

Food Analysis

Analytes for Food Analysis (in 1 mL of solvent, unless otherwise noted)

* in 10 mL

Individual Food Analytes

ANALYTES	CAS NO.	QTY./CONC.	MATRIX	CAT. NO.
Arachidin		100 mg	Neat	GS-021N
Behenin	6916-74-1	100 mg	Neat	GS-024N
Benzoic acid	65-85-0	1 gram	Neat	AP-001N
Butyl paraben	94-26-8	1 gram	Neat	AP-009N
Calcium propionate	4075-81-4	1 gram	Neat	AP-012N
Caprylin	19670-49-6	100 mg	Neat	GS-003N
b-Carotene	7235-40-7	10 mg	Neat	VIT-019N
Diarachidin	60586-60-9	100 mg	Neat	GS-020N
Dibehenin		100 mg	Neat	GS-023N
Dicaprin	53988-07-1	100 mg	Neat	GS-005N
Dicaprylin	36354-80-0	100 mg	Neat	GS-002N
Dieicosadienoin		10 mg	Neat	UG-032N
Dieicosenoin (mixed isomers)	102783-82-4	10 mg	Neat	UG-029N
Dielaidin	98168-52-6	10 mg	Neat	UG-014N
Dilaurin	27638-00-2	100 mg	Neat	GS-008N
Dilinolein (mixed isomers)	30606-27-0	10 mg	Neat	UG-020N
Dilinolenin (mixed isomers)		10 mg	Neat	UG-023N
gamma-Dilinolenin		10 mg	Neat	UG-026N
Dimyristin	53563-63-6	100 mg	Neat	GS-011N
Dimyristolein		10 mg	Neat	UG-002N
Diolein	25637-84-7	10 mg	Neat	UG-011N
Dipalmitin	26657-95-4	100 mg	Neat	GS-014N
Dipalmitolein (mixed isomers)	113728-10-2	10 mg	Neat	UG-005N
Dipetroselinin		10 mg	Neat	UG-008N
Distearin	1323-83-7	100 mg	Neat	GS-017N
Dithiothreitol	27565-41-9	1 mg/mL	Ethyl acetate	M-509-RS-10ML *
Divaccenin		10 mg	Neat	UG-017N
D-Pantothenic acid	79-83-4	100 mg	Neat	VIT-008N
Ethyl paraben	120-47-8	1 gram	Neat	AP-008N
Linolein		10 mg	Neat	UG-019N
Linolenin		10 mg	Neat	UG-022N
gamma-Linolenin		10 mg	Neat	UG-025N
Methyl 12-hydroxy-cis-9-octadecenoate	141-24-2	100 mg	Neat	UFA-008N
		10 mg/mL	Heptane	UFA-008S
Methyl 12-hydroxystearate	141-23-1	100 mg	Neat	SFA-012N
		10 mg/mL	Hexane	SFA-012S
Methyl 5,8,11,14,17-Eicosapentaenoate	2734-47-6	100 mg	Neat	UFA-025N
		10 mg/mL	Heptane	UFA-025S
Methyl arachidonate	2566-89-4	100 mg	Neat	UFA-024N
		10 mg/mL	Heptane	UFA-024S
Methyl cis-11,14,17-eicosatrienoate	55682-88-7	100 mg	Neat	UFA-023N
		10 mg/mL	Heptane	UFA-023S
Methyl cis-11,14-eicosadienoate	2463-02-7	100 mg	Neat	UFA-020N
		10 mg/mL	Heptane	UFA-020S
Methyl cis-11-eicosenoate	2390-09-2	100 mg	Neat	UFA-018N
		10 mg/mL	Heptane	UFA-018S
Methyl cis-11-octadecenoate	1937-63-9	100 mg	Neat	UFA-007N
		10 mg/mL	Heptane	UFA-007S
Methyl cis-13,16,19-docosatrienoate	108698-01-7	100 mg	Neat	UFA-030N
		10 mg/mL	Heptane	UFA-030S
Methyl cis-13,16-docosadienoate	61012-47-3	100 mg	Neat	UFA-029N
		10 mg/mL	Heptane	UFA-029S
Methyl cis-13-docosenoate	1120-34-9	100 mg	Neat	UFA-027N
		10 mg/mL	Heptane	UFA-027S
Methyl cis-15-tetracosenoate	2733-88-2	100 mg	Neat	UFA-033N
		10 mg/mL	Heptane	UFA-033S
Methyl cis-4,7,10,13,16,19-docosahexanoate		100 mg	Neat	UFA-032N
		10 mg/mL	Heptane	UFA-032S
Methyl cis-5-eicosenoate	20839-34-3	100 mg	Neat	UFA-019N
		10 mg/mL	Heptane	UFA-019S
Methyl cis-6-octadecenoate	2777-58-4	100 mg	Neat	UFA-003N
		10 mg/mL	Heptane	UFA-003S
Methyl cis-7,10,13,16,19-docosapentaenoate	108698-02-8	100 mg	Neat	UFA-026N
		10 mg/mL	Heptane	UFA-026S
Methyl cis-7,10,13,16-docosatetraenoate	13487-42-8	100 mg	Neat	UFA-031N
		10 mg/mL	Heptane	UFA-031S
Methyl cis-8,11,14-eicosatrienoate	1783-84-2	100 mg	Neat	UFA-022N
		10 mg/mL	Heptane	UFA-022S
Methyl cis-8-eicosenoate	69119-99-9	100 mg	Neat	UFA-017N
		10 mg/mL	Heptane	UFA-017S
Methyl cis-9-hexadecenoate	1120-25-8	100 mg	Neat	UFA-001N
		10 mg/mL	Heptane	UFA-001S
Methyl cis-9-octadecenoate	112-62-9	100 mg	Neat	UFA-005N
		10 mg/mL	Heptane	UFA-005S
Methyl decanoate	110-42-9	100 mg	Neat	SFA-003N
		10 mg/mL	Hexane	SFA-003S
Methyl docosanoate	929-77-1	100 mg	Neat	SFA-016N
		10 mg/mL	Hexane	SFA-016S
Methyl dodecanoate	111-82-0	100 mg	Neat	SFA-005N
		10 mg/mL	Hexane	SFA-005S
Methyl eicosanoate	1120-28-1	100 mg	Neat	SFA-014N
		10 mg/mL	Hexane	SFA-014S
Methyl g-linolenate	16326-32-2	100 mg	Neat	UFA-015N
		10 mg/mL	Heptane	UFA-015S

