

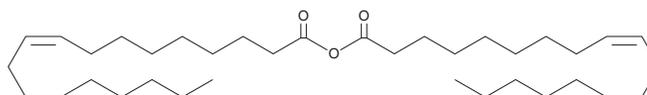
PRODUCT INFORMATION



Oleic Anhydride

Item No. 20825

CAS Registry No.: 24909-72-6
Formal Name: 9Z-octadecenoic acid, 1,1'-anhydride
Synonyms: cis-9-Octadecenoic Anhydride,
Oleoyl Anhydride
MF: C₃₆H₆₆O₃
FW: 546.9
Purity: ≥95%
UV/Vis.: λ_{max}: 222 nm
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

Oleic anhydride is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. Oleic anhydride is miscible in these solvents.

Oleic anhydride is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of oleic anhydride should be diluted with the aqueous buffer of choice. Oleic anhydride has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method.

Description

Oleic anhydride is a fatty acid anhydride that inhibits sphingosine-induced phosphorylation of p32 in Jurkat T cells when used at concentrations ranging from 30 to 100 μM.¹ It has been used in the synthesis of various phospholipids and triglycerides.^{2,3}

References

1. Pushkareva, M.Y., Bielawska, A., Menaldiv, D., *et al.* Regulation of sphingosine-activated protein kinases: Selectivity of activation by sphingoid bases and inhibition by non-esterified fatty acids. *Biochem. J.* **294(Pt 3)**, 699-703 (1993).
2. Patel, K.M., Morrisett, J.D., and Sparrow, J.T. A convenient synthesis of phosphatidylcholines: Acylation of sn-glycero-3-phosphocholine with fatty acid anhydride and 4-pyrrolidinopyridine. *J. Lipid Res.* **20(5)**, 674-677 (1979).
3. Stamatov, S.D. and Stawinski, J. Regioselective and stereospecific acylation across oxirane- and silyloxy systems as a novel strategy to the synthesis of enantiomerically pure mono-, di- and triglycerides. *Org. Biomol. Chem.* **5(23)**, 3787-3800 (2007).

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.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 01/06/2026

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