

Desert Silicon Inc. 941 S. Park Ln. Tempe AZ 85281

http://www.desertsilicon.com/

| Spin-on-Glass P-260         |                                     |                     |
|-----------------------------|-------------------------------------|---------------------|
| <b>Elements of Interest</b> | Concentration atoms/cm <sup>3</sup> | Key Element in Film |
| Si, O, P                    | $8.8 \times 10^{^{21}}$             | Phosphorus          |
| Viscosity                   | Thickness                           | Shelf Life          |
| 1.3 cps                     | Coats 1800 Å at 3000 rpm            | 20°C 3 months       |
|                             |                                     | 4°C 9 months        |

## **Benefits**

- Heavy phosphorus doping level
- Easy shipping without POCl<sub>3</sub> complications
- Lower maintenance and cost of ownership
- High purity materials

- Uniform coatings
- Lower melting point than silica alone
- Stable processing independent of flow rates
- Available with impurity specification of less than 1 ppm or less than 50 ppb.

# **Typical Application**

This is a standard phosphorous doped silicate glass very typical for semiconductor applications. It begins curing at about 200°C to give a less dense but solid film. It becomes increasingly strong as bake temperatures rise to 650°C or higher. We recommend baking at the highest temperature the material will see in any post processing. For doping applications the glass is often removed after the drive-in procedure.

The phosphorous in the glass matrix can act as a getter for sodium and other mobile ions. This reduces the effective concentration of unwanted ionic species.

#### **Packaging**

- 240 ml
- 500 ml
- -1L
- -2.5 L
- 4 L

#### **Alternative Products**

P-210

P-220

P-230

P-240

P-250

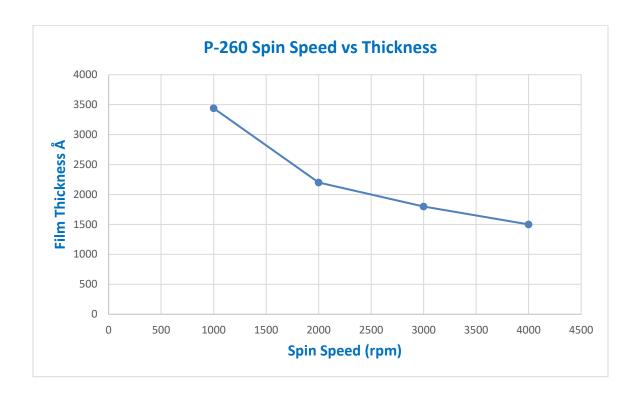
### **Elements Available to Add**

- -As
- Sb
  - **B**1
- Blends of two or more elements
- Other elements available for compound semiconductor use

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