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ANALYTES	CAS NO.	QTY./CONC.	MATRIX	CAT. NO.
Methyl heneicosanoate	6064-90-0	100 mg 10 mg/mL	Neat Hexane	SFA-015N SFA-015S
Methyl heptadecanoate	1731-92-6	100 mg 10 mg/mL	Neat Hexane	SFA-010N SFA-010S
Methyl hexadecanoate	112-39-0	100 mg 10 mg/mL	Neat Hexane	SFA-009N SFA-009S
Methyl linoleate	112-63-0	100 mg 10 mg/mL	Neat Heptane	UFA-010N UFA-010S
Methyl linoelaidate	2566-97-4	100 mg 10 mg/mL	Neat Heptane	UFA-011N UFA-011S
Methyl linolenate	301-00-8	100 mg 10 mg/mL	Neat Heptane	UFA-014N UFA-014S
Methyl nonadecanoate	1731-94-8	100 mg 10 mg/mL	Neat Hexane	SFA-013N SFA-013S
Methyl nonanoate	1731-84-6	100 mg 10 mg/mL	Neat Hexane	SFA-002N SFA-002S
Methyl octadecadienoate (conjugated)		100 mg 10 mg/mL	Neat Heptane	UFA-012N UFA-012S
Methyl octadecanoate		100 mg 10 mg/mL	Neat Hexane	SFA-011N SFA-011S
Methyl octanoate	111-11-5	100 mg 10 mg/mL	Neat Hexane	SFA-001N SFA-001S
Methyl paraben	99-76-3	1 gram	Neat	AP-007N
Methyl pentadecanoate	7132-64-1	100 mg 10 mg/mL	Neat Hexane	SFA-008N SFA-008S
Methyl tetracosanoate	2442-49-1	100 mg 10 mg/mL	Neat Hexane	SFA-018N SFA-018S
Methyl tetradecanoate	124-10-7	100 mg 10 mg/mL	Neat Hexane	SFA-007N SFA-007S
Methyl trans-11-eicosenoate	69119-90-0	100 mg 10 mg/mL	Neat Heptane	UFA-016N UFA-016S
Methyl trans-13-docosenoate	7439-44-3	100 mg 10 mg/mL	Neat Heptane	UFA-028N UFA-028S
Methyl trans-6-octadecenoate		100 mg 10 mg/mL	Neat Heptane	UFA-004N UFA-004S
Methyl trans-9-hexadecenoate	10030-74-7	100 mg 10 mg/mL	Neat Heptane	UFA-002N UFA-002S
Methyl trans-9-octadecenoate	2462-84-2	100 mg 10 mg/mL	Neat Heptane	UFA-006N UFA-006S
Methyl tricosanoate	2433-97-8	100 mg 10 mg/mL	Neat Hexane	SFA-017N SFA-017S
Methyl tridecanoate	1731-88-0	100 mg 10 mg/mL	Neat Hexane	SFA-006N SFA-006S
Methyl undecanoate	1731-86-8	100 mg 10 mg/mL	Neat Hexane	SFA-004N SFA-004S
Monocaprin	26402-22-2	100 mg	Neat	GS-006N
Monoeicosadienoïn		10 mg	Neat	UG-033N
Monoeicosenoïn		10 mg	Neat	UG-030N
Monocelaidin	2716-53-2	10 mg	Neat	UG-015N
Monolaurin	142-18-7	100 mg	Neat	GS-009N
Monolinoleïn	2277-28-3	10 mg	Neat	UG-021N
Monolinolenin	26545-75-5	10 mg	Neat	UG-024N
gamma-Monolinolenin		10 mg	Neat	UG-027N
Monomyristoleïn		10 mg	Neat	UG-003N
Monocoleïn	111-03-5	10 mg	Neat	UG-012N
Monopalmitin		100 mg	Neat	GS-015N
Monopalmitoleïn	37515-61-0	10 mg	Neat	UG-006N
Monopetroselinin		10 mg	Neat	UG-009N
Monovaccenin		10 mg	Neat	UG-018N
Myristin	75685-84-6	100 mg	Neat	GS-012N
Myristoleïn		10 mg	Neat	UG-001N
Niacin	59-67-6	1 gram	Neat	VIT-005N
Nicotinamide	98-92-0	1 gram	Neat	VIT-006N
Olein	122-32-7	10 mg	Neat	UG-010N
Palmitoleïn	20246-55-3	10 mg	Neat	UG-004N
Petroselinin	3296-43-3	10 mg	Neat	UG-007N
Potassium nitrate	7757-79-1	1 gram	Neat	AP-006N
Potassium nitrite	7758-09-0	1 gram	Neat	AP-003N
Potassium sorbate	24634-61-5	1 gram	Neat	AP-014N
Propionic acid	79-09-4	1 gram	Neat	AP-010N
Saccharin	81-07-2	2 mg/mL	AcCN	AS-E0369
Sodium benzoate	532-32-1	1 gram	Neat	AP-002N
Sodium nitrate	7631-99-4	1 gram	Neat	AP-005N
Sodium nitrite	7632-00-0	1 gram	Neat	AP-004N
Sodium propionate	137-40-6	1 gram	Neat	AP-011N
Sorbic acid	110-44-1	1 gram	Neat	AP-013N
Stearin	22610-63-5	100 mg	Neat	GS-018N
Tricaprin	621-71-6	100 mg	Neat	GS-004N
Tricaprylin	538-23-8	100 mg	Neat	GS-001N
Tridocosanoïn		100 mg	Neat	GS-022N
Tridodecanoïn		100 mg	Neat	GS-007N
Triecosenoïn	80380-39-8	100 mg 10 mg	Neat Neat	GS-019N UG-028N

