**Product**  
SOG Ti-452

**Elements of Interest**  
Ti, O

**Key Element percentage**  
100 wt% TiO₂ in glass

<table>
<thead>
<tr>
<th>Dielectric Constant and RI</th>
<th>Viscosity</th>
<th>Shelf Life</th>
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<tbody>
<tr>
<td>Dielectric Constant 78</td>
<td>0.90 +/- 0.25 cps</td>
<td>20°C 3 months</td>
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<tr>
<td>Refractive Index 2.5</td>
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<td>4°C 9 months</td>
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**Typical Application**  
Titanium oxide coatings are useful for their high dielectric constant and high dielectric strength. This combination is useful in making capacitors in many diverse applications. The higher index is useful for matching to many semiconductor light input or output devices. It can also be used depending on processing to give a white boundary.

**Benefits**
- Excellent capacitor interlayer dielectric
- Uniform Coatings
- High index for matching optical inputs / outputs or cladding.
- White coating for marking or dispersion.
- UV absorbing for critical applications

**Packaging**
240ml, 500ml, 1l, 4l  
Packaging Standard.

**Alternative Products**
Ti-140R

**Alternative Elements**
Yttrium, Zirconium, Hafnium or Niobium  
Blends of two or more elements also available.  
Other elements available for compound semiconductor use.
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