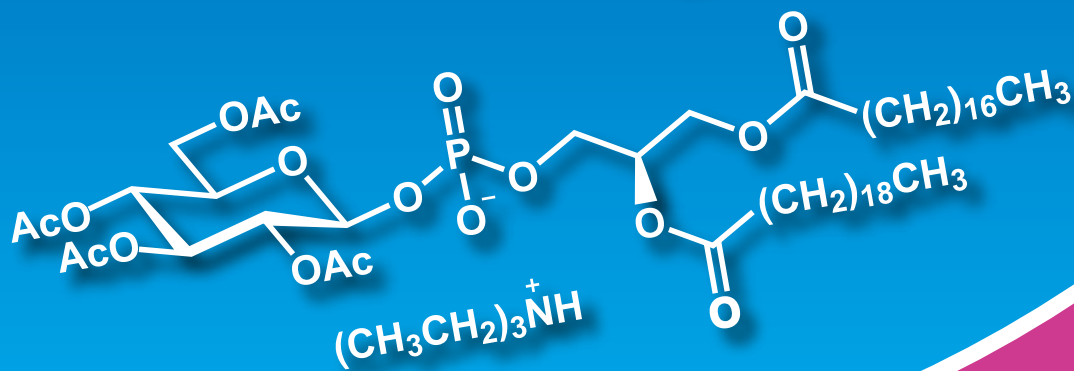
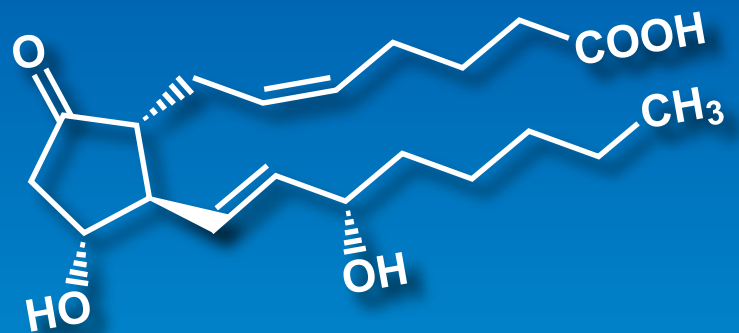
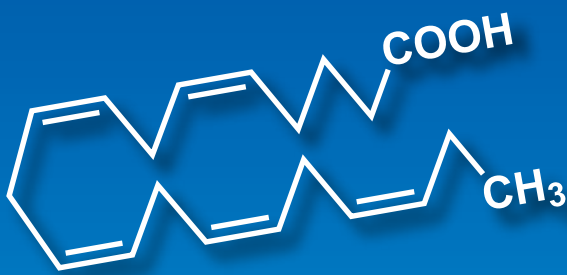


Lipids



Fatty Acyls

Glycerolipids

Phospholipids

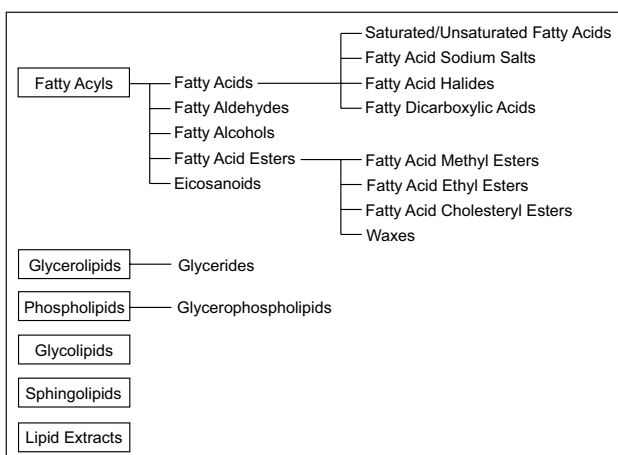
Glycolipids

Sphingolipids

Lipid Extracts, Oils

Lipids

Lipids form a broad category of biomolecules which constitute an essential part of living organisms in addition to carbohydrates and proteins. This brochure introduces lipids and related substances such as fatty acids and their derivatives. The biosynthesis of fatty acids involves the condensation of malonyl-CoA (or methylmalonyl CoA) with acyl CoA as a primer.¹⁾ Carboxylic acids with chains of 4 or more carbons are referred to as fatty acids while those with 10 or more carbons are called higher fatty acids.²⁾ Lipids are classified as the below.³⁾



