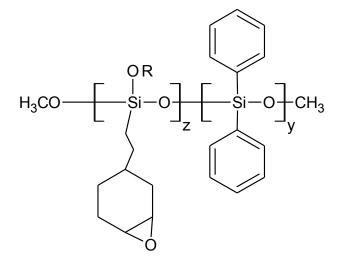


### Advanced Materials for **PERFORMANCE**

# PC-2011 Epoxy Siloxane Copolymer

## Technical Bulletin



Polyset product no. **PC-2011** is a viscous, multifunctional siliconcontaining epoxy resin with exceptionally high reactivity. PC-2011 is a clear, colorless to light straw colored fluid which displays low toxicity. The following physical and chemical characteristics make **PC-2011** a unique product suitable for a wide range of applications.

### **Typical Uncured Properties**

Physical appearance	Colorless to light straw liquid
Viscosity	22,000 – 28,000 cps @ 25C
Specific gravity	1.08
Weight per gallon	9.0 lbs/gal

**PC-2011** can be employed in a variety of optical/microelectronics applications. PC-2011 can be cured photochemically using cationic polymerizations such as diaryliodonium and triarylsulfonium salts. Such cationic polymerizations are especially useful in applications where high cure rates are desirable such as photolithography and printable interconnects.

In cured form, **PC-2011** has desirable mechanical and electrical characteristics including:

#### **Typical Cured Properties**

Hardness	350 MPa (@ 20 nm nanoindent)
Modulus	3 GPa (@ 20 nm nanoindent)
Dielectric Constant	2.9
Refractive Index	1.57 (@ λ = 589 nm)
Thermal decomposition point	> 425°C

The Polyset Company has considerable experience in tailoring formulations based on **PC-2011** for specific applications. In addition, the Polyset Company possesses unique thermal and UV epoxy cure systems which provide rapid cure of PC-2011 at low temperatures. We will gladly formulate **PC-2011** and other epoxy-based resins to your specifications.

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