

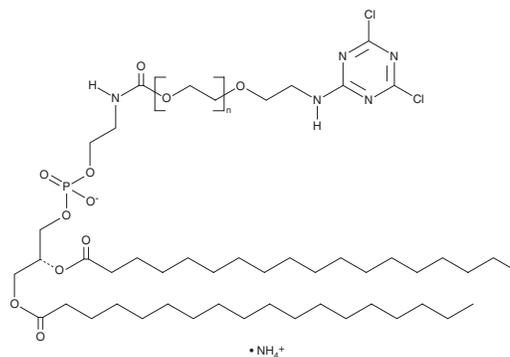
# PRODUCT INFORMATION



## DSPE-PEG(2000) Cyanur (ammonium salt)

Item No. 37797

**CAS Registry No.:** 1246304-74-4  
**Formal Name:**  $\alpha$ -[(9R)-6-hydroxy-6-oxido-1,12-dioxo-9-[(1-oxooctadecyl)oxy]-5,7,11-trioxa-2-aza-6-phosphanonacos-1-yl]- $\omega$ -[2-[(4,6-dichloro-1,3,5-triazin-2-yl)amino]ethoxy]-poly(oxy-1,2-ethanediy), monoammonium salt  
**MF:**  $(C_2H_4O)_n C_{47}H_{85}Cl_2N_5O_{10}P \cdot NH_4$   
**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) Cyanur (ammonium salt) is supplied as a solid. A stock solution may be made by dissolving the DSPE-PEG(2000) cyanur (ammonium salt) in the solvent of choice, which should be purged with an inert gas. DSPE-PEG(2000) Cyanur (ammonium salt) is sparingly soluble (1-10 mg/ml) in methanol.

### Description

DSPE-PEG(2000) Cyanur is a PEGylated form of 1,2-distearoyl-*sn*-glycero-3-PE (DSPE; Item No. 15095) that has been used in the generation of lipid nanoparticles (LNPs) for the delivery of micro RNA (miRNA) *in vitro*.<sup>1</sup> LNPs containing DSPE-PEG(2000) cyanur, encapsulating let-7a miRNA, and conjugated to the Eph tyrosine kinase receptor (Eph) ligand ephrin-A1 reduce the proliferation and colony formation and size of NCI H2081, NCI 5380, and A549 lung cancer cells, as well as reduce migration of NCI 5380 cells in a wound healing assay.

### Reference

1. Lee, H.-Y., Mohammed, K.A., Kaye, F.J., *et al.* Targeted delivery of let-7a microRNA encapsulated ephrin-A1 conjugated liposomal nanoparticles inhibit tumor growth in lung cancer. *Int. J. Nanomedicine* **8**, 4481-4494 (2013).

#### 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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