



OxiMax™ COATING

Ultrapure, transparent silicon oxide coating

Overview

Entegris uses its innovative, low-temperature Plasma Enhanced Chemical Vapor Deposition (PECVD) process to deposit silicon oxide coatings for various industrial applications, including semiconductor equipment chamber components. The AR properties of the coating make it suitable for coating IR optics. The OxiMax™ coating has low internal stress and is highly adherent and micro-conformal to the substrate surface. This coating is amorphous, highly dense and can be deposited on a wide variety of substrate materials.



Applications

- Particle reduction during semiconductor wafer processing
- Oxidation/corrosion resistant
- AR properties make it suitable for coating IR optics

Features

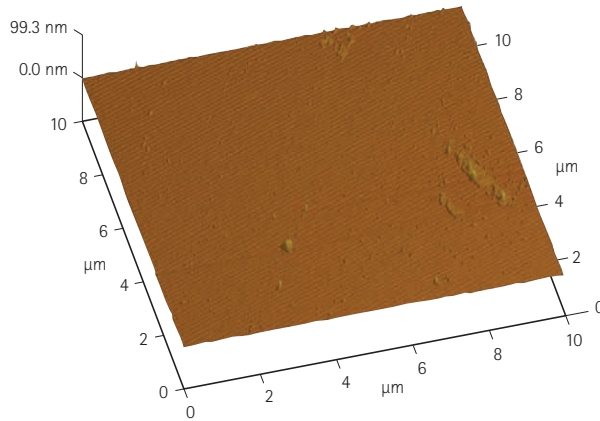
- Optically transparent
- Excellent breakdown voltage

Specifications

Substrate:	Compatibility	Most metals and ceramics
	Size	Up to 91 cm (36")
	Geometry	Any shape, including complex geometries
Structure:	Amorphous	
Temperature:	Deposition	Max 150°C (302°F)
	Use	1000°C (1832°F)
Coating thickness:	A few nm to over 100 μm	
Electrical resistivity:	~10 ¹³ Ω-cm	
Hardness:	800 HV	
Dielectric strength:	80 V/micron	
Purity:	99.9995%	
Wear resistance:	Very good	
Corrosion resistance:	Excellent aqueous corrosion resistance	
	Resistant to acids and alkalis	

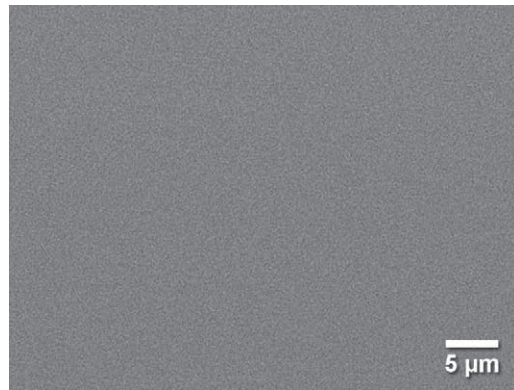
Characteristics

AFM Image of OxiMax Coating

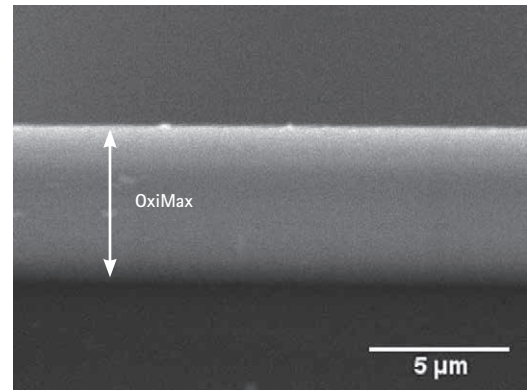


SEM Images of OxiMax Coating

Coating Surface Morphology



Coating Cross-section



For More Information

To learn more about how Entegris' high-purity specialty coatings help customers enhance yields, improve productivity and meet future technological needs, call Entegris at +1 781-538-8745.

To review Entegris' specialty coatings offering, visit Entegris' website at www.EntegrisSpecialtyCoatings.com.

Terms and Conditions of Sale

All purchases are subject to Entegris' Terms and Conditions of Sale. To view and print this information, visit www.entegris.com and select the Legal Notices link from the footer.

Entegris®, the Entegris Rings Design®, Creating a Material Advantage® and OxiMax™ are trademarks of Entegris, Inc.

ENTEGRIS, INC.

Corporate Headquarters | 129 Concord Road | Billerica, MA 01821 USA
Customer Service Tel. +1 952 556 4181 | Customer Service Fax +1 952 556 8022
In North America 800 394 4083 | www.entegris.com

©2008–2014 Entegris, Inc. All rights reserved Printed in USA 6102-5485ENT-0514

