

# PRODUCT INFORMATION



## DSPE-PEG(2000)-TCO

Item No. 43626

**Formal Name:** (2R)-3-((((1-(((S,E)-cyclooct-4-en-1-yl)oxy)-1,9-dioxo-5,8-dioxo-2,10-diazadodecan-12-yl)oxy)(hydroxy)phosphoryl)oxy)propane-1,2-diyl distearate

**Synonyms:** 1,2-Distearoyl-*sn*-glycero-3-PE-Polyethylene Glycol-2000-*trans*-cyclooctene, 1,2-Distearoyl-*sn*-glycero-3-Phosphoethanolamine-Polyethylene Glycol-2000-*trans*-cyclooctene

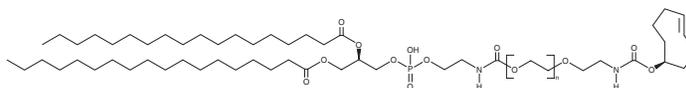
**MF:**  $(C_2H_4O)_n C_{53}H_{99}N_2O_{12}P$

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

**Supplied as:** A solid

**Storage:**  $-20^\circ\text{C}$

**Stability:**  $\geq 4$  years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

DSPE-PEG(2000)-TCO is supplied as a solid. A stock solution may be made by dissolving the DSPE-PEG(2000)-TCO in the solvent of choice, which should be purged with an inert gas. DSPE-PEG(2000)-TCO is sparingly soluble (1-10 mg/ml) in ethanol and slightly soluble (0.1-1 mg/ml) in DMSO.

### Description

DSPE-PEG(2000)-TCO is a PEGylated derivative of 1,2-distearoyl-*sn*-3-phosphoethanolamine (1,2-DSPE) that contains a *trans*-cyclooctene (TCO) moiety, which reacts with tetrazine rings and can be used for bioorthogonal ligation of lipid nanoparticles (LNPs).<sup>1</sup>

### Reference

1. Marqués-Gallego, P. and de Kroon, A.I. Ligation strategies for targeting liposomal nanocarriers. *Biomed. Res. Int.* 129458 (2014).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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