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ANALYTES	CAS NO.	QTY./CONC.	MATRIX	CAT. NO.
cis-11,14-Trieicosadienoin		10 mg	Neat	UG-031N
Trielaidin	537-39-3	10 mg	Neat	UG-013N
Trihexadecanoin	555-42-2	100 mg	Neat	GS-013N
Trioctadecanoin	555-43-1	100 mg	Neat	GS-016N
Tritetradecanoin		100 mg	Neat	GS-010N
Vaccenin		10 mg	Neat	UG-016N
Vitamin A acetate	127-47-9	100 mg	Neat	VIT-011N
Vitamin A palmitate	79-81-2	100 mg	Neat	VIT-014N
Vitamin B1	67-03-8	1 gram	Neat	VIT-001N
Vitamin B2	83-88-5	1 gram	Neat	VIT-002N
Vitamin B6	58-56-0	1 gram	Neat	VIT-003N
Vitamin B12	68-19-9	25 mg	Neat	VIT-010N-R1
Vitamin C	50-81-7	1 gram	Neat	VIT-004N
Vitamin D2	50-14-6	100 mg	Neat	VIT-022N
Vitamin D3	67-97-0	100 mg	Neat	VIT-013N
Vitamin E	10191-41-0	100 mg	Neat	VIT-012N
Vitamin E acetate	7695-91-2	100 mg	Neat	VIT-015N
Vitamin E succinate	4345-03-3	100 mg	Neat	VIT-020N
Vitamin H	58-85-5	100 mg	Neat	VIT-009N-R1
Vitamin K1	84-80-0	100 mg	Neat	VIT-016N
Vitamin K2	11032-49-8	100 mg	Neat	VIT-017N
Vitamin K3	58-27-5	100 mg	Neat	VIT-018N
Vitamin M	59-30-3	1 gram	Neat	VIT-007N

Kits for Qualitative Analysis & Identification

Fatty Acids C₃-C₁₈

PS-651C 15 units

Neat at the stated quantities

(01) Propionic acid	2 mL
(02) Butyric acid	2 mL
(03) Valeric acid	2 mL
(04) Caproic acid	2 mL
(05) Heptanoic acid	2 mL
(06) Caprylic acid	2 mL
(07) Pelargonic acid	2 mL
(08) Capric acid	2 mL
(09) <i>n</i> -Hendecanoic acid	2 mL
(10) 10-Hendecenoic acid	0.5 g
(11) Lauric acid	0.5 g
(12) Myristic acid	0.5 g
(13) Palmitic acid	0.5 g
(14) Stearic acid	0.5 g
(15) Fatty Acids Mixture PS-65C	2 mL

Neat at the stated weight

Propionic acid	20%
Butyric acid	20%
Valeric acid	20%
Caproic acid	20%
Heptanoic acid	20%

Calibration Mixture

PS-65C 1 x 2 mL

Neat at the stated weight % listed above

L-Amino Acid Kit

PS-970C 22 units

100 mg each. Neat.

(01) L-Alanine
(02) L-Arginine
(03) L-Asparagine
(04) L-Aspartic acid
(05) L-Cysteine
(06) L-Cystine
(07) L-Glutamic acid
(08) L-Glutamine
(09) Glycine
(10) L-Histidine
(11) <i>trans</i> -4-Hydroxy-L-proline
(12) L-Isoleucine
(13) L-Leucine
(14) L-Lycine
(15) L-Methionine
(16) L-Phenylalanine
(17) L-Proline
(18) L-Serine
(19) L-Threonine
(20) L-Tryptophan
(21) L-Tyrosine
(22) L-Valine

Dicarboxylic Acids

PS-670CX 15 units

0.5 each. Neat.

(01) Oxalic acid
(02) Malonic acid
(03) Maleic acid
(04) Fumaric acid
(05) Succinic acid
(06) Glutaric acid
(07) Adipic acid
(08) Pimelic acid
(09) Suberic acid
(10) Azelaic acid
(11) Sebacic acid
(12) 1,12-Dodecanedioic acid
(13) Phthalic acid
(14) Isophthalic acid
(15) Terephthalic acid

Antioxidants

PS-920CX 15 units

0.5 g each vial. Neat.

(01) BHA (2 and 3- <i>tert</i> -Butyl-4-methoxy phenol)
(02) BHT (2,6- <i>di-tert</i> -Butyl-4-methyl phenol)
(03) 4-Hydroxymethyl-2,6- <i>di-tert</i> -butyl phenol
(04) THBP (2,4,5-Trihydroxybutyrophenone)
(05) Ethoxyquin (1,2-Dihydro-6-ethoxy-2,2,4-trimethyl quinoline)
(06) <i>tert</i> -Butyl hydroquinone
(07) DLTDP (Dilaurylthiodipropionate)
(08) Thiodipmpionic acid
(09) Propyl gallate
(10) Ascorbyl palmitate
(11) Ascorbic acid
(12) Erythorbic acid (<i>iso</i> -Ascorbic acid)
(13) Tocopherols (mixed)
(14) Glycine
(15) Lecithin

Sugars & Sugar Alcohols

PS-960C 15 units

500 mg/vial. Neat.

(01) D-Xylose
(02) D-Ribose
(03) L-Arabinose
(04) D-Fructose
(05) D-Galactose
(06) α -D-Glucose
(07) D-Mannose
(08) L-Rhamnose monohydrate
(09) L-Sorbose
(10) Xylitol
(11) Ribitol (Adonitol)
(12) D-Arabitol
(13) L-Arabitol
(14) D-Mannitol
(15) D-Sorbitol

Polysaccharides & Synthetic Sweeteners

PS-961C 15 units

500 mg/vial. Neat.