Fatty Acyls

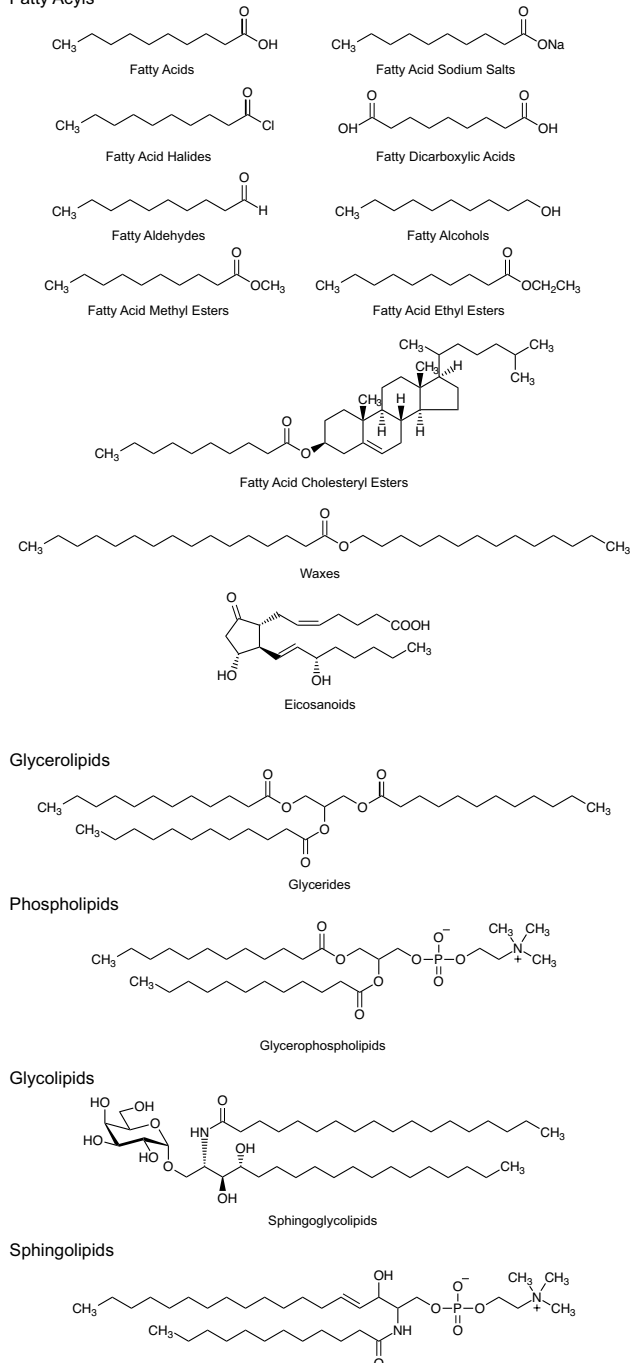


Figure 1. Classification of Lipids

● Functional Roles

Fatty acids exist in living organisms mainly as esters of glycerol and triacylglycerols which occur as a major form of energy storage in adipose tissue. Triacylglycerols are found in living organisms as mixtures of acyl groups with different number of carbons and are difficult in most cases to isolate as a single substance. Moreover, fatty acids also exist in living organisms in the form of cholesteryl esters which constitute an essential component of cell membranes where it is required to establish proper membrane permeability and fluidity.

Free fatty acids are known to suppress cell-growth at an order of 0.1mM and above, therefore considerable attention should be paid during their administration to cells.⁴⁾

● Storage Precautions

Unsaturated fatty acids like oleic acid are known to undergo aerial oxidation to produce peroxides. Opened bottles of unsaturated fatty acids and their derivatives should be stored in the refrigerator or frozen with inert gas such as nitrogen or argon. Moreover the tendency to oxidation increases as the degree of unsaturation in the fatty acids increases.

