

# PRODUCT INFORMATION



## Pinolenic Acid ethyl ester

Item No. 10008658

**CAS Registry No.:** 493015-74-0  
**Formal Name:** 5Z,9Z,12Z-octadecatrienoic acid, ethyl ester  
**Synonyms:** C18:3 (cis-5,9,12) ethyl ester;  
all-cis-5,9,12-Octadecatrienoic Acid ethyl ester;  
all-Z-5,9,12-Octadecatrienoic Acid ethyl ester;  
Ethyl all-cis-5,9,12-Octadecatrienoate;  
Ethyl Pinolenate; PLA ethyl ester, SFE 20:3

**MF:** C<sub>20</sub>H<sub>34</sub>O<sub>2</sub>

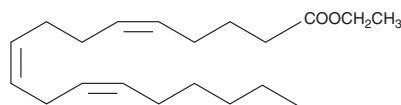
**FW:** 306.5

**Purity:** ≥98%

**Supplied as:** A 10 mg/ml solution in ethanol

**Storage:** -20°C

**Stability:** ≥2 years



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

### Laboratory Procedures

Pinolenic acid ethyl ester 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 ethanol, DMSO, and dimethyl formamide (DMF) purged with an inert gas can be used. The solubility of pinolenic acid ethyl ester in ethanol is approximately 100 mg/ml and approximately 30 mg/ml in DMSO and DMF.

Pinolenic acid ethyl ester is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanol solution of pinolenic acid ethyl ester should be diluted with the aqueous buffer of choice. Pinolenic acid ethyl ester has a solubility of 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

Pinolenic acid ethyl ester is a polyunsaturated fatty acid ethyl ester.<sup>1</sup> Oral administration of pinolenic acid ethyl ester (100 mg/kg) decreases blood glucose levels in an oral glucose tolerance test in mice.

### Reference

- Christiansen, E., Watterson, K.R., Stocker, C.J., *et al.* Activity of dietary fatty acids on FFA1 and FFA4 and characterisation of pinolenic acid as a dual FFA1/FFA4 agonist with potential effect against metabolic diseases. *Br. J. Nutr.* **113(11)** 1677-1688 (2015).

#### 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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