

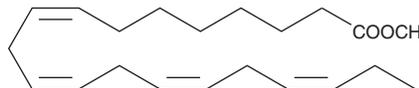
# PRODUCT INFORMATION



## $\omega$ -3 Arachidonic Acid methyl ester

Item No. 10006454

**CAS Registry No.:** 132712-70-0  
**Formal Name:** 8Z,11Z,14Z,17Z-eicosatetraenoic acid, methyl ester  
**Synonym:** SFE 21:4  
**MF:** C<sub>21</sub>H<sub>34</sub>O<sub>2</sub>  
**FW:** 318.5  
**Purity:**  $\geq$ 98%  
**Supplied as:** A solution in methanol  
**Storage:** -20°C  
**Stability:**  $\geq$ 2 years



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

### Laboratory Procedures

$\omega$ -3 Arachidonic acid methyl ester is supplied as a solution in methanol. To change the solvent, simply evaporate the methanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as ethanol, DMSO, hexane, and dimethyl formamide (DMF), purged with an inert gas can be used. The solubility of  $\omega$ -3 arachidonic acid methyl ester in ethanol, DMSO, and DMF is approximately 50 mg/ml and approximately 10 mg/ml in hexane.

Further dilutions of the stock 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. If an organic solvent-free solution of  $\omega$ -3 arachidonic acid methyl ester is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of  $\omega$ -3 arachidonic acid methyl ester in PBS (pH 7.2) is approximately 0.15 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

$\omega$ -3 Fatty acids, represented primarily by docosahexaenoic acid, eicosapentaenoic acid, and  $\alpha$ -linoleate, are essential dietary nutrients required for normal growth and development.  $\omega$ -3 Arachidonic acid methyl ester is a neutral, lipid-soluble form of the rare fatty acid  $\omega$ -3 arachidonic acid. The  $\omega$ -3 fatty acids, as a group, are associated with decreased inflammatory and autoimmune activity, and a reduction in thrombosis and platelet activation.<sup>1</sup>

### Reference

1. Simopoulos, A.P.  $\omega$ -3 Fatty acids in health and disease and in growth and development. *Am. J. Clin. Nutr.* **54**, 438-463 (1991).

#### 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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