



# Yung Chyang Chemical Industries Co.,Ltd.

## Technical Data Sheet ( Zinc Oxide ; ZnO )

### 1. Raw Materials :

AG-ZnO – Zinc Dross , Zn > 92%

SHG-ZnO – Zinc Ingot , Zn > 99.995%

### 2. Manufacturing Process : French Process (Indirect)

Prepared by vaporization of metallic Zinc and Oxidation of the vapors with air.

### 3. Properties :

White odorless powder, Hexagonal crystalline. PH 7.4 (5% Soln.)

Practically insoluble in water, alcohol, organic solvent

Soluble in dilute acetic or mineral acid, ammonia, fixed alkali hydroxide soln.

### 4. Specification :

#### 1. Physical Properties :

a. Chemical formula	: ZnO	b. Molecular Weight	: 81.38
c. Melting Point	: 1,800°C↑	d. Specific Gravity	: 5.5-5.7
e. Mean Particle Size	: 1.0µm	f. Surface Area	: 3.0-5.0 m <sup>2</sup> /g
g. Particle Shape	: Nodular	h. Oil Absorption, DOP	: 28ml/100g

#### 2. Chemical Specification :

Item	Special High Grade		A Grade	
	Guarantee Value	Typical Assay	Guarantee Value	Typical Assay
1. Assay ZnO	Min. 99.80%	99.88%	Min. 99.50%	99.60%
2. Moisture 105°C*2HRS	Max. 0.30%	0.10%	Max. 0.30%	0.15%
3. Soluble in H <sub>2</sub> O	Max. 0.10%	0.03%	Max. 0.10%	0.03%
4. Insoluble in HCl	Max. 0.05%	0.01%	Max. 0.10%	0.05%
5. Pb ,Lead	Max. 0.003%	0.0012%	Max. 0.15%	0.08%
6. Cd, Cadmium	Max. 0.001%	0.0002%	Max. 0.01%	0.003%
7. Reduce 325 mesh	Max. 0.10%	0.020%	Max. 0.10%	0.05%
8. PH Value	7.35-7.50	7.38	7.35-7.50	7.42

### 5. Uses :

In rubber, ceramics, and opaque glass; Manuf. Enamels, cosmetics, driers, Cements;  
Manuf. Zinc phosphate coating, paint, soft type ferromagnetic, copy paper, medicine

### 6. Package : Net weight 25 kgs PP film, woven bag.

### 7. Shelf Life : 2 years

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