

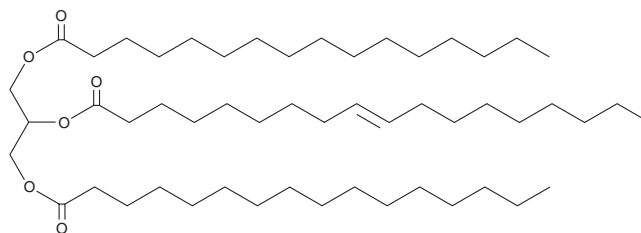
PRODUCT INFORMATION



1,3-Dipalmitoyl-2-Elaidoyl Glycerol

Item No. 27165

CAS Registry No.: 32221-51-5
Formal Name: 9E-octadecenoic acid, 2-[(1-oxohexadecyl)oxy]-1-[[[(1-oxohexadecyl)oxy]methyl]ethyl] ester
Synonyms: 2-Elaidodipalmitin, 1,3-Palmitate-2-Elaidate, 1,3-Palmitin-2-Elaidin, 1,2-Palmitoyl-2-Elaidoyl-glycerol, PEP, TG(16:0/18:1/16:0)
MF: C₅₃H₁₀₀O₆
FW: 833.4
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

1,3-Dipalmitoyl-2-Elaidoyl Glycerol (PEP) is supplied as a solid. A stock solution may be made by dissolving the PEP in the solvent of choice, which should be purged with an inert gas. PEP is soluble in organic solvents such as ethanol and dimethyl formamide. The solubility of PEP in these solvents is approximately 10 mg/ml.

PEP is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PEP should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. PEP has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

PEP is a triacylglycerol containing palmitic acid (Item No. 10006627) at the *sn*-1 and *sn*-3 positions and elaidic acid (Item No. 90250) at the *sn*-2 position. PEP has been synthesized as a partially hydrogenated confectionery fat and, when used as 10% of the fat component in cocoa butter, it promotes the conversion of low-melting polymorphic forms of cocoa butter-PEP mixtures to high-melting polymorphic forms.¹

Reference

1. Gray, M.S., Lovegren, N.V., and Feuge, R.O. Effect of 2-oleodipalmitin and 2-elaidodipalmitin on polymorphic behavior of cocoa butter. *J. Am. Oil Chem. Soc.* **53**(12), 727-731 (1976).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM