

## **Commercially available Polycarbosilane(PCS) from NaBond Silicon Carbide Matrix Precursor**



Polycarbosilane(PCS) is the most typical polymeric solid precursor with main chain of Si-C to high temperature resistant SiC ceramics.

NaBond\_Polycarbosilane with high quality now available commercially. Call or email for more details.

### **Benefits of NaBond\_Polycarbosilanes (PCS)**

- High thermal stability and purity of 99%.
- Well-distributed molecular weight which molecular weight distribution index is around 2.0.
- High ceramic yields of more than 55wt%
- Patented production method with good diathermancy and reaction uniformity has a high yield, high synthesis efficiency and short preparation time. No harmful gases released out during the production process.
- Self-curing.
- Low oxygen content.

#### **Polycarbosilane(PCS)**

Appearance:	<b>Light yellow solid</b>
Average Molecular weight:	<b>1500-2500</b>
Melting Point:	<b>180-220 degree C</b>
Density:	<b>1.15 g/cm<sup>3</sup></b>
Ceramic yield at 900 Deg.C:	<b>&gt; 55%</b>
Solubility:	<b>Soluble in common organic Solvents, such as Tetrahydrofuran, Toluene, xylene, and so on.</b>
Self life	<b>Six months</b>

**Applications**

NaBond\_Polycarbosilane (PCS) is a preceramic polymer for silicon carbide, e.g. in the formation of silicon carbide fibers, silicon carbide nanopowders, microporous silicon carbide(SiC)-based membranes and SiC preforms as well as coatings and binders for particles, and especially very good for C/SiC composites.

**Shipping**

NaBond\_Polycarbosilane(PCS) is not considered hazardous and therefore is not regulated by DOT or IATA.

**Storage**

NaBond\_Polycarbosilane(PCS) has a shelf life of or more than six months. As PCS is sensitive to oxygen, it should be kept at no-air and dry conditions, it's best to keep it under inert gas protection.

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