



Triglycerides, C_{24} - C_{54}

Analysis of milk fat triglycerides

Application Note

Food Testing & Agriculture

Authors

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Introduction

A short, high temperature stable UltiMetal wide-bore capillary column allows a fast analysis of triglycerides in milk fat. The compounds range from tricaprylic C_{24} up to tristearic C_{54} , completely separated in less than 40 minutes. The response factors of the FID for these triglycerides correspond to the number of carbon atoms in the molecule minus three. The carboxyl C atoms do not contribute to the FID response.



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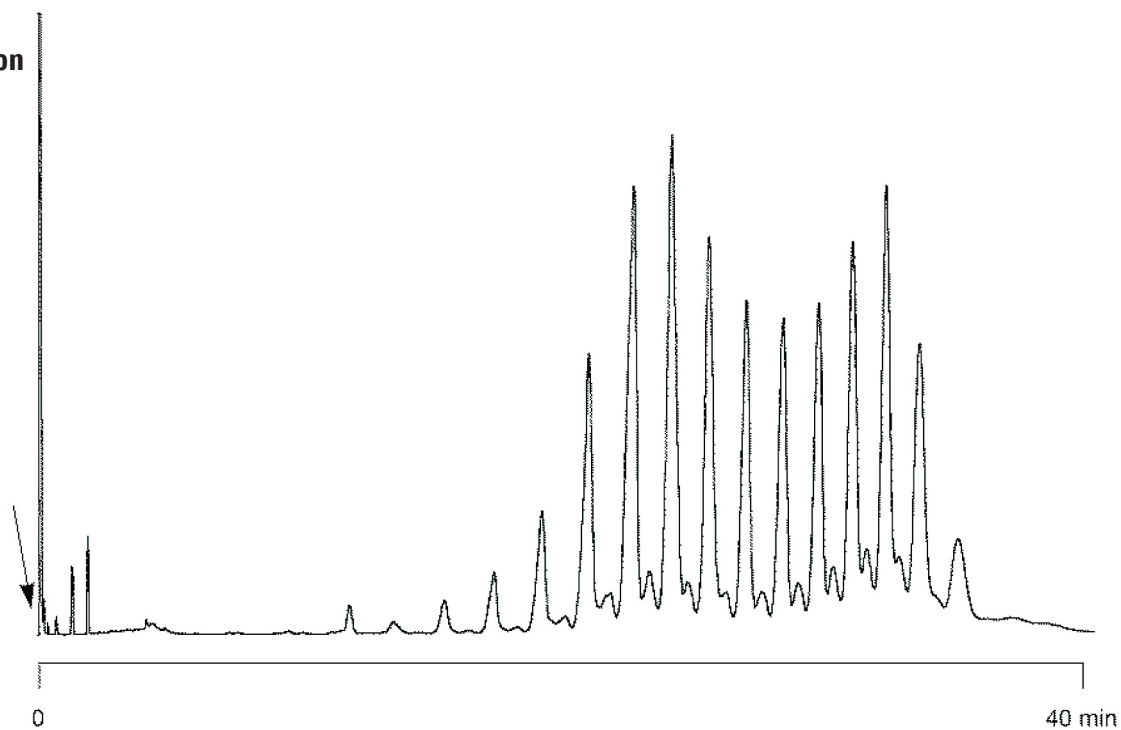
Conditions

Technique : GC-capillary
Column : Agilent CP-SimDist UltiMetal, 0.53 mm x 5 m fused silica WCOT (df = 0.17 μm) (Part no. CP7532)
Temperature : 80 °C (1 min) \rightarrow 190 °C. 50 °C/min: 190 °C (1 min) \rightarrow 350 °C, 6 °C/min: 350 °C (6 min)
Carrier Gas : N₂, 3 mL/min
Injector : On-column
Detector : FID
T = 360 °C
Sample Size : 0.5 μL
Concentration Range : 10 mg/mL milk fat in solvent
Solvent Sample : n-heptane

Courtesy : Prof. Dr. F. Ulberth, Universität für Bodenkultur,
Department of Dairy Research, Vienna, Austria

Peak identification

C₂₄ - C₅₄ triglycerides



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This information is subject to change without notice.

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