

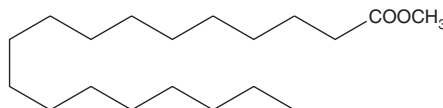
# PRODUCT INFORMATION



## Stearic Acid methyl ester

Item No. 20609

**CAS Registry No.:** 112-61-8  
**Formal Name:** octadecanoic acid, methyl ester  
**Synonyms:** Methyl Octadecanoate,  
Methyl Stearate, NSC 9418,  
SFE 19:0  
**MF:**  $C_{19}H_{38}O_2$   
**FW:** 298.5  
**Purity:**  $\geq 95\%$   
**Supplied as:** A crystalline solid  
**Storage:**  $-20^{\circ}\text{C}$   
**Stability:**  $\geq 4$  years



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

### Laboratory Procedures

Stearic acid methyl ester is supplied as a crystalline solid. A stock solution may be made by dissolving the stearic acid methyl ester in the solvent of choice. Stearic acid methyl ester is soluble in organic solvents such as ethanol and dimethyl formamide, which should be purged with an inert gas. The solubility of stearic acid methyl ester in these solvents is approximately 100 and 30 mg/ml, respectively.

### Description

Stearic acid methyl ester is an esterified version of the free acid which is less water soluble but more amenable for the formulation of stearate-containing diets and dietary supplements. Stearic acid (Item No. 10011298) is a long-chain saturated fatty acid that can be derived from either animal fats or vegetable oils. Compared to other long-chain saturated fatty acids that are hypercholesterolemic, experimental diets high in stearic acid (9.3-11.8% of energy) do not raise plasma total cholesterol or LDL cholesterol concentrations but may slightly reduce HDL cholesterol concentrations.<sup>1,2</sup>

### References

1. Yu, S., Derr, J., Etherton, T.D., *et al.* Plasma cholesterol-predictive equations demonstrate that stearic acid is neutral and monounsaturated fatty acids are hypocholesterolemic. *Am. J. Clin. Nutr.* **61**, 1129-1139 (1995).
2. Aro, A., Jauhiainen, M., Partanen, R., *et al.* Stearic acid, *trans* fatty acids, and dairy fat: Effects on serum and lipoprotein lipids, apolipoproteins, lipoprotein(a), and lipid transfer proteins in healthy subjects. *Am. J. Clin. Nutr.* **65**, 1419-1426 (1997).

#### 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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