

Product Name: Laurdan

Catalog No.: 7275

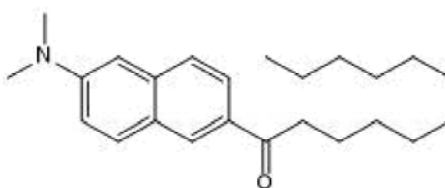
Batch No.: 1

CAS Number: 74515-25-6

IUPAC Name: 1-[6-(Dimethylamino)-2-naphthalenyl]-1-dodecanone

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:	C ₂₄ H ₃₅ NO
Batch Molecular Weight:	353.55
Physical Appearance:	Yellow solid
Solubility:	DMF to 20 mM
Storage:	Store at -20°C
Batch Molecular Structure:	



2. ANALYTICAL DATA

HPLC:	Shows 99.5% purity at 240.0 nm
¹H NMR:	Consistent with structure
Mass Spectrum:	Consistent with structure
UV Spectrum:	Consistent with structure
λ_{max}:	365 nm (Methanol)
λ_{ex}:	364 nm (Methanol)
λ_{em}:	498 nm (Methanol)

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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Description:

Laurdan is a polarity sensitive fluorescent probe for imaging lipid rafts in membranes. It is suitable for use with generalized polarization (GP) imaging and scanning fluorescence correlation spectroscopy (FCS). Laurdan can be used to image lipids in live and fixed cells as well as in whole tissues with multiphoton microscopy. Laurdan has emission maxima of 440 nm and 490 nm in gel and liquid phase membranes, respectively.

Physical and Chemical Properties:

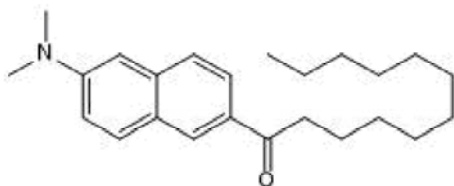
Batch Molecular Formula: C₂₄H₃₅NO

Batch Molecular Weight: 353.55

Physical Appearance: Yellow solid

Minimum Purity: ≥95%

Batch Molecular Structure:



Storage: Store at -20°C

CAUTION - This product is light sensitive and we recommend that the solid material and any solutions obtained are protected from exposure to light.

Solubility & Usage Info:

DMF to 20 mM

Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

SOLIDS: Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

SOLUTIONS: We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

References:

Sanchez et al (2012) Laurdan generalized polarization fluctuations measures membrane packing micro-heterogeneity *in vivo*. Proc.Natl.Acad.Sci.U.S.A. **109** 7314. PMID: 22529342.

Owen et al (2011) Quantitative imaging of membrane lipid order in cells and organisms. Nat.Protoc. **7** 24. PMID: 22157973.

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