

# PRODUCT INFORMATION



## DSPE-PEG(2000)-NHS ester

Item No. 37275

**Formal Name:** (2R)-3-(((14-((2,5-dioxopyrrolidin-1-yl)oxy)-4,14-dioxo-5,8,11-trioxa-3-azatetradecyl)oxy)(hydroxy)phosphoryl)oxy)propane-1,2-diyl distearate

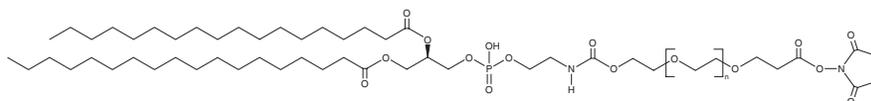
**MF:**  $(C_{2}H_{4}O)_n C_{51}H_{93}N_2O_{15}P$

**Purity:**  $\geq 90\%$

**Supplied as:** A solid

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

**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)-NHS ester is supplied as a solid. A stock solution may be made by dissolving the DSPE-PEG(2000)-NHS ester in the solvent of choice, which should be purged with an inert gas. DSPE-PEG(2000)-NHS ester is soluble in the organic solvent ethanol at a concentration of approximately 5 mg/ml.

### Description

DSPE-PEG(2000)-NHS ester is a PEGylated derivative of 1,2-distearoyl-*sn*-glycero-3-PE (DSPE; Item No. 15095).<sup>1</sup> It has been used in the generation of micelles and in combination with other lipids in the formation of liposomes. DSPE-PEG(2000)-NHS ester-containing liposomes localize to the liver and tumor after intravenous administration in mice. Liposomes containing DSPE-PEG(2000)-NHS ester conjugated to the breast cancer targeting H6 peptide and encapsulating the DNA topoisomerase inhibitor doxorubicin (Item No. 15007) reduce tumor growth in an SK-BR-3 breast cancer mouse xenograft model.

### Reference

1. Jia, X., Wang, W., Han, Q., *et al.* Micromixer based preparation of functionalized liposomes and targeting drug delivery. *ACS Med. Chem. Lett.* **7**(4), 429-434 (2016).

#### 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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