

## Indium Corp. Germanium Corporation® GeO2 Germanium Dioxide

Category : Ceramic , Oxide

### Material Notes:

Germanium dioxide is a white powder that is manufactured in both crystalline and amorphous forms. Germanium dioxide's refractive index (1.7) and its optical dispersion properties are useful for making wide-angle lenses and optical microscope objective lenses. It is transparent to infrared light. Germanium dioxide is also used as a catalyst in the production of polyethylene terephthalate (PET) resin and in the production of other germanium compounds, as well as some phosphors and semiconductor materials. Characteristics: Synonyms:

Germanium (IV) Oxide, GeO2 CAS Number: 1310-53-8 EC Number: 215-180-8 RTECS: LY5240000 Purity: 99.999% Appearance/Form: White powder Crystal structure: Hexagonal Solubility: Soluble in Alkalis. Slightly Soluble in Acids. Slightly soluble in Water. Information provided by the manufacturer, Indium Corporation of America.

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_Indium-Corp-Germanium-Corporation-GeO2-Germanium-Dioxide.php](http://www.lookpolymers.com/polymer_Indium-Corp-Germanium-Corporation-GeO2-Germanium-Dioxide.php)

Physical Properties	Metric	English	Comments
Bulk Density	1.30 - 1.70 g/cc	0.0470 - 0.0614 lb/in <sup>3</sup>	apparent
Loss On Ignition	<= 3.0 %	<= 3.0 %	
Molecular Weight	104.61 g/mol	104.61 g/mol	
Maximum Moisture Content	<= 1.0	<= 1.0	Typical, LOD
	<= 2.0	<= 2.0	LOD

Thermal Properties	Metric	English	Comments
Melting Point	1115 Â°C	2039 Â°F	

Optical Properties	Metric	English	Comments
Refractive Index	1.70	1.70	
IR Transmittance	90 %	90 %	transparent; thickness not quantified

Component Elements Properties	Metric	English	Comments
Aluminum, Al	<= 0.00010 %	<= 0.00010 %	Typical
	<= 0.00030 %	<= 0.00030 %	Max
Cobalt, Co	<= 0.00010 %	<= 0.00010 %	Typical
	<= 0.00030 %	<= 0.00030 %	Max
Copper, Cu	<= 0.00010 %	<= 0.00010 %	Typical

Component Elements Properties	<b>&lt;= 0.00030 %</b> Metric	<b>&lt;= 0.00030 %</b> English	<b>Max</b> Comments
Germanium, Ge	69.434 %	69.434 %	Theoretical
Iron, Fe	<= 0.00020 %	<= 0.00020 %	Typical
	<= 0.00030 %	<= 0.00030 %	Max
Nickel, Ni	<= 0.00010 %	<= 0.00010 %	Typical
	<= 0.00030 %	<= 0.00030 %	Max
Trace Metals	<= 0.00030 %	<= 0.00030 %	Total combined metals, typical
	<= 0.0010 %	<= 0.0010 %	Total combined metals, max
Zinc, Zn	<= 0.00010 %	<= 0.00010 %	Typical
	<= 0.00030 %	<= 0.00030 %	Max

Chemical Properties	Metric	English	Comments
Ionic Impurities - Cl (Chloride)	<= 500 ppm	<= 500 ppm	

## Contact Songhan Plastic Technology Co.,Ltd.

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