(01) D-Cellobiose
(02) α -D-Lactose monohydrate
(03) β -D-Lactose
(04) D-Maltose monohydrate
(05) Maltitol
(06) α -D-Melibiose hydrate
(07) Sucrose
(08) D-Trehalose dihydrate
(09) D-Turanose
(10) Maltotriose
(11) Melezitose dihydrate
(12) D-Raffinose pentahydrate
(13) Saccharin
(14) Aspartame (L-Aspartyl-phenylalanine methyl ester)
(15) Sodium cyclamate (Sodium cyclohexylsulfamate)

Food Analysis

ASTM Method D6042-92 Plastic Packaging Testing Standards

This method is used by both pharmaceutical companies and plastic manufacturers. The test ensures the quality of the plastic product during the manufacturing process, and as delivered to the pharmaceutical customer. Compounds are often added to the method's analyte list by pharmaceutical companies.

Calibration Mix

PLAS-CAL-001		1 x 1 mL
PLAS-CAL-001-PAK		5 x 1 mL
<i>50 µg/mL each in Isopropanol</i>		
BHT	Irganox 3114	
Erucamide Slip	Irganox 1010	
Vitamin E	Irganox 1076	
Irgafor 128		

Internal Standard Mix

PLAS-IS-001		1 x 1 mL
PLAS-IS-001-PAK		5 x 1 mL
<i>51.8 µg/mL each in Isopropanol</i>		
Tinuvin P		

Expanded List of Additives

Each at 50 µg/mL in Isopropanol, except Ethanox 703 at 1000 µg/mL

Ultranox 626	PLAS-CAL-002-1	1 x 1 mL
Santanox R	PLAS-CAL-002-2	1 x 1 mL
Ethanox 330	PLAS-CAL-002-3	1 x 1 mL
Ethanox 323	PLAS-CAL-002-4	1 x 1 mL
Ethanox 702	PLAS-CAL-002-5	1 x 1 mL
Ethanox 703	PLAS-CAL-002-6	1 x 1 mL
Irganox 1035	PLAS-CAL-002-7	1 x 1 mL

Component list:

1. Tinuvin® P
2. BHT
3. erucamide
4. Irganox® 3114
5. Irganox® 1010
6. vitamin E
7. Irganox® 1076
8. Irgafos® 168

Analysis Conditions:

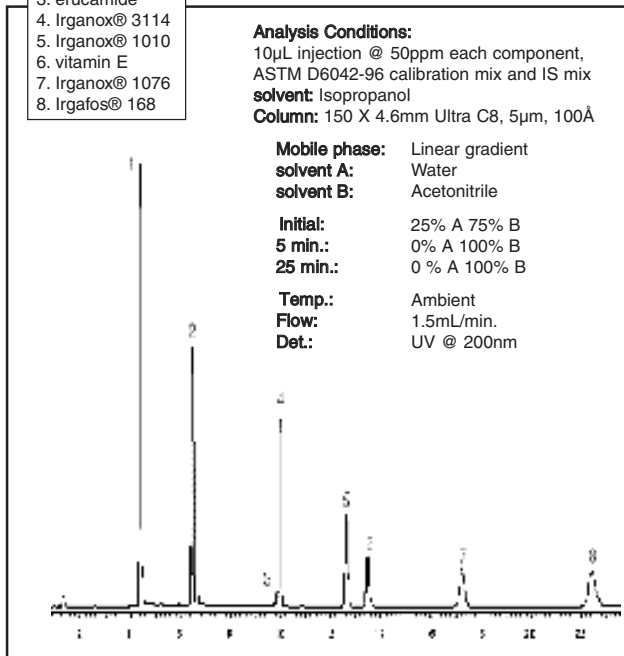
10µL injection @ 50ppm each component,
ASTM D6042-96 calibration mix and IS mix
solvent: Isopropanol

Column: 150 X 4.6mm Ultra C8, 5µm, 100Å

Mobile phase: Linear gradient
solvent A: Water
solvent B: Acetonitrile

Initial: 25% A 75% B
5 min.: 0% A 100% B
25 min.: 0% A 100% B

Temp.: Ambient
Flow: 1.5mL/min.
Det.: UV @ 200nm



The figure shows the separation of the compounds on the method's analyte list, as analyzed by our HPLC specialists. The primary calibration standard mixture contains the common antioxidants and slips listed in ASTM D6042-96.

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Food Analysis

Lipid Standards

- High Purity Analyzed by GLC & TLC
- Packaged in Sealed Ampules under Nitrogen Blanket

Methyl Esters

Saturated Methyl Ester Series (Min. 99% Purity)

Cat. No.	Description
SFA-001	Methyloctanoate (<i>Caprylate</i>) C8:0
SFA-002	Methylnonoate (<i>Pelargonate</i>) C9:0
SFA-003	Methyldecanoate (<i>Caprate</i>) C10:0
SFA-004	Methylundecanoate C11:0
SFA-005	Methyldodecanoate (<i>Laurate</i>) C12:0
SFA-006	Methyltridecanoate C13:0
SFA-007	Methyltetradecanoate (<i>Myristate</i>) C14:0
SFA-008	Methylpentadecanoate C15:0
SFA-009	Methylhexadecanoate (<i>Palmitate</i>) C16:0
SFA-010	Methylheptadecanoate (<i>Margarate</i>) C17:0
SFA-011	Methyloctadecanoate (<i>Stearate</i>) C18:0
SFA-012	Methyl 12-hydroxystearate C18:0
SFA-013	Methylnonadecanoate C19:0
SFA-014	Methyleicosanoate (<i>Arachidate</i>) C20:0
SFA-015	Methylheneicosanoate C21:0
SFA-016	Methyldocosanoate (<i>Behenate</i>) C22:0
SFA-017	Methyltricosanoate C23:0
SFA-018	Methyltetracosanoate (<i>Lignocerate</i>) C24:0
SFA-KIT	Saturated Fatty Acids Methyl ester Kit 1 x 18 units (SFA-001 to SFA-018)

Same Price for Solutions or Neat Standards

To Order

Solutions: 10 mg/mL in high purity Hexane, use suffix "S" after Cat. No.

