# PRODUCT INFORMATION



## Dihydroartemisinic Acid

Item No. 25142

CAS Registry No.: 85031-59-0

Formal Name: (αR,1R,4R,4aS,8aS)-1,2,3,4,4a,5,6,8a-

octahydro-α,4,7-trimethyl-1-

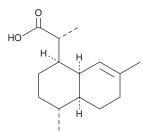
naphthaleneacetic acid

MF:  $C_{15}H_{24}O_{2}$ FW: 236.4 **Purity:** ≥98%

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**

Dihydroartemisinic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the dihydroartemisinic acid in the solvent of choice, which should be purged with an inert gas. Dihydroartemisinic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of dihydroartemisinic acid in these solvents is approximately 16, 10, and 20 mg/ml, respectively.

Dihydroartemisinic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, dihydroartemisinic acid should first be dissolved in DMF and then diluted with the aqueous buffer of choice. Dihydroartemisinic acid has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

#### Description

Dihydroartemisinic acid is a biosynthetic precursor to the antimalarial agent artemisinin (Item No. 11816) and an intermediate in the synthesis of artemisinin from artemisinic acid (Item No. 25059).<sup>1,2</sup>

### References

- 1. Tian, N., Li, J., Liu, S., et al. Simultaneous isolation of artemisinin and its precursors from Artemisia annua L. by preparative RP-HPLC. Biomed. Chromatogr. 26(6), 708-713 (2012).
- 2. Roth, R.J. and Acton, N. A simple conversion of artemisinic acid into artemisinin. J. Nat. Prod. 52(5), 1183-1185 (1989).

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.

## WARRANTY AND LIMITATION OF REMEDY

subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website

Copyright Cayman Chemical Company, 12/01/2022

#### **CAYMAN CHEMICAL**

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