Desert Silicon
LIQUID SOURCE SOLUTIONS

Spin-on Dopant Si-2000

Elements of Interest	Key Element atoms/cm^3	Key Element % in Film
Si, O	N/A	N/A
Viscosity	**Thickness**	**Shelf Life**
0.90 +/- 0.15 cps	Coats 2000 Å (200 nm) at 4000 rpm Refractive Index 1.4161	20°C 3 months 4°C 9 months
Dielectric Constant (k)		
3.0		

Benefits

- Simple method for silicon dopant layers
- Can be used as a source of silicon for doping purposes
- Lower Maintenance and Cost of Ownership
- High purity materials
- Uniform Coatings
- Basic composition that other elements can be easily added to
- Stable Processing Independent of Flow Rates

Typical Application

This is a silicon-doped glass that is used as a silicon-doping source. When baked at 250°C it gives a low-density film that continues to become increasingly dense as bakes continue to 600°C or higher. We recommend baking at least as high as the highest temperature in subsequent processing.

The silica formed films have high melting points. Other elements can be added to lower the melting point if that is desired. Sometimes elements are added to change the refractive index or other properties.

Packaging

- 240ml
- 500ml
- 1 l
- 2.5 l
- 4 l

Alternative Products

Sn-365

Alternate Elements

- Ge
- Tin
- Blends of two or more elements
- Other elements available for compound semiconductor use

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