1-Octadecanol

Product Description
Molecular Formula: C_{18}H_{38}O
Molecular Weight: 270.5
CAS Number: 112-92-5
Melting Point: 56-60 °C (general product); 59.4-59.8 °C (pure 1-Octadecanol)
Synonyms: stearyl alcohol, stenol, octadecyl alcohol, stearol, n-octadecanol

1-Octadecanol is a long chain primary alcohol that is used in the production of emulsions, textile oils, antifoam agents, and lubricants. Other large scale applications include the manufacture of alkyl amines, tertiary amines, ethoxylates, halides/mercaptans, and polymerization stabilizers. It generally occurs as a mixture of solid alcohols whose primary constituent is 1-octadecanol. It occurs naturally in sperm whale oil and has been isolated from the hyperthermophilic bacterium *Pyrococcus furiosus*.

A study on the effects of various long chain alcohols, including 1-octadecanol, on the activity of firefly luciferase has been reported. 1-Octadecanol has been used to model the plant epicuticular wax layer for an investigation by differential scanning calorimetry and Fourier transform infrared spectroscopy.

The use of 1-octadecanol to prepare microsphere formulations for such compounds as paclitaxel and indomethacin has been described.

Precautions and Disclaimer
For Laboratory Use Only. Not for drug, household or other uses.

Preparation Instructions
This product is soluble in ethanol (100 mg/ml), with heat as needed, yielding a clear, colorless solution. It is also soluble in ether, benzene, and acetone.

References
1. The Merck Index, 12th ed., Entry# 8960.

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