



# DESERT SILICON, INC.

ENDURING EFFICIENCY THROUGH PROCESS, PROPERTIES, AND MATERIALS

## Spin-on-Glass P-280

Elements of Interest	Key Element atoms/cm <sup>3</sup>	Key Element % in Film
Si, O, P	P, 5E+21	Phosphorus
Viscosity	Thickness	Shelf Life
1.3 cps	Coats 4800 Å at 3000 rpm	20°C 3 months 4°C 9 months

### Benefits

- High 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 in the low ppb range.

### Typical Application

This is a standard silicate phosphorous doped glass very typical for semiconductor applications. Typical curing at 150° - 200°C gives a low density but solid film. It continues to become increasingly dense as temperature increases to 650°C or higher. We recommend baking at the highest temperature the material will see in any post processing if the material is to remain with the part. For doping applications the glass is often removed after drive in. 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

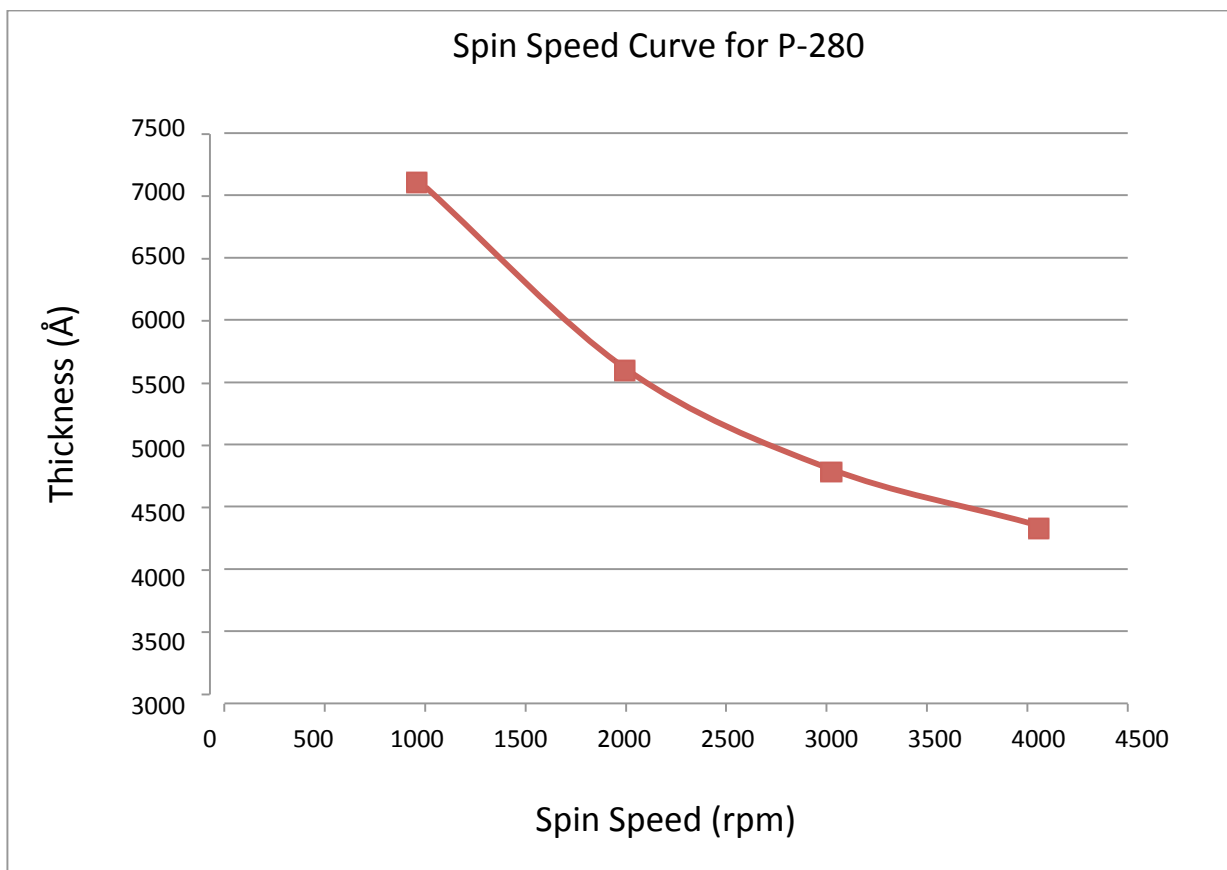
- 8 oz (240ml)
- 16 oz (480ml)
- Larger sizes available for higher volume applications

### Alternative Products

P-240  
P-250  
P-260  
P-640

### Elements Available to Add

- As
- Sb
- Blends of two or more elements are available
- Other elements are available for compound semiconductor doping



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