Neat Fatty Acids: 100 mg, in a vial, use suffix "N" after Cat. No.

Unsaturated Methyl Ester Series

Cat. No.	Description (Storage: -20°C, protect from light)
UFA-001	Methyl cis-9-hexadecenoate (<i>Palmitoleate</i>) C16:1
UFA-002	Methyl trans-9-hexadecenoate C16:1
UFA-003	Methyl cis-6-octadecenoate (<i>Petroselinolate</i>) C18:1
UFA-004	Methyl trans-6-octadecenoate (<i>Petroselaidate</i>) C18:1
UFA-005	Methyl cis-9-octadecenoate (<i>Oleate</i>) C18:1
UFA-006	Methyl trans-9-octadecenoate (<i>Elaidate</i>) C18:1
UFA-007	Methyl cis-11-octadecenoate (<i>Vaccenate</i>) C18:1
UFA-008	Methyl 12-hydroxy-cis-9-octadecenoate (<i>Ricinoleate</i>) C18:1
UFA-010	Methyl linoleate (<i>Linoleate</i>) C18:2
UFA-011	Methyl linolelaidate (<i>Linoelaidate</i>) C18:2
UFA-012	Methyl octadecadienoate (<i>Conjugated</i>) C18:2
UFA-014	Methyl linolenate (<i>Linolenate</i>) C18:3
UFA-015	Methyl g-linolenate (<i>Gamma Linolenate</i>) C18:3
UFA-016	Methyl trans-11-eicosenoate C20:1
UFA-017	Methyl cis-8-eicosenoate C20:1
UFA-018	Methyl cis-11-eicosenoate C20:1
UFA-019	Methyl cis-5-eicosenoate C20:1
UFA-020	Methyl cis-11,14-eicosadienoate C20:2
UFA-022 ‡	Methyl cis-8,11,14-eicosatrienoate (<i>Homogamma linolenate</i>) C20:3
UFA-023 ‡	Methyl cis-11,14,17-eicosatrienoate C20:3
UFA-024	Methyl arachidonate (<i>Arachidonate</i>) C20:4
UFA-025 ‡	Methyl 5,8,11,14,17-Eicosapentaenoate C20:5
UFA-026 ‡	Methyl cis-7,10,13,16,19-Docosapentaenoate (DPA) C22:5
UFA-027	Methyl cis-13-docosenoate (<i>Erucate</i>) C22:1
UFA-028	Methyl trans-13-docosenoate (<i>Brassicdate</i>) C22:1
UFA-029	Methyl cis-13,16-docosadienoate C22:2
UFA-030 ‡	Methyl cis-13,16,19-docosatrienoate C22:3
UFA-031 ‡	Methyl cis-7,10,13,16-Docosatetraenoate C22:4
UFA-032 ‡	Methyl cis-4,7,10,13,16,19-Docosahexenoate C22:6 95%
UFA-033	Methyl cis-15-tetracosenoate (<i>Nervonate</i>) C24:1
UFA-KIT-2 ‡	Kit of Unsaturated Fatty Acid 1 x 30 units Methyl Ester Set (UFA-001 to UFA-033)

To Order

Solutions: 10 mg/mL in high purity Heptane, use suffix "S" after Cat. No.

Neat Fatty Acids: 100 mg, in a vial, use suffix "N" after Cat. No.

‡ To delay premature breakdown of thermally labile products in transit we suggest shipping with a "Cold Pack"

- Certificate of Analysis

Glycerides

Saturated Glyceride Series (Min. 99% Purity)

Cat. No.	Description	Unit
GS-001N	Trioctanoïn (<i>Caprylin</i>) C8:0	100 mg
GS-002N	Dicaprylin C8:0	100 mg
GS-003N	Monocaprylin C8:0	100 mg
GS-004N	Tridecanoïn (<i>Caprin</i>) C10:0	100 mg
GS-005N	Dicaprin C10:0	100 mg
GS-006N	Monocaprin C10:0	100 mg
GS-007N	Tridodecanoïn (<i>Laurin</i>) C12:0	100 mg
GS-008N	Dilaurin C12:0	100 mg
GS-009N	Monolaurin C12:0	100 mg
GS-010N	Tritradecanoïn (<i>Myristin</i>) C14:0	100 mg
GS-011N	Dimyristin C14:0	100 mg
GS-012N	Monomyristin C14:0	100 mg
GS-013N	Trihexadecanoïn (<i>Palmitin</i>) C16:0	100 mg
GS-014N	Dipalmitin C16:0	100 mg
GS-015N	Monopalmitin C16:0	100 mg
GS-016N	Trioctadecanoïn (<i>Stearin</i>) C18:0	100 mg
GS-017N	Distearin C18:0	100 mg
GS-018N	Monostearin C18:0	100 mg
GS-019N	Triicosanoïn (<i>Arachidin</i>) C20:0	100 mg
GS-020N	Diarachidin C20:0	100 mg
GS-021N	Monoarachidin C20:0	100 mg
GS-022N	Tridocosanoïn (<i>Behenin</i>) C22:0	100 mg
GS-023N	Dibehenin C22:0	100 mg
GS-024N	Monobehenin C22:0	100 mg
GS-KIT	Kit of Saturated glyceride Kit 1 x 24 units (GS-001 to GS-024)	

