OCTADECADIENOIC ACID,
CONJUGATED, METHYL ESTER
Sigma Prod. No. O5632

CAS NO.: N/A
SYNONYM: conjugated linoleic acid methyl ester

PHYSICAL PROPERTIES:
Appearance: Clear liquid
Molecular formula: C₁₉H₃₄O₂
Molecular weight: 294.5

STABILITY / STORAGE AS SUPPLIED:
The product is a clear liquid which appears to be completely stable for at least a year (based on unchanged GC), if stored sealed at -20°C. It is packaged under argon to prevent oxidation.

SOLUBILITY / SOLUTION STABILITY:
This product can be dissolved into hexane or chloroform (at 50 mg/mL) to give a clear solution. Solutions should be stored under an inert gas, protected from light, at -20°C.

GENERAL REMARKS:
The product is a mixture of the cis- and trans- isomers of 9,11- and 10,12-octadecadienoic acid methyl esters. The precise isomer ratio varies somewhat from lot to lot. The linoleic acid methyl ester content is less than 1%.

This product is prepared using pure cis-9,cis-12-octadecadienoic acid as starting material; the reaction is monitored for the disappearance of starting material.¹

Typically, two major peaks, two minor peaks appear in the GC assay: about 42% of a mixture cis-9,trans-11 and trans-9,cis-11 which occur as one peak; trans-10,cis-12 is about 44%; cis-10,cis-12 is about 10% and the balance is about 5% of a mixture of other isomers (including includes trans-9, trans-11, etc.).¹

REFERENCES:
1. Supplier information.
2. Sigma quality control.