



## Product Information

### PDMS-based UCNPs (PDMS-UCNPs)

**Cat. No.:** X26-05-ZQ740

**Size:** 100 mg; 250 mg; 500 mg; 1 g; 5 g

**Synonym:** PDMS-encapsulated UCNPs; Poly(dimethylsiloxane)-modified UCNPs; PDMS-matrix upconversion nanostructures

**This product is for research use only and is not intended for diagnostic use.**

#### Product Information

**Description** These polydimethylsiloxane (PDMS) based upconverting nanoparticles (UCNPs) (PDMS-UCNPs) are composite materials where upconverting phosphors are embedded within a silicone elastomer matrix. The polydimethylsiloxane (PDMS) provides a flexible, transparent, and chemically inert environment for the UCNP cores. This material is primarily used for research into flexible optical sensors, stretchable photonic devices, and the development of light-emitting elastomers.

**Source** Custom synthesis

**Functional Group** PDMS

**Form** Solid or powder

**Purity**  $\geq 95\%$

**Impurities** No visible impurities to the naked eye.

**Identity** HPLC/MS/NMR

**Stability** This product is stable for one year when stored at the recommended temperature in lyophilized powder.

**Quality Level** Research grade

**Storage** Store at  $-20^{\circ}\text{C}$ .