

## SMARTSIL 1000/5000

### Purified Silicone Oil for Vitreoretinal Surgery

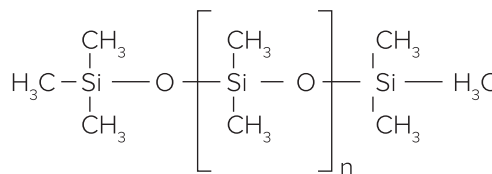


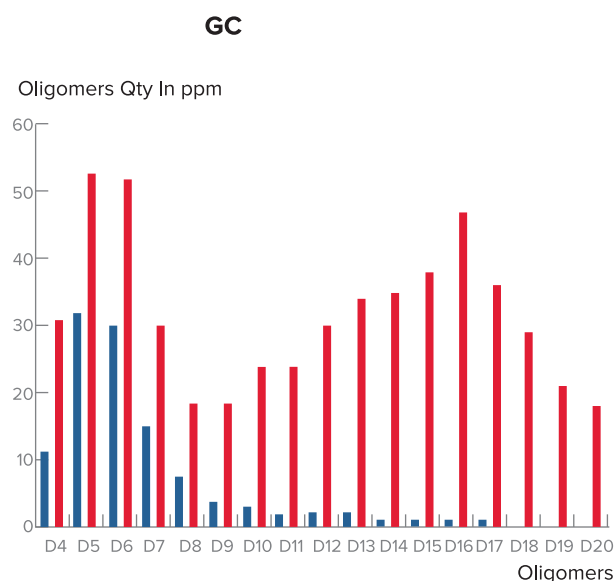
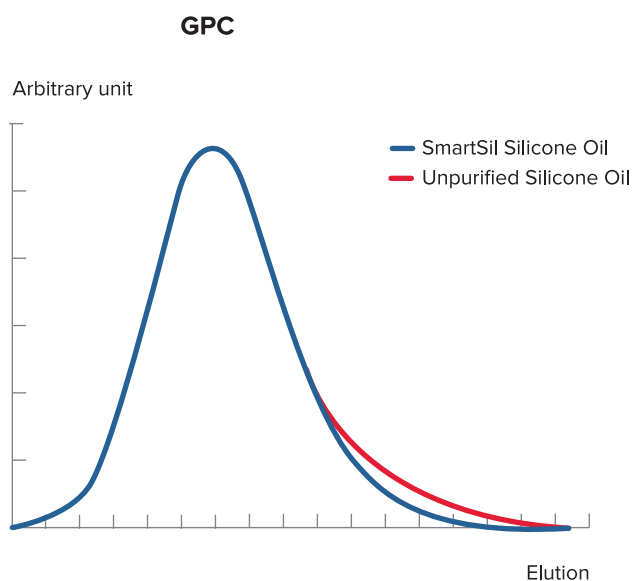
- Maximum interfacial tension and minimum interactions between tissues, cells, and endo-tamponades media
- Optimal combination of specific gravity, refractive index and surface tension
- The choice of viscosity for a balance between easy injection and a stable temporary tamponade

#### Physico-chemical properties

Interfacial tension	≥ 40 mNm <sup>-1</sup> 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<sub>4</sub> to D<sub>20</sub>) 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

