# **PRODUCT** INFORMATION



Hexadecanamide

Item No. 21086

CAS Registry No.:	629-54-9
Formal Name:	hexadecanamide
Synonyms:	NSC 3327, Palmitamide, Palmitic Amide,
	Palmitoyl Amide
MF:	C <sub>16</sub> H <sub>33</sub> NO "
FW:	255.4
Purity:	≥95%
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

Hexadecanamide is supplied as a crystalline solid. A stock solution may be made by dissolving the hexadecanamide in the solvent of choice. Hexadecanamide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of hexadecanamide in these solvents is approximately 22, 20, and 14 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of hexadecanamide can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of hexadecanamide in PBS, pH 7.2, is approximately 50 µg/ml. We do not recommend storing the aqueous solution for more than one day.

# Description

Hexadecanamide is a primary fatty acid amide that is derived from palmitic acid (C16:0) (Item No. 10006627) and belongs to a class of important cell signaling lipids.<sup>1</sup> While the physiological significance of this compound is not yet clear, it is reported to demonstrate weak anticonvulsant activity in a maximal electroshock seizure test in mice when compared with the endocannabinoid palmitoyl ethanolamide (Item No. 90350).2

# References

- 1. Farrell, E.K., Chen, Y., Barazanji, M., et al. Primary fatty acid amide metabolism: Conversion of fatty acids and an ethanolamine in N18TG2 and SCP cells. J. Lipid. Res. 53(2), 247-256 (2012).
- 2. Lambert, D.M., Vandevoorde, S., Diepandaele, G., et al. Anticonvulsant activity of N-palmitoylethanolamide, a putative endocannabinoid, in mice. Epilepsia 42(3), 321-327 (2001).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

## SAFFTY 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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