

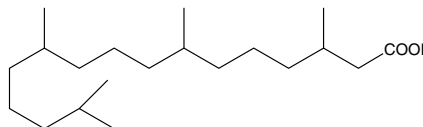
# Product Information



## Phytanic Acid

Item No. 90360

**CAS Registry No.:** 14721-66-5  
**Formal Name:** 3,7,11,15-tetramethylhexadecanoic acid  
**MF:** C<sub>20</sub>H<sub>40</sub>O<sub>2</sub>  
**FW:** 312.5  
**Purity:** ≥96%  
**Stability:** ≥1 year at -20°C  
**Supplied as:** A solution in ethanol



### Laboratory Procedures

For long term storage, we suggest that phytanic acid be stored as supplied at -20°C. It should be stable for at least one year.

Phytanic acid is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of phytanic acid in these solvents is approximately 100 mg/ml.

Phytanic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of phytanic acid should be diluted with the aqueous buffer of choice. Phytanic acid has a solubility of 1 mg/ml in a 0.15 M Tris-HCl (pH 8.5) solution using this method. Therefore, further dilutions of the organic solvent 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. We do not recommend storing the aqueous solution for more than one day.

Phytanic acid is a saturated 20-carbon branched-chain fatty acid which can only be derived from dietary sources. In cases of peroxisomal disorders, elevated levels of phytanic acid have been observed, and this is linked to diseases such as infantile phytanic acid storage disease and Refsum's disease.<sup>1</sup>

### Reference

1. Wanders, R.J.A., Boltshauser, E., Steinmann, B., *et al.* Infantile phytanic acid storage disease, a disorder of peroxisome biogenesis: A case report. *J. Neurol. Sci.* **98**, 1-11 (1990).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/90360](http://www.caymanchem.com/catalog/90360)

**WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY. NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

#### SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. 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

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

For further details, please refer to our **Warranty and Limitation of Remedy located on our website and in our catalog**.

Copyright Cayman Chemical Company, 10/23/2013

### Cayman Chemical

#### Mailing address

1180 E. Ellsworth Road  
Ann Arbor, MI  
48108 USA

#### Phone

(800) 364-9897  
(734) 971-3335

#### Fax

(734) 971-3640

#### E-Mail

[custserv@caymanchem.com](mailto:custserv@caymanchem.com)

#### Web

[www.caymanchem.com](http://www.caymanchem.com)