PRODUCT INFORMATION



13(Z)-Docosenoic Acid methyl ester

Item No. 20568

CAS Registry No.:	1120-34-9	
Formal Name:	13Z-docosenoic acid, methyl ester	
Synonyms:	(Z)-Erucic Acid methyl ester,	
	Methyl cis-13-Docosenoate,	
	Methyl Erucate, SFE 23:1)CH ₂
MF:	$C_{23}H_{44}O_2$	0
FW:	352.6	
Purity:	≥95%	
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

13(Z)-Docosenoic acid methyl 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 DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of 13(Z)-docosenoic acid methyl ester in these solvents is approximately 100 mg/ml.

13(Z)-Docosenoic acid methyl ester is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 13(Z)-docosenoic acid methyl ester should be diluted with the aqueous buffer of choice. The solubility of 13(Z)-docosenoic 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

13(Z)-Docosenoic acid methyl ester is a fatty acid methyl ester that is a flavor-active, volatile, and aromatic compound found in cooked commercial shrimp waste.¹ It is a component of biodiesel formed from C. megalocarpus and C. pentandra oils that contain trierucin.² 13(Z)-Docosenoic acid methyl ester has also been used as a standard for the quantification of 13(Z)-docosenoic acid (Item No. 90175) by GC-MS.³

References

- 1. Mandevill, S., Yaylayan, V., and Simpson, B. GC/MS analysis of flavor-active compounds in cooked commercial shrimp waste. J. Agric. Food Chem. 40(7), 1275-1279 (1992).
- 2. Ruhul, A.M., Kalam, M.A., Masjuki, H.H., et al. Production, characterization, engine performance and emission characteristics of Croton megalocarpus and Ceiba pentandra complementary blends in a single-cylinder diesel engine. RSC Adv. 6(29), 24584-24595 (2016).
- 3. Jung, J.-M., Kim, K.-H., Kwon, E.E., et al. Analysis of the lipid profiles in a section of bovine brain via non-catalytic rapid methylation. Analyst 140(18), 6210-6216 (2015).

WARNING THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFFTY 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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