● Derivatives

Fatty acid methyl esters are the most widely used fatty acid derivatives in analytical chemistry due to their ease of handling in organic solvents as compared to the highly polar free fatty acids. Moreover their analysis by TLC, gas chromatography (GC) and liquid chromatography (LC) can be improvised by suppressing tailing.

Although fatty acid ethyl esters are rarely used for analysis as compared to the methyl esters, they offer an advantage since their method of preparation from fatty acids involves the use of the less toxic ethanol instead of methanol. For instance, eicosapentaenoic acid which is used as a hyperlipemia medicine is being supplied as ethyl ester. Ethyl esters of lower to middle-chain fatty acids can be also employed in the fragrance industry. Sodium salts of fatty acids can be obtained as saponification products of lipids and are widely used in daily life as an ingredient of soap owing to their amphiphilicity and surfactant properties.

● Analysis

GC is the most frequently used technique for the analysis of fatty acids. However, their direct analysis appears to be difficult owing to their low volatility in electron impact (EI) ionization mass spectrometry under normal condition. They can however be easily detected by GC-MS method upon derivatization to their methyl esters.

The several methylation methods include the treatment of the free fatty acids with boron trifluoride-ether complex in methanol or with trimethylsilyldiazomethane, etc.

The GC on-column method is a simple method that uses a methanolic solution of trimethylsulfonium hydroxide or 3-(trifluoromethyl)phenyltrimethylammonium hydroxide to analyze the fatty acid component of lipids such as glycerolipids.

● Solubility

In general, the solubility of fatty acids in water decreases as the carbon number increases.

Fatty acid esters and glycerolipids are insoluble in water but soluble in ethanol, chloroform and diethyl ether. They can be added to the buffer solution as a dimethyl sulfoxide solution to examine their activity in living organisms. Please take caution that the solution becomes suspended as the concentration level of the dissolved substance increases. It is recommended to define the optimal concentration level and volume of addition in advance. Sodium salts of fatty acid are more water-soluble than the free fatty acids. Long-chain fatty acid salts tend to form micelles.

References

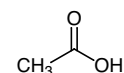
- 1) P. M. Dewick, in *Medicinal Natural Products*, 3rd ed., John Wiley & Sons, Chichester, **2009**, p. 39.
- 2) *Biochemical Nomenclature and Related Documents*, 2nd ed., Portland Press, London, **1992**, p. 180.
- 3) E. Fahy, S. Subramaniam, H. A. Brown, C. K. Glass, A. H. Merrill, Jr., R. C. Murphy, C. R. H. Raetz, D. W. Russell, Y. Seyama, W. Shaw, T. Shimizu, F. Spener, G. van Meer, M. S. VanNieuwenhze, S. H. White, J. L. Witztum, E. A. Dennis, *J. Lipid Res.* **2005**, *46*, 839.
- 4) C. W. Sheu, D. Salomon, J. L. Simmons, T. Sreevalsan, E. Freese, *Antimicrob. Agents Chemother.* **1975**, *7*, 349.

