

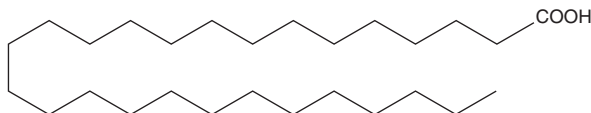
# PRODUCT INFORMATION



## Heptacosanoic Acid

Item No. 36163

CAS Registry No.: 7138-40-1  
Synonyms: C27:0, Carboeric Acid,  
FA 27:0  
MF:  $C_{27}H_{54}O_2$   
FW: 410.7  
Purity:  $\geq 95\%$   
Supplied as: A solid  
Storage:  $-20^{\circ}C$   
Stability:  $\geq 4$  years



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

### Laboratory Procedures

Heptacosanoic acid is supplied as a solid. A stock solution may be made by dissolving the heptacosanoic acid in the solvent of choice, which should be purged with an inert gas. Heptacosanoic acid is slightly soluble in chloroform, DMSO, hexane, and dimethyl formamide.

Aqueous solutions of heptacosanoic acid can be prepared by directly dissolving the solid in aqueous buffers. Heptacosanoic acid is slightly soluble in PBS (pH 7.2). We do not recommend storing the aqueous solution for more than one day. It is also slightly soluble in water.

### Description

Heptacosanoic acid is an odd-chain saturated fatty acid. It has been used as an internal standard for the quantification of very long-chain fatty acids (VLCFAs) in human serum.<sup>1</sup> Heptacosanoic acid has been found in wood smoke, as well as in urban and rural emissions of fine particulate matter less than  $2.5 \mu m$  in aerodynamic diameter (PM<sub>2.5</sub>).<sup>2,3</sup>

### References

1. Paik, M.J., Lee, K.O., and Shin, H.S. Determination of very-long-chain fatty acids in serum by gas chromatography-nitrogen-phosphorus detection following cyanomethylation. *J. Chromatogr. B Biomed. Sci. Appl.* **721**(1), 3-11 (1999).
2. Rogge, W.F., Hildemann, L.M., Mazurek, M.A., et al. Sources of fine organic aerosol. 9. Pine, oak, and synthetic log combustion in residential fireplaces. *Environ. Sci. Technol.* **32**(1), 13-22 (1998).
3. Zheng, M., Cass, G.R., Schauer, J.J., et al. Source apportionment of PM<sub>2.5</sub> in the southeastern United States using solvent-extractable organic compounds as tracers. *Environ. Sci. Technol.* **36**(11), 2361-2371 (2002).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 02/20/2024

#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897  
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
WWW.CAYMANCHEM.COM