Unsaturated Glyceride Series Min. 99% Purity

Cat. No.	Description	Unit
UG-001N	Myristoleïn C14:1 cis	10 mg
UG-002N	Dimyristoleïn C14:1	10 mg
UG-003N	Monomyristoleïn C14:1	10 mg
UG-004N	Palmitoleïn C16:1 cis	10 mg
UG-005N	Dipalmitoleïn C16:1	10 mg
UG-006N	Monopalmitoleïn C16:1	10 mg
UG-007N	Petroselinin 6 C18:1 cis	10 mg
UG-008N	Dipetroselinin 6 C18:1	10 mg
UG-009N	Monopetroselinin 6 C18:1	10 mg
UG-010N	Olein 9 C18:1 cis	10 mg
UG-011N	Diolein 9 C18:1	10 mg
UG-012N	Monoleïn 9 C18:1	10 mg
UG-013N	Trielaidin 9 C18:1 trans	10 mg
UG-014N	Dielaidin 9 C18:1 trans	10 mg
UG-015N	Monoelaidin 9 C18:1 trans	10 mg
UG-016N	Vaccenin 11 C18:1 cis	10 mg
UG-017N	Divaccenin 11 C18:1	10 mg
UG-018N	Monovaccenin 11 C18:1	10 mg
UG-019N ‡	Linoleïn C18:2 cis,cis	10 mg
UG-020N ‡	Dilinoïn C18:2	10 mg
UG-021N ‡	Monolinoïn C18:2	10 mg
UG-022N ‡	Linolenin C18:3 cis,cis,cis	10 mg
UG-023N ‡	Dilinoïn C18:3	10 mg
UG-024N ‡	Monolinoïn C18:3	10 mg
UG-025N ‡	Gamma linolenin C18:3 cis,cis,cis	10 mg
UG-026N ‡	Gamma di-linolenin C18:3	10 mg
UG-027N ‡	Gamma mono-linolenin C18:3	10 mg
UG-028N	Triicosenoïn C20:1 cis	10 mg
UG-029N	Dieicosenoïn C20:1	10 mg
UG-030N	Monoeicosenoïn C20:1	10 mg
UG-031N ‡	11-14 cis Trieicosadienoïn C20:2 cis,cis	10 mg
UG-032N ‡	Dieicosadienoïn C20:2	10 mg
UG-033N ‡	Monoeicosadienoïn C20:2	10 mg
UG-KIT ‡	Kit of Unsaturated Glyceride Set 1 x 33 units (UFA-001 to UFA-033)	

Food Analysis

AOCS, Method Ce1-62 Animal & Vegetable Reference Mixes

Cat. No.	Description (See Below for Composition of Neat Mixes)	Unit
AOCS-001N ‡	AOCS Animal & Vegetable Reference Mix 1, Suitable standard for corn, cottonseed, kapok, poppyseed, rice, safflower, sesame, soybean, sunflower and walnut oils	100 mg
AOCS-002N ‡	AOCS Animal & Vegetable Reference Mix 2, Suitable standard for hempseed, linseed, perrilla & rubberseed oils	100 mg
AOCS-003N ‡	AOCS Animal & Vegetable Reference Mix 3, Suitable standard for mustard seed, peanut and rapeseed oil	100 mg
AOCS-006N ‡	AOCS Animal & Vegetable Reference Mix 6, Suitable standard for lard, beef tallow, mutton tallow and palm oil	100 mg
AOCS-004N ‡	AOCS Animal & Vegetable Reference Mix 4, Suitable standard for neatsfoot, olive and teaseed oils	100 mg
AOCS-005N ‡	AOCS Animal & Vegetable Reference Mix 5, Suitable standard for babassu, coconut, ouri-curi & palm kernel oils	100 mg
AOCS-007N ‡	AOCS Rapeseed Mix, Suitable standard for modern low erucic acid oils	100 mg
AOCS-SET ‡	AOCS Animal & Vegetable Reference Mix Set (Set includes AOCS-001N to AOCS-007N)	7 units

Methyl Ester (% Composition by Weight)

AOCS Ref. Mix	Cat. No.	C8:0 Caprylate	C10:0 Caprate	C12:0 Laurate	C14:0 Myristate	C16:0 Palmitate	C16:1 Palmitoleate	C18:0 Stearate	C18:1 Oleate	C18:2 Linoleate	C18:3 Linolenate	C20:0 Arachidate	C22:0 Behenate	C22:1 Elcosenoate	C24:0 Lignocerate
RM -1	AOCS-001N					6.0		3.0	35.0	50.0		3.0	3.0		
RM -2	AOCS-002N					7.0		5.0	18.0	36.0	34.0				
RM -3	AOCS-003N				1.0	4.0		3.0	45.0	15.0		3.0	3.0		3.0
RM -4	AOCS-004N					11.0		3.0	80.0	6.0					20.0
RM -5	AOCS-005N		7.0	5.0	48.0	15.0	7.0	3.0	12.0	3.0					
RM -6	AOCS-006N					2.0	30.0	3.0	14.0	41.0	7.0	3.0			
Rapeseed	AOCS-007N					1.0	4.0		3.0	60.0	12.0	5.0	3.0	1.0	3.0

NHI/NIH Fatty Acid Methyl Ester Profiling Mixes

NHI/NIH Fatty Acid Methyl Ester Profiling Mixes

Designed to test reliability of chromatographic system when performing quantitative analysis of Fatty Acids.

Methyl Ester (% Composition by Weight)

NHI/NIH Ref. Mix	Cat. No.	100 mg	C8:0 Caprylate	C10:0 Caprate	C12:0 Laurate	C14:0 Myristate	C16:0 Palmitate	C16:1 Palmitoleate	C18:0 Stearate	C18:1 Oleate	C20:0 Arachidate	C22:0 Behenate	C24:0 Lignocerate	
NHI-A	NHI-001N						25.0	10.0		65.0				
NHI-B	NHI-002N						4.0	40.0		56.0				
NHI-C	NHI-003N			1.5	3.0	6.0	12	19.4		24.9		33.2		
NHI-D	NHI-004N						11.8	23.6	6.9	13.1	44.6			
NHI-E	NHI-005N			6.3	9.1	12.0	23.3	49.2						
NHI-F	NHI-006N						2.5	4.2		7.3		13.6	25.4	47.0
NHI-SET	(Set includes NHI-001N to NHI-006N)													

‡ To delay premature breakdown of thermally labile products in transit we suggest shipping with a "Cold Pack"

Food Analysis

Fatty Acid Methyl Esters Reference Mixtures and Kits

Prepared from 99% pure materials these mixes & kits are suitable for determining peak identification & establishing chromatographic retention times.

