# PRODUCT INFORMATION



## **Oleyl Anilide**

Item No. 10006529

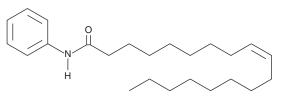
CAS Registry No.: 5429-85-6

Formal Name: N-phenyl-9Z-octadecenamide Synonyms: OA, Oleic Acid Anilide, Oleylanilide

MF:  $C_{24}H_{39}NO$ FW: 357.6 **Purity:** ≥95%  $\lambda_{max}$ : 243 nm A crystalline solid UV/Vis.: Supplied as:

Storage: -20°C Stability: ≥4 vears

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



### **Laboratory Procedures**

Oleyl anilide is supplied as a crystalline solid. A stock solution may be made by dissolving the oleyl anilide in the solvent of choice, which should be purged with an inert gas. Oleyl anilide is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of oleyl anilide in these solvents is approximately 30 mg/ml.

#### Description

Oleyl anilide is an inhibitor of acyl-coenzyme A:cholesterol acyltransferase (ACAT;  $IC_{50}$  = 26  $\mu$ M).<sup>1</sup> It induces splenomegaly in C57BL/6 mice and leads to weakness, weight loss, cachexia, and death in A/J mice with increases in serum IgG and IgM levels in both strains.<sup>2</sup> Oleyl anilide has been found in aniline-denatured rapeseed cooking oil, which has been associated with toxic oil syndrome, a chemically induced autoimmune syndrome characterized by acute pulmonary inflammation and eosinophilia, severe myalgia, and chronic peripheral neuropathy.3-5

#### References

- 1. Roth, B.D., Blankley, C.J., Hoefle, M.L., et al. Inhibitors of acyl-CoA: Cholesterol acyltransferase.1. Identification and structure-activity relationship of a novel series of fatty acid anilide hypocholesterolemic agents. J. Med. Chem. 35(9), 1609-1617 (1992).
- Berking, C., Hobbs, M.V., Chatelain, R., et al. Strain-dependent cytokine profile and susceptibility to oleic acid anilide in a murine model of the toxic oil syndrome. Toxicol. Appl. Pharmacol. 148(2), 222-228 (1998).
- Gelpi, E., de la Paz, M.P., Terracini, B., et al. The spanish toxic oil syndrome 20 years after its onset: A multidisciplinary review of scientific knowledge. Environ. Health Perspect. 110(5), 457-464 (2002).
- Posada de la Paz, M., Philen, R.M., and Borda, A.I. Toxic oil syndrome: The perspective after 20 years. Epidemiol. Rev. 23(2), 231-247 (2001).
- Hard, G.C. A search for an animal model of the Spanish toxic oil syndrome. Food Chem. Toxicol. 40(11), 1551-1567 (2002).

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

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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