Fatty Acyls

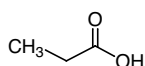
Fatty Acids

Saturated
Fatty Acids

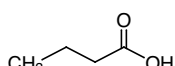
A2035 300mL

Acetic Acid
CAS RN: 64-19-7

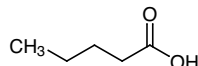
P0500 25mL 500mL

Propionic Acid
CAS RN: 79-09-4

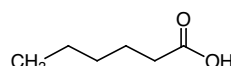
B0754 25mL 500mL

Butyric Acid
CAS RN: 107-92-6

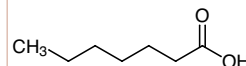
V0003 25mL 500mL

Valeric Acid
CAS RN: 109-52-4

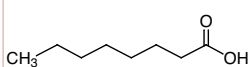
H0105 25mL 500mL

Hexanoic Acid
CAS RN: 142-62-1

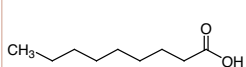
H0030 25mL 500mL

Heptanoic Acid
CAS RN: 111-14-8

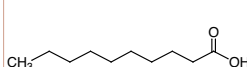
O0027 25mL 500mL

*n*-Octanoic Acid
CAS RN: 124-07-2

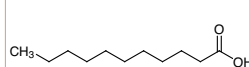
P0952 25mL 100mL 500mL

Nonanoic Acid
CAS RN: 112-05-0

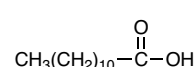
D0017 25g 400g

Decanoic Acid
CAS RN: 334-48-5

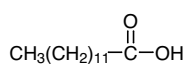
U0004 25g 250g

Undecanoic Acid
CAS RN: 112-37-8

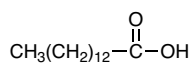
L0011 25g 500g

Lauric Acid
CAS RN: 143-07-7

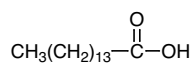
T0412 25g 100g 500g

Tridecanoic Acid
CAS RN: 638-53-9

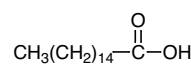
M0476 25g 500g

Myristic Acid
CAS RN: 544-63-8

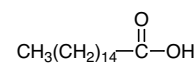
P0035 25g 100g 500g

Pentadecanoic Acid
CAS RN: 1002-84-2

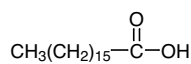
P0002 25g 500g

Palmitic Acid (>97.0%)
CAS RN: 57-10-3

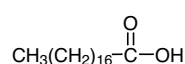
P1145 5g

Palmitic Acid (>99.5%)
CAS RN: 57-10-3

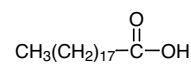
H0019 25g 100g 500g

Heptadecanoic Acid
CAS RN: 506-12-7

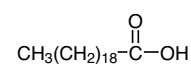
S0163 25g 500g

Stearic Acid
CAS RN: 57-11-4

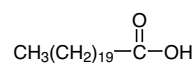
N0283 10g 25g

Nonadecanoic Acid
CAS RN: 646-30-0

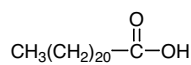
E0006 1g 25g

Arachidic Acid
CAS RN: 506-30-9

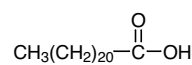
H0010 1g 10g

Heneicosanoic Acid
CAS RN: 2363-71-5

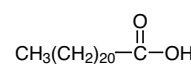
D0963 25g 500g

Behenic Acid (>80.0%)
CAS RN: 112-85-6

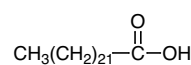
B1248 5g 25g

Behenic Acid (>95.0%)
CAS RN: 112-85-6

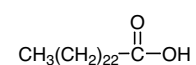
B1747 5g

Behenic Acid (>99.0%)
CAS RN: 112-85-6

