

PRODUCT INFORMATION



α -Linolenic Acid MaxSpec[®] Standard

Item No. 27359

CAS Registry No.: 463-40-1

Formal Name: 9Z,12Z,15Z-octadecatrienoic acid

Synonyms: C18:3 n-3, C18:3 (9Z,12Z,15Z), FA 18:3

MF: C₁₈H₃₀O₂

FW: 278.4

Purity: $\geq 95\%$

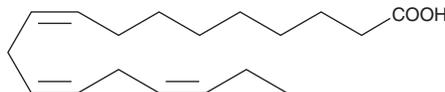
Supplied as: A solution in ethanol; in a deactivated glass ampule

Concentration: 1 mg/ml (nominal); see certificate of analysis for verified concentration

Storage: -20°C

Stability: ≥ 5 years; *Stability testing is ongoing to ensure concentration accuracy. The certificate of analysis and product expiry date will be updated upon completion of testing.*

Special Conditions: Store upright and unopened at -20°C. Warm to room temperature prior to opening. Light sensitive.



Description

α -Linolenic acid is an essential ω -3 polyunsaturated fatty acid found in plants.¹ *In vivo*, it is converted to the longer-chain fatty acids eicosapentaenoic (Item Nos. 90110 | 90110.1 | 21908), docosapentaenoic (Item Nos. 90165 | 21907), or docosahexaenoic acid (Item No. 90310).² It is also catabolized *via* fatty acid β -oxidation for energy or the synthesis of saturated and monounsaturated fatty acids, or stored in adipose tissue. Dietary consumption of α -linolenic acid-containing foods is positively associated with a moderately lower risk of cardiovascular disease.¹

α -Linolenic acid MaxSpec[®] standard is a quantitative grade standard of α -linolenic acid (Item Nos. 90210 | 21910) that has been prepared specifically for mass spectrometry or any application where quantitative reproducibility is required. The solution has been prepared gravimetrically and is supplied in a deactivated glass ampule sealed under argon. The concentration was verified by comparison to an independently prepared calibration standard. This α -linolenic acid MaxSpec[®] standard is guaranteed to meet identity, purity, stability, and concentration specifications and is provided with a batch-specific certificate of analysis. Ongoing stability testing is performed to ensure the concentration remains accurate throughout the shelf life of the product. **Note:** *The amount of solution added to the vial is in excess of the listed amount. Therefore, it is necessary to accurately measure volumes for preparation of calibration standards. Follow recommended storage and handling conditions to maintain product quality.*

References

1. Pan, A., Chen, M., Chowdhury, R., *et al.* α -Linolenic acid and risk of cardiovascular disease: A systematic review and meta-analysis. *Am. J. Clin. Nutr.* **96**(6), 1262-1273 (2012).
2. Burdge, G.C. Metabolism of α -linolenic acid in humans. *Prostaglandins Leukot. Essent. Fatty Acids* **75**(3), 161-168 (2006).

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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