

SMARTSIL 1000/5000

Purified Silicone Oil for Vitreoretinal Surgery

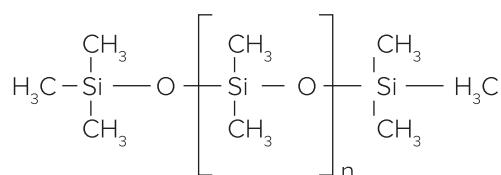


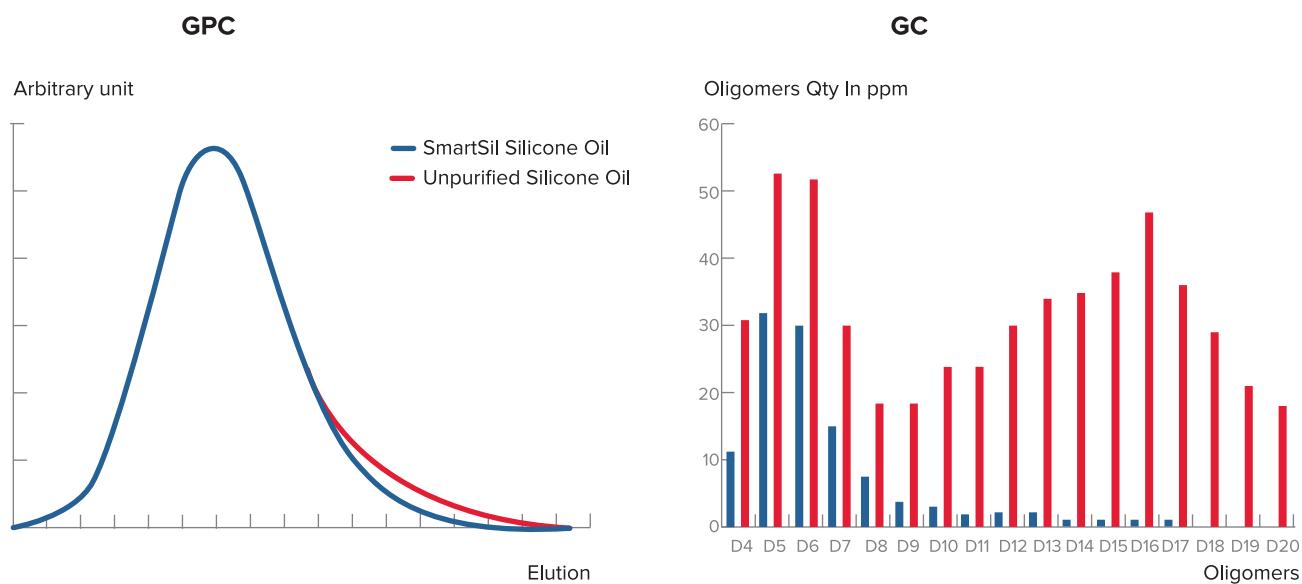
- Maximum interfacial tension and minimum interactions between tissues, cells, and endo-tamponades media
- Optimal combination of specific gravity, refractive index and surface tension
- The choice of viscosity for a balance between easy injection and a stable temporary tamponade

Physico-chemical properties

| | |
|---------------------|--|
| Interfacial tension | $\geq 40 \text{ mNm}^{-1}$ at 37°C |
| Density | 0.97 |
| Viscosity | 1000/5000 cSt |
| Refractive index | 1.40 |
| Volatility | < 1% |
| Polydispersity | < 2.8 |
| Volume of oil | 10 ml |
| Syringe | 20 ml |

Formula: Polydimethylsiloxane





Purification

- Vacuum molecular distillation solvent free purification
- Potentially toxic low molecular weight oligomers (D_4 to D_{20}) extraction
- Residual volatile components extraction (water, ethanol, etc.)

Post-purification controls

- Gel permeation chromatography (GPC)
- Gaseous chromatography (GC)

Sterilization

- Silicone oils are dry heat sterilized
- Syringes are steam sterilized

Packaging

Syringes are supplied sterile under double pouch

Indication

SmartSil 1000/5000 is used for prolonged tamponade after surgical treatment for severe retinal detachment (RD), especially:

- RD with proliferative vitreal retinopathy
- RD with diabetic retinopathy complications
- RD with giant tears
- Traumatic RD
- Secondary RD with viral retinitis



Not for sale in the USA