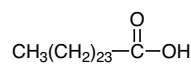
T0402 1g 10g

Tricosanoic Acid
CAS RN: 2433-96-7

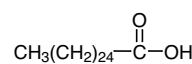
T0076 1g 5g 25g

Lignoceric Acid
CAS RN: 557-59-5

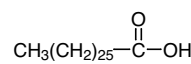
P0882 1g 5g

Pentacosanoic Acid
CAS RN: 506-38-7

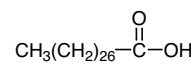
C0829 1g 10g

Cerotic Acid
CAS RN: 506-46-7

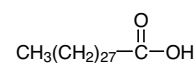
H0971 100mg 1g 5g

Heptacosanoic Acid
CAS RN: 7138-40-1

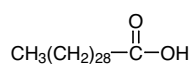
M1342 100mg

Octacosanoic Acid
CAS RN: 506-48-9

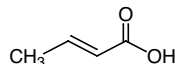
N0662 1g 5g

Nonacosanoic Acid
CAS RN: 4250-38-8

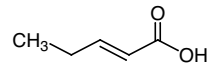
M0595 100mg 1g 5g

Melissic Acid
CAS RN: 506-50-3Unsaturated
Fatty Acids

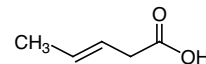
C0416 25g 100g

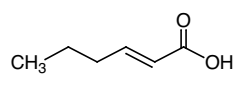
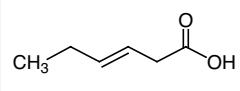
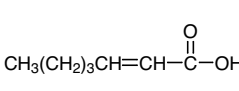
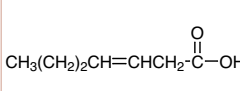
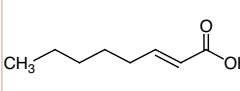
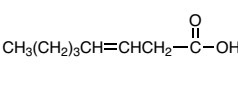
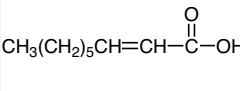
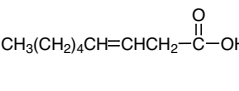
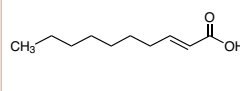
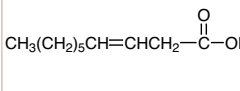
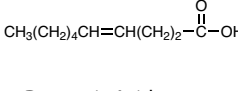
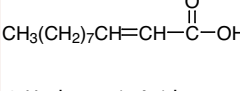
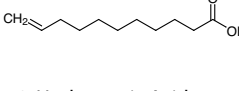
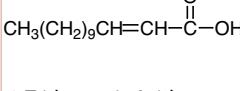
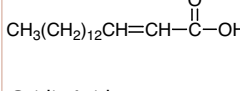
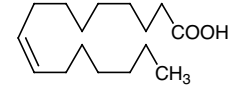
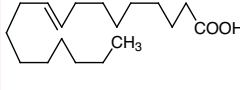
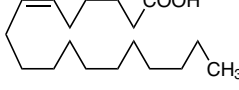
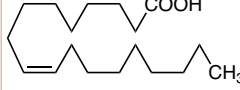
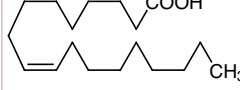
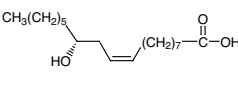
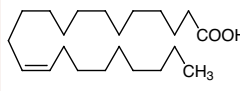
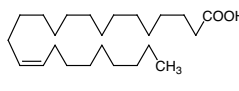
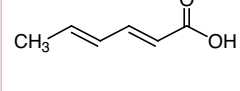
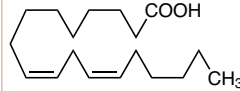
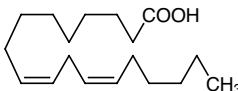
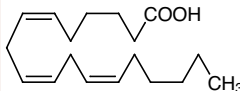
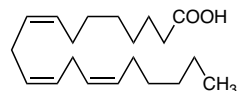
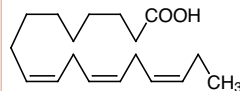
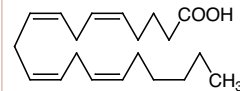


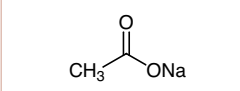
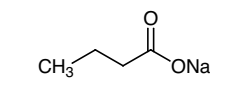
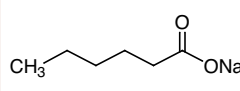
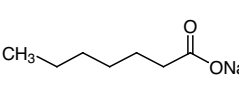
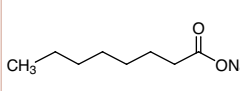
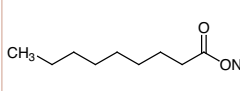
Crotonic Acid
CAS RN: 107-93-7

