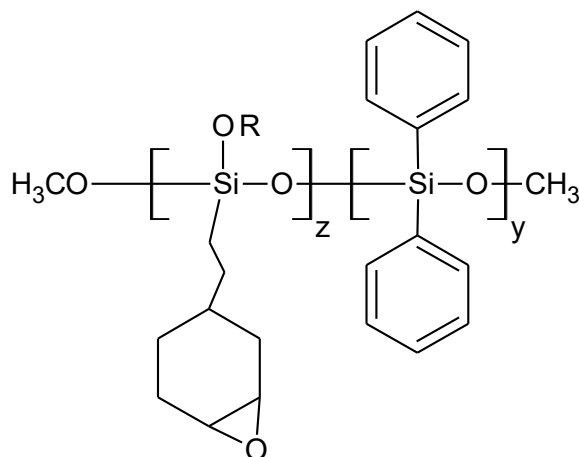




PC-2011 Epoxy Siloxane Monomer

Technical Bulletin



Polyset PC-2011 is a viscous, multi-functional silicon-containing 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, cps @ 25°C	20,000 – 30,000
Specific Gravity	1.08
Weight per Gallon, lbs/gal	9.0

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, MPa @ 20 nm nanoindent	350
Modulus, GPa @ 20 nm nanoindent	3
Dielectric Constant	2.9
Refractive Index, @ λ = 589 nm	1.57
Thermal Decomposition Point, °C	> 425

Polyset has considerable experience in tailoring formulations based on PC-2011 for specific applications. In addition, Polyset 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.

Limited Warranty: Polyset Company Inc. makes no warranty, expressed or implied, including any warranty of merchantability of fitness for a particular purpose. The sole remedy of Purchaser for any claim concerning this product, including, but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is the replacement of product or refund of the purchase price, at the discretion of Polyset Company Inc. Any claims concerning this product shall be submitted in writing within one year of the delivery date of this product to Purchaser and any claims not presented within that period are waived by Purchaser. IN NO EVENT SHALL POLYSET COMPANY INC. BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDES LOSS OF PROFITS) OR PUNITIVE DAMAGES. Copyright © 2020 Polyset Company, Inc. All rights reserved. Revised 8/14/2020