

<i>Item No.:</i>	46816
<i>Batch No.:</i>	0826813
<i>Expiry Date:</i>	23SEP2028 (valid from date of certification)
<i>Supplied as:</i>	A mixture of polysaturated fatty acid methyl esters
<i>Contents:</i>	See table
<i>Volume per Ampule:</i>	Not less than 1 ml. Ampules are overfilled. It is advised that labs use measured volumes.
<i>Storage & Handling:</i>	Store upright and unopened at -20°C. Warm to room temperature prior to opening.

Comprehensive Fatty Acid methyl ester Mixture 4 contains nine saturated, six monounsaturated, and ten polyunsaturated fatty acid methyl esters (FAMES). It is intended for use as a reference standard for the quantification of these fatty acids in various sample types by GC-FID or GC-MS.

Column: SP-2560 100m x 0.25mm x 0.2u
Oven: 150°C (0 min.), 3°C/min. to 230°C (29min.)
Inj.: 250°C Det.: 250°C
Carrier gas: helium, 20cm/sec.
Injection: 1.0uL, 100:1 split

E. Johnson

Cayman Chemical certifies that this product meets the specifications stated in this certificate and warrants this product to meet the stated acceptance criteria through the expiry date when stored unopened as recommended.

CERTIFICATE of ANALYSIS



Quality Control Table

Retention Time	Carbon Number	Item Name	Gravimetric Weight (g)	Concentration (mg/ml)
16.68	C15:0	Methyl pentadecanoate	0.05009	4.00
18.21	C16:0	Methyl hexadecanoate (palmitate)	0.05014	4.00
19.48	C16:1	Methyl hexadecenoate (<i>cis</i> -9) (palmitoleate)	0.05008	4.00
19.83	C17:0	Methyl heptadecanoate (margarate)	0.05011	4.00
21.52	C18:0	Methyl octadecanoate (stearate)	0.05001	3.99
22.35	C18:1	Methyl octadecenoate (<i>trans</i> -9) (elaidate)	0.05009	4.00
22.71	C18:1	Methyl octadecenoate (<i>cis</i> -9) (oleate)	0.05001	3.99
22.87	C18:1	Methyl octadecenoate (<i>cis</i> -11) (<i>cis</i> -vaccenate)	0.05016	4.01
24.45	C18:2	Methyl octadecadienoate (all <i>cis</i> -9,12) (linoleate)	0.05010	4.00
24.96	C20:0	Methyl eicosanoate (arachidate)	0.05007	4.00
25.76	C18:3	Methyl octadecatrienoate (all <i>cis</i> -6,9,12) (gamma-linolenate)	0.05008	4.00
26.15	C20:1	Methyl eicosenoate (<i>cis</i> -11)	0.05017	4.01
26.46	C18:3	Methyl octadecatrienoate (all <i>cis</i> -9,12,15) (linolenate)	0.05002	4.00
26.68	C21:0	Methyl heneicosanoate	0.05004	4.00
27.92	C20:2	Methyl eicosadienoate (all <i>cis</i> -11,14)	0.05002	4.00
28.43	C22:0	Methyl docosanoate (behenate)	0.05000	3.99
29.30	C20:3	Methyl eicosatrienoate (all <i>cis</i> -8,11,14) (homogamma-linolenate)	0.05005	4.00
30.27	C20:4	Methyl eicosatetraenoate (all <i>cis</i> -5,8,11,14) (arachidonate)	0.05012	4.00
30.42	C23:0	Methyl tricosanoate	0.05011	4.00
32.24	C24:0	Methyl tetracosanoate (lignocerate)	0.05010	4.00
32.91	C20:5	Methyl eicosapentaenoate (all <i>cis</i> -5,8,11,14,17)	0.05000	3.99
33.72	C24:1	Methyl tetracosenoate (<i>cis</i> -15) (nervonate)	0.05019	4.01
34.91	C22:4	Methyl docosatetraenoate (all <i>cis</i> -7,10,13,16)	0.05001	3.99
38.00	C22:5	Methyl docosapentaenoate (all <i>cis</i> -7,10,13,16,19)	0.05014	4.00
39.51	C22:6	Methyl docosahexaenoate (all <i>cis</i> -4,7,10,13,16,19)	0.05007	4.00
			1.25198	
Column:		SP-2560; 100 m x 0.25 mm x 0.20 u		
Oven:		150°C (0 min.), 3°C/min. to 230°C (29 min.)		
Inj./Det.:		250°C/250°C		
Carrier Gas:		helium, 20 cm/sec.		
Injection:		1.0 µl, 100:1 split		

CERTIFICATE of ANALYSIS



Revision History

Revision No.	Date	Reason for Revision
01	23SEP2026	Initial version

Disclaimers

Material Safety Data

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some but not all of the information required for the safe and proper use of this material. Before use, review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

Warranty and Limitation of Remedy

Cayman Chemical Company makes no warranty or guarantee of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman warrants only to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have any obligation or liability, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's exclusive remedy and Cayman's sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman's option, the replacement, at no cost to Buyer, of all material that does not meet our specification.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver of Buyer of all claims hereunder with respect to said material.

For further details, please refer to our Warranty and Limitations of Remedy located on our website and in our catalog.

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