P0345 5mL 25mL

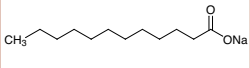
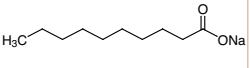
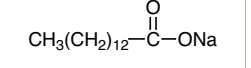
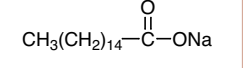
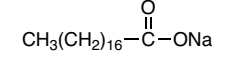
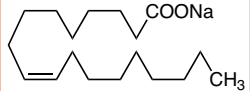
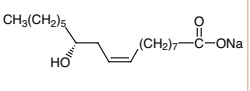
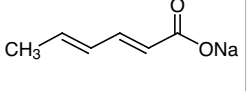
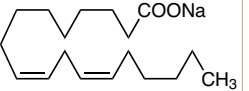
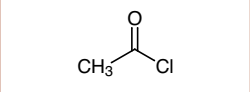
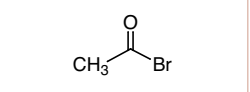
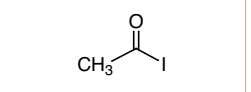
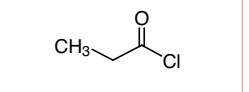
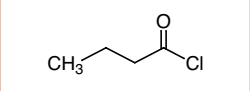
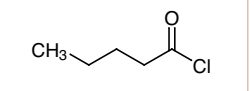
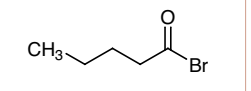
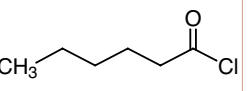
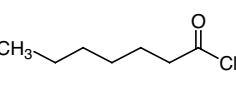
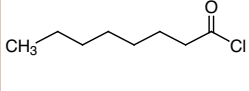
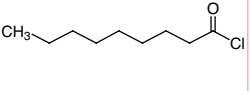
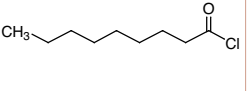
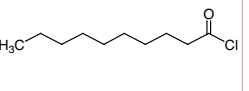
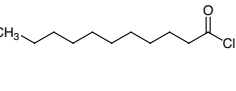
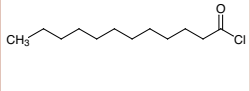
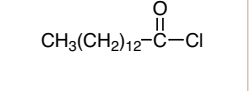
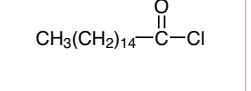
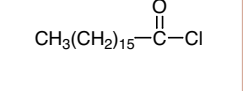
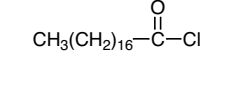
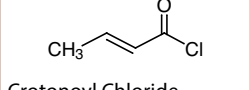
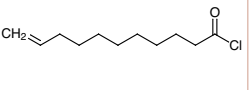
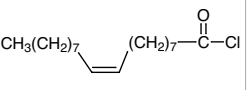
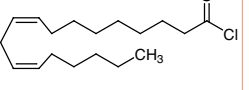
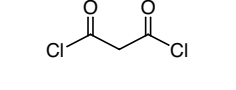
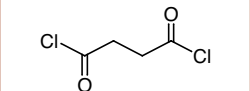
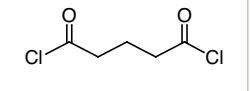
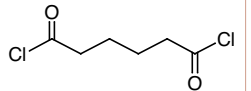
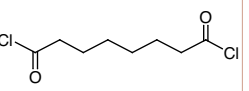
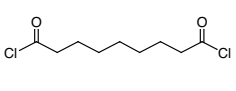
*trans*-2-Pentenoic Acid
CAS RN: 13991-37-2

