

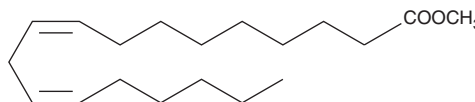
# PRODUCT INFORMATION



## Linoleic Acid methyl ester

Item No. 20603

**CAS Registry No.:** 112-63-0  
**Formal Name:** 9Z,12Z-octadecadienoic acid, methyl ester  
**Synonyms:** C18:2 (cis-9,12) methyl ester, Methyl cis-9,12-Octadecadienoate, Methyl Linoleate, SFE 19:2, Telfairic Acid methyl ester  
**MF:** C<sub>19</sub>H<sub>34</sub>O<sub>2</sub>  
**FW:** 294.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 203 nm  
**Supplied as:** A 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

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

### Description

Linoleic acid methyl ester is an esterified form of linoleic acid (Item Nos. 90150 | 90150.1 | 21909). It has been found in several types of animal fat biodiesel and biodiesel synthesized from beef tallow, soybean oil, and babassu oil blends.<sup>1,2</sup> It has been used as a substrate to measure the antioxidant activity of β-carotene (Item No. 16837) against free radical-induced lipid peroxidation.<sup>3</sup>

### References

1. Sander, A., Koščak, M.A., Kosir, D., *et al.* The influence of animal fat type and purification conditions on biodiesel quality. *Renewable Energy* **118**, 752-760 (2018).
2. Teixeira, G.A.A., Maia, A.S., and Santos, I.M.G. Biodiesels from beef tallow/soybean oil/babassu oil blends. Correlation between fluid dynamic properties and TMDSC data. *J. Therm. Anal. Calorim.* **106(2)**, 563-567 (2011).
3. Tsuchihashi, H., Kigoshi, M., Iwatsuki, M., *et al.* Action of β-carotene as an antioxidant against lipid peroxidation. *Arch. Biochem. Biophys.* **323(1)**, 137-147 (1995).

#### 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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