

November 2001

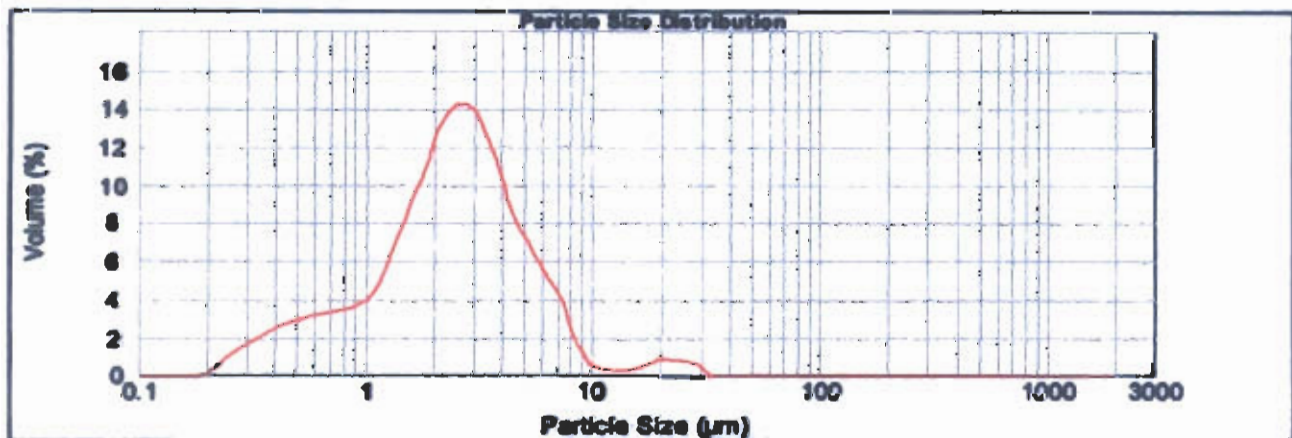
## Technical Data Sheet for Indium Oxide powder

**Nomenclature:** Indium(III)Oxide, Indium Oxide, Indium Trioxide  
**Formula:**  $\text{In}_2\text{O}_3$  M.W. 277.6  
**CAS Number:** 1312-43-2

Chemical Data	Typical values		Morphology	Typical values
$\text{In}_2\text{O}_3$	99.9% min.	99.99%min.	<b>Particle size</b>	
Bi	3ppm	1ppm	D10	0.65 micrometers
Ca	< 5ppm	< 5ppm	D50	2.28 micrometers
Cr	1ppm	1ppm	D90	5.07 micrometers
Cd	8ppm	1ppm		
Cu	3ppm	2ppm	<b>Crystalline Density</b>	
Fe	8ppm	8ppm	$\text{In}_2\text{O}_3$	= 7.179gcm <sup>-3</sup>
Ni	1ppm	1ppm	<b>Tap density</b>	= 0.4gcm <sup>-3</sup>
Si	12ppm	12ppm		
Sb	10ppm	1ppm	<b>Moisture &amp; ignition loss</b>	typically < 0.1%
Pb	12ppm	2ppm		
Tl	< 2ppm	< 2ppm	<b>Theoretical % metal in compound as indium</b>	= 82.71% w/w
Zn	4ppm	< 2ppm		

**Appearance** - fine yellow powder  
**Solubility** in water - insoluble  
**Solubility** in mineral acids - soluble

**Packaging/Containers**  
Typically 5-10kg plastic tubs



Profile for indium oxide with D50 particle  
size of 2.28µm