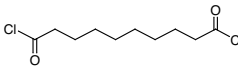
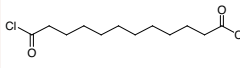
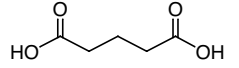
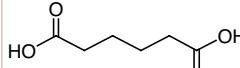
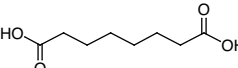
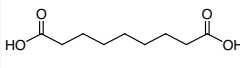
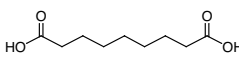
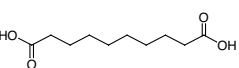
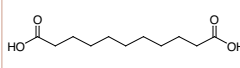
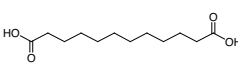
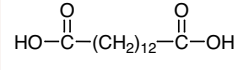
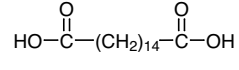
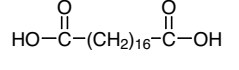
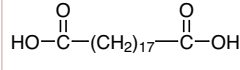
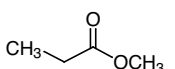
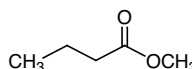
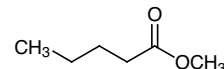
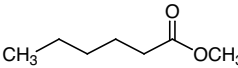
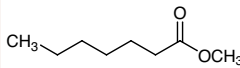
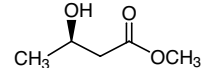
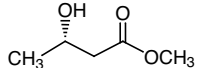
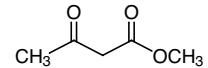
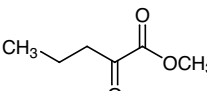
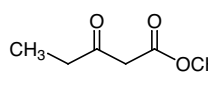
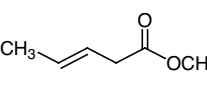
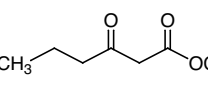
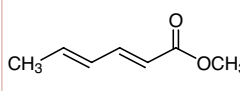
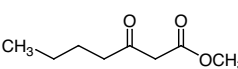
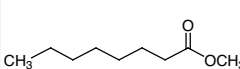
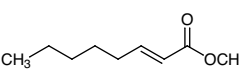
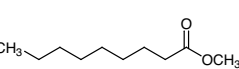
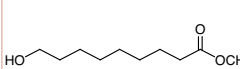
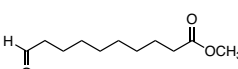
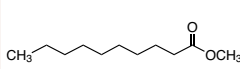
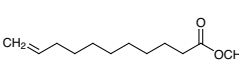
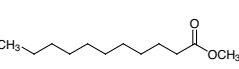
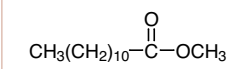
P1072 5mL 25mL

*trans*-3-Pentenoic Acid
CAS RN: 1617-32-9

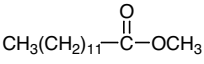
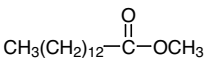
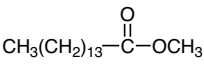
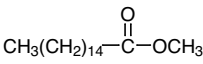
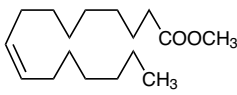
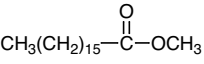
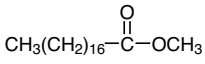
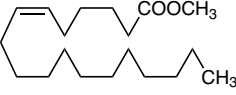
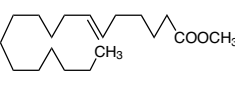
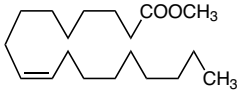
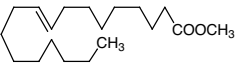
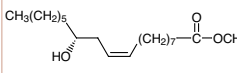
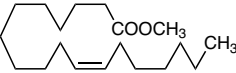

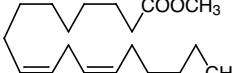
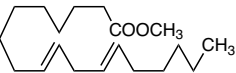
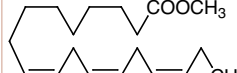
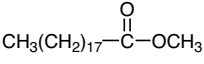
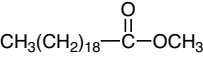

