

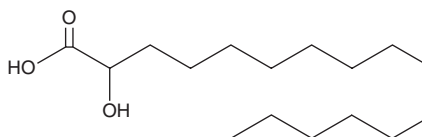
# PRODUCT INFORMATION



## 2-hydroxy Palmitic Acid

Item No. 22679

**CAS Registry No.:** 764-67-0  
**Formal Name:** 2-hydroxy-hexadecanoic acid  
**Synonyms:** FA 16:0;O, 2-HHA, NSC 2097, 2-OH-16, (±)-α-hydroxy Palmitic Acid  
**MF:** C<sub>16</sub>H<sub>32</sub>O<sub>3</sub>  
**FW:** 272.4  
**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

2-hydroxy Palmitic acid is supplied as a crystalline solid. A stock solution may be made by dissolving the 2-hydroxy palmitic acid in the solvent of choice. 2-hydroxy Palmitic acid is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of 2-hydroxy palmitic acid in these solvents is approximately 2.5 mg/ml in ethanol and 20 mg/ml in DMSO and DMF.

2-hydroxy Palmitic acid is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 2-hydroxy palmitic acid should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. 2-hydroxy Palmitic acid has a solubility of approximately 0.33 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

2-hydroxy Palmitic acid is a form of the 16:0 long-chain saturated palmitic acid (Item No. 10006627).<sup>1</sup> It is an intermediate in the metabolism of phytosphingosine to odd-numbered fatty acids.<sup>2</sup> 2-hydroxy Palmitic acid levels in yeast fermentations increase following treatment with fumonisin B<sub>1</sub> (Item No. 62580).

### References

1. Kaneshiro, T., Vesendor, R.F., Peterson, R.E., *et al.* 2-Hydroxyhexadecanoic and 8,9,13-trihydroxydocosanoic acid accumulation by yeasts treated with fumonisin B<sub>1</sub>. *Lipids* **28**(5), 397-401 (1993).
2. Kondo, N., Ohno, Y., Yamagata, M., *et al.* Identification of the phytosphingosine metabolic pathway leading to odd-numbered fatty acids. *Nat. Commun.* **5**, 5338 (2014).

#### WARNING

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

#### SAFETY 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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