PRODUCT INFORMATION



Laurdan

Item No. 19706

CAS Registry No.:	74515-25-6		
Formal Name:	1-[6-(dimethylamino)-2-naphthalenyl]-	0	
	1-dodecanone	a a Ŭ	~ ~
MF:	C ₂₄ H ₃₅ NO		\checkmark
FW:	353.5		
Purity:	≥98%		
UV/Vis.:	λ _{max} : 230, 250, 259, 284, 362 nm		
Supplied as:	A crystalline 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

Laurdan is supplied as a crystalline solid. A stock solution may be made by dissolving the laurdan in the solvent of choice, which should be purged with an inert gas. Laurdan is soluble in the organic solvent chloroform at a concentration of approximately 10 mg/ml.

Description

Laurdan is a membrane-permeable fluorescent probe that displays spectral sensitivity to the phospholipid phase of the cell membrane to which it is bound.¹ Quantitation of generalized polarization (GP) of laurdan can be used to identify phospholipid phase. When excited at 340 nm, GP values are 0.6 and -0.2 for gel phase and liquid crystalline phase, respectively. GP does not change with polar head group or pH (in the range 4-10); it changes only with phase state.

Reference

1. Parasassi, T., De Stasio, G., Ravagnan, G., et al. Quantitation of lipid phases in phospholipid vesicles by the generalized polarization of Laurdan fluorescence. Biophys. J. 60(1), 179-189 (1991).

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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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