T). Grade 102T replaces grade ZOCO 102C and KADOX 911C.

Grade 102 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 102 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 grade is used where very low impurities are required, and where increased zinc oxide reactivity provides application benefits.

### 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	AA (ASTM D4075) or ICP (EPA 200.7)
Cadmium (Cd) *	0.002 max	0.0003	AA (ASTM D4075) or ICP (EPA 200.7)
Iron (Fe)	0.002 max	0.0003	AA (ASTM D4075) or ICP (EPA 200.7)
Copper (Cu)	0.001 max	0.0001	AA (ASTM D4075) or ICP (EPA 200.7)
Loss at 110°C (moisture)	0.4 max	0.2	ASTM D280

### REPRESENTATIVE PHYSICAL PROPERTIES

Surface Area (m <sup>2</sup> /g) *	8.0 – 10	9	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 available if specified by customer and agreed upon by Zochem.

\*\* 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, or 2,000 lb FIBC.  
 Shelf life one year from date of manufacturing.