# **PRODUCT** INFORMATION



Stearic Acid ethyl ester

Item No. 10008196

CAS Registry No.:	111-61-5	
Formal Name:	octadecanoic acid, ethyl ester	
Synonyms:	Ethyl Octadecanoate, Ethyl Stearate, NSC 8919,	
	Octadecanoic Acid ethyl ester, SFE 20:0	
MF:	$C_{20}H_{40}O_{2}$	
FW:	312.5	$\langle \land \land \land \land$
Purity:	≥98%	
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

Stearic 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. Stearic acid ethyl ester is soluble in the organic solvent dimethyl formamide at a concentration of approximately 30 mg/ml.

## Description

Stearic acid is a saturated fatty acid commonly found in animal and vegetable fats that is frequently used in cosmetics, candles, soaps, plastics, oil pastels, and for softening rubber. Stearic acid ethyl ester (ethyl stearate) is the neutral, more lipid soluble form of the free acid. It perturbs the cell cycle and induces apoptosis in HepG2 cells and is a marker of excessive alcohol consumption that can be isolated from an individual's hair.<sup>1,2</sup>

## References

- 1. Aydin, A., Celik, H.A., Deveci, R., et al. Induction of apoptosis by fatty acid ethyl esters in HepG2 cells. Food Chem. Toxicol. 43(1), 139-145 (2005).
- 2. Hartwig, S., Auwärter, V., and Pragst, F. Fatty acid ethyl esters in scalp, public, axillary, beard and body hair as markers for alcohol misuse. Alcohol Alcohol. 38(2), 163-167 (2003).

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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