

## MarkeTech Gadolinium silicate: Cerium (GSO:Ce; Gd<sub>2</sub>SiO<sub>5</sub>) Scintillator Crystal

Category : Ceramic , Oxide

### Material Notes:

Gadolinium silicate doped with cerium is a "fast" crystal and can be used as a protection scintillator. Its possible applications include computer tomography, spatial resolution of less than 1 mm. Is the most promising for spectrometry and radiometry of gamma-radiation in the low energy range (

Order this product through the following link:

[http://www.lookpolymers.com/polymer\\_MarkeTech-Gadolinium-silicateCerium-GSO:Ce-Gd2SiO5-Scintillator-Crystal.php](http://www.lookpolymers.com/polymer_MarkeTech-Gadolinium-silicateCerium-GSO:Ce-Gd2SiO5-Scintillator-Crystal.php)

Physical Properties	Metric	English	Comments
Density	6.71 g/cc	0.242 lb/in <sup>3</sup>	

Mechanical Properties	Metric	English	Comments
Hardness, Mohs	5.7	5.7	

Thermal Properties	Metric	English	Comments
CTE, linear	4.00 - 12.0 $\mu\text{m/m}\cdot^\circ\text{C}$	2.22 - 6.67 $\mu\text{in/in}\cdot^\circ\text{F}$	

Descriptive Properties	Value	Comments
Crystal Structure	Monoclinic	
Luminescence: Afterglow	<0.005%	at 6 ms
Luminescence: Decay Constant	30-60 n/s	
Luminescence: Integrated Light Output	20-25	NaI:TI = 100
Luminescence: Photon Yield	8 to 10	300K; 10 <sup>3</sup> pH/MeV
Luminescence: Radiation Length	1.38 cm	
Luminescence: Wavelength of max emissions	440 nm	

## Contact Songhan Plastic Technology Co.,Ltd.

Website : [www.lookpolymers.com](http://www.lookpolymers.com)

Email : [sales@lookpolymers.com](mailto:sales@lookpolymers.com)

Tel : +86 021-51131842

Mobile : +86 13061808058

Skype : lookpolymers

Address : United North Road 215, Fengxian District, Shanghai City, China