Individual Food Analyses

Saturated Straight Chain Kit

FAME-001-R1-KIT **10 units**

Storage: 0°C
Methyl esters, purity 99%, 100 mg each

Me Caproic acid (C6:0)
Me Caprylic acid (C8:0)
Me Capric acid (C10:0)
Me Lauric acid (C12:0)
Me Myristic acid (C14:0)
Me Palmitic acid (C16:0)
Me Stearic acid (C18:0)
Me Arachidic acid (C20:0)
Me Behenic acid (C22:0)
Me Lignoceric acid (C24:0)

Saturated Straight Chain Kit

FAME-002-R1-KIT **19 units**

Storage: 0°C
Methyl esters, 99% purity, 100 mg each

Me Caproic acid (6:0) Me Palmitic acid (16:0)
Me Heptanoic acid (7:0) Me Heptadecanoic acid (17:0)
Me Caprylic acid (8:0) Me Stearic acid (18:0)
Me Nonanoic acid (9:0) Me Nonadecanoic acid (19:0)
Me Capric acid (10:0) Me Arachidic acid (20:0)
Me Undecanoic acid (11:0) Me Heneicosanoic acid (21:0)
Me Lauric Acid (12:0) Me Behenic acid (22:0)
Me Tridecanoic acid (13:0) Me Tricosanoic acid (23:0)
Me Myristic acid (14:0) Me Lignoceric acid (24:0)
Me Pentadecanoic acid (15:0)

Unsaturated Straight Chain Kit

FAME-003-R1-KIT **14 units**

Storage -20°C, Protect from light
Saturated methyl esters, purity 99%, 10 mg each

Me Myristoleic acid (14:1)
Me Palmitoleic acid (16:1)
Me Petroselinic acid (18:1)
Me Elaidic acid (18:1)
Me cis-Vaccenic acid (18:1, cis)
Me Linoleic acid (18:2, cis)
Me Linolelaidic acid (18:2, trans)
Me Linolenic acid (18:3)
Me cis-11-Eicosenoic acid (20:1)
Me Arachidonic acid (20:4)
Me Erucic acid (22:1)
Me cis-4,7,10,13,16,19-Docosahexaenoic acid (22:6)
Me Nervonic acid (24:1)
Me Oleic acid (18:1)

Even Carbon Straight Chain Kit

FAME-004-R2-KIT **10 units**

Storage: -20°C, Keep from light
Methyl esters, 99+% purity at stated quantities

Me Caproic acid (C6:0) 1 g
Me Caprylic acid (C8:0) 1 g
Me Capric acid (C10:0) 1 g
Me Lauric acid (C12:0) 1 g
Me Myristic acid (C14:0) 1 g
Me Palmitic acid (C16:0) 1 g
Me Stearic acid (C18:0) 100 mg
Me Arachidic acid (C20:0) 100 mg
Me Behenic acid (C22:0) 100 mg
Me Lignoceric acid (C24:0) 100 mg

Odd Carbon Straight Chain Kit

FAME-005-R1-KIT **9 units**

Storage: -20°C, Keep from light
Methyl esters, 99+% purity, 100 mg each

Me Heptanoic acid (C7:0)
Me Nonanoic acid (C9:0)
Me Undecanoic acid (C11:0)
Me Tridecanoic acid (C13:0)
Me Pentadecanoic acid (C15:0)
Me Heptadecanoic acid (C17:0)
Me Nonadecanoic acid (C19:0)
Me Heneicosanoic acid (C21:0)
Me Tricosanoic acid (C23:0)

Methyl Ester Mix #1

FAMQ-001 **40 mg**

Storage: -20°C, Keep from light
Approximately 10 mg of each in a qualitative mix

11-Eicosenoic acid methyl ester (20:1)
11,14-Eicosadienoic acid methyl ester (20:2)
Arachidonic acid methyl ester (20:4)
5,8,11,14,17-Eicosapentaenoic acid methyl ester (20:5)

Fatty Acid Methyl Ester Mix #2

FAMQ-002 **50 mg**

Storage: -20°C, Keep from light
Approximately 10 mg of each in a qualitative mix

11-Eicosenoic acid methyl ester (20:1)
11,14-Eicosadienoic acid methyl ester (20:2)
11,14,17-Eicosatriaenoic acid methyl ester (20:3)
Arachidonic acid methyl ester (20:4)
5,8,11,14,17-Eicosapentaenoic acid methyl ester (20:5)

Volatile Acid Standard Solution

FAMQ-004 **1 x 100 mL**

Storage: Refrigerate
10mM of each component in deionized H₂O.

