

Standard Oxide Recipe - STS PECVD 3

February, 2 2016

Equipment

| | |
|-------------|--------------|
| Equipment | STS PECVD 3 |
| Manufacture | Plasma-Therm |
| Model | unknown |
| Platen size | 6 in |

Recipe

| | | |
|--------------------|------------------|-----------|
| Recipe Name | | |
| Gas | SiH ₄ | 8 sccm |
| | N ₂ O | 1440 sccm |
| | N ₂ | 391 sccm |
| Platen Power | 25 W | |
| RF Frequency | 13.56 Mhz | |
| Chamber Pressure | 650 mTorr | |
| Platen Temperature | 300 °C | |

Results ^a

| | |
|-----------------------|-----------------------------|
| Deposition Rate | 359 Å/min ^b |
| Uniformity | 0.4 % ^c |
| Refractive Index | 1.4711 ^d |
| Stress Level | -429.7 MPascal ^e |
| Etch Rate (100:1 BOE) | N/A ^f |

^a: All data is updated as the date indicated above

^b: An average value from min deposition

^c: Film thickness variation across a 4" wafer, defined as (max-min)/average

^d: An average value across a 4" wafer

^e: Measured with optical stress measurement tool

^f: An average value from min etch