Formic acid Isovaleric acid
Acetic acid n-Valeric acid
Propionic acid Isocaproic acid (4-Methyl valeric acid)
Isobutyric acid Hexanoic acid (n-Caproic acid)
Butyric acid Heptanoic acid

FAME Quantitative Standard Mix

FAMQ-005 **1 x 1 mL**

in CH₂Cl₂ (total of 10 mg/mL)
37 comps.

	mg/mL
Butyric acid methyl ester (C4:0)	0.4
Caproic acid methyl ester (C6:0)	0.4
Caprylic acid methyl ester (C8:0)	0.4
Capric acid methyl ester (C10:0)	0.4
Undecanoic acid methyl ester (C11:0)	0.2
Lauric acid methyl ester (C12:0)	0.4
Tridecanoic acid methyl ester (C13:0)	0.2
Myristic acid methyl ester (C14:0)	0.4
Myristoleic acid methyl ester (C14:1)	0.2
Pentadecanoic acid methyl ester (C15:0)	0.2
cis-10-Pentadecenoic acid methyl ester (C15:1)	0.2
Palmitic acid methyl ester (C16:0)	0.6
Palmitoleic acid methyl ester (C16:1)	0.2
Heptadecanoic acid methyl ester (C17:0)	0.2
cis-10-Heptadecenoic acid methyl ester (C17:1)	0.2
Stearic acid methyl ester (C18:0)	0.4
Elaidic acid methyl ester (C18:1n9t)	0.2
Oleic acid methyl ester (C18:1n9c)	0.4
Linolelaidic acid methyl ester (C18:2n6t)	0.2
Linoleic acid methyl ester (C18:2n6c)	0.2
Arachidic acid methyl ester (C20:0)	0.4
γ-Linolenic acid methyl ester (C18:3n6)	0.2
cis-11-Eicosenoic acid methyl ester (C20:1)	0.2
Linolenic acid methyl ester (C18:3n3)	0.2
Heneicosanoic acid methyl ester (C21:0)	0.2
cis-11,14-Eicosadienoic acid methyl ester (C20:2)	0.2
Behenic acid methyl ester (C22:0)	0.4
cis-8,11,14-Eicosatrienoic acid methyl ester (C20:3n6)	0.2
Erucic acid methyl ester (C22:1n9)	0.2
cis-11,14,17-Eicosatrienoic acid methyl ester (C20:3n3)	0.2
Arachidonic acid methyl ester (C20:4n6)	0.2
Tricosanoic acid methyl ester (C23:0)	0.2
cis-13,16-Docosadienoic acid methyl ester (C22:2)	0.2
Lignoceric acid methyl ester (C24:0)	0.4
cis-5,8,11,14,17-Eicosapentaenoic acid methyl ester (C20:5n3)	0.2
Nervonic acid methyl ester (C24:1)	0.2
cis-4,7,10,13,16,19-Docosahexaenoic acid methyl ester (C22:6n3)	0.2

Technical Note

Useful for retention time determination and developing response factors. Certificate of analysis included.

Food Analysis

- Typically 98+% Pure, with Low By-Products
- Complete Documentation

- Special Handling & Packaging to Preserve Purity

Vitamin Standards

Cat. No.	Description	Vitamin	Size
Water Soluble			
VIT-001N	Thiamine • HCL	B1	1 gram
VIT-002N	Riboflavin	B2	1 gram
VIT-003N	Pyridoxine • HCL	B6	1 gram
VIT-004N	L-Ascorbic acid	C	1 gram
VIT-005N	Nicotinic acid	Niacin	1 gram
VIT-006N	Nicotinamide		1 gram
VIT-007N	Folic Acid	M	1 gram
VIT-008N	Pantothenic acid		100 mg
VIT-009N-R1	d-Biotin	H	100 mg
VIT-010N-R1	Cyanocobalamin	B12	25 mg
VIT-WSK-R1-SET	Water Soluble Vitamin Kit, Includes: VIT-001N to VIT-010N		10 units
Fat Soluble			
VIT-011N	Retinol acetate	A, Acetate	100 mg
VIT-012N	d-alpha-Tocopherol	E	100 mg
VIT-013N	Cholecalciferol	D3	100 mg
VIT-014N	Retinol Palmitate	A, Palmitate	100 mg
VIT-015N	d-alpha-Tocopherol acetate		100 mg
VIT-016N	Phylloquinone	K1	100 mg
VIT-017N	Menaquinone	K2	100 mg
VIT-018N	Menadione	K3	100 mg
VIT-019N	β-Carotene (Substantially free of alpha Carotene)		10 mg
VIT-020N	d-alpha-Tocopherol succinate	E	100 mg
VIT-022N	Ergocalciferol	D2	100 mg
VIT-FSK-R1-SET	Fat Soluble Vitamin Kit, Includes: VIT-011N to VIT-022N		11 units

Technical Note

AccuStandard Vitamin Standards are thoroughly tested, packaged and stored under an ISO 9001 Quality System to provide the highest quality Vitamin Standards available. Remember to always store Standards properly, away from light sources. Each standard is provided with an actual lot analysis and additional transfer vial and label.

Preservative and Antimicrobial Standards

Cat. No.	CAS No.	Compound	Purity	1 gram
AP-001N	65-85-0	Benzoic acid	99 %	
AP-002N	532-32-1	Sodium benzoate	99	
AP-003N	7758-09-0	Potassium nitrite	97	
AP-004N	7632-00-0	Sodium nitrite	99	
AP-005N	7631-99-4	Sodium nitrate	99	
AP-006N	7757-79-1	Potassium nitrate	99	
AP-007N	99-76-3	Methyl paraben	99	
AP-008N	120-47-8	Ethyl paraben	99	
AP-009N	94-13-3	Butyl paraben	99	
AP-010N	79-094	Propionic acid	99	
AP-011N	137-40-6	Sodium propionate	97	
AP-012N	4075-81-4	Calcium propionate	97	
AP-013N	110-44-1	Sorbic acid	99	
AP-014N	590-00-1	Potassium sorbate	99	
AP-KIT	Preservative & Antimicrobial Kit			14 units
Kit includes: AP-001N through AP-014N				

- 99% Purity (except as noted)
- Convenient packaging size eliminates costly disposal
- Lot Analysis supplied with each Standard

10030-74-7:133	2777-58-4:132	AOCS-004N:137	136	PLAS-CAL-002-3:135
10191-41-0:134	301-00-8:133	AOCS-005N:137	GS-006N:133,	
102783-82-4:132	30606-27-0:132	AOCS-006N:137	136	PLAS-CAL-002-4:135
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