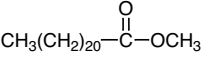
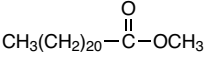
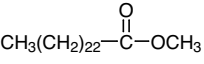
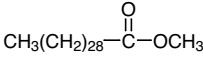
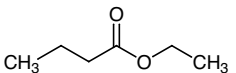
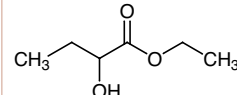
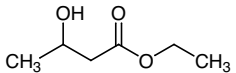
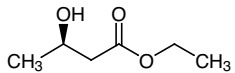
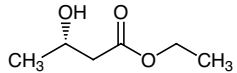
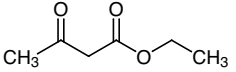
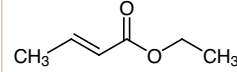
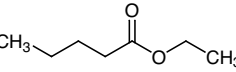
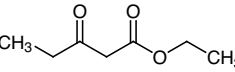
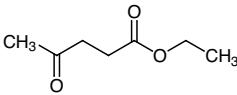
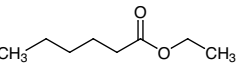
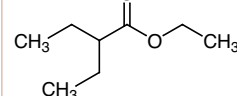
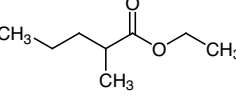
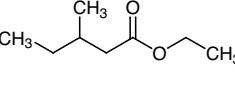
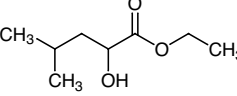
H0383 25g 250g  <i>trans</i> -2-Hexenoic Acid CAS RN: 13419-69-7	H0077 25g  <i>trans</i> -3-Hexenoic Acid CAS RN: 1577-18-0	H0426 5mL  2-Heptenoic Acid (contains 3-Heptenoic Acid) CAS RN: 18999-28-5	H0427 5mL 25mL  3-Heptenoic Acid CAS RN: 29901-85-7	O0004 10mL  <i>trans</i> -2-Octenoic Acid CAS RN: 1871-67-6
O0070 5mL 25mL  3-Octenoic Acid CAS RN: 1577-19-1	N0426 25mL  2-Nonenoic Acid CAS RN: 3760-11-0	N0312 1mL 5mL  3-Nonenoic Acid CAS RN: 4124-88-3	D0098 5mL 25mL  <i>trans</i> -2-Decenoic Acid CAS RN: 334-49-6	D1186 5mL  3-Decenoic Acid CAS RN: 15469-77-9
D4449 5mL 25mL  4-Decenoic Acid CAS RN: 26303-90-2	U0032 5g  2-Undecenoic Acid CAS RN: 4189-02-0	U0007 25g 400g  10-Undecenoic Acid CAS RN: 112-38-9	T0759 5g 25g  2-Tridecenoic Acid CAS RN: 6969-16-0	H0428 1g 5g  Gaidic Acid CAS RN: 629-56-1
H0072 100mg 1g  Palmitoleic Acid CAS RN: 373-49-9	O0010 5g 25g  Elaidic Acid CAS RN: 112-79-8	O0009 1g  Petroselinic Acid CAS RN: 593-39-5	O0011 25mL 500mL  Oleic Acid (>85.0%) CAS RN: 112-80-1	O0180 5mL 25mL  Oleic Acid (>99.0%) CAS RN: 112-80-1
R0027 25mL 500mL  Ricinoleic Acid CAS RN: 141-22-0	D0965 25g 100g 400g  Erucic Acid CAS RN: 112-86-7	T1642 1g  <i>cis</i> -15-Tetracosenoic Acid CAS RN: 506-37-6	S0053 25g 500g  Sorbic Acid CAS RN: 110-44-1	L0053 25mL 100mL 500mL  Linoleic Acid (>85.0%) CAS RN: 60-33-3
L0124 5g 25g  Linoleic Acid (>97.0%) CAS RN: 60-33-3	L0152 100mg 1g  γ -Linolenic Acid CAS RN: 506-26-3	E0640 10mg 50mg  Dihomo- γ -linolenic Acid CAS RN: 1783-84-2	L0050 25mL  Linolenic Acid CAS RN: 463-40-1	A0781 100mg 500mg  Arachidonic Acid CAS RN: 506-32-1
E0441 100mg 500mg  EPA CAS RN: 10417-94-4	D2226 100mg  DHA CAS RN: 6217-54-5	Fatty Acid Sodium Salts		S0559 300g  Sodium Acetate CAS RN: 127-09-3
S0519 25g 100g  Sodium Butyrate CAS RN: 156-54-7	H0112 25g 500g  Sodium Hexanoate CAS RN: 10051-44-2	E0009 25g  Sodium Heptanoate CAS RN: 10051-45-3	O0034 25g 250g  Sodium <i>n</i> -Octanoate CAS RN: 1984-06-1	N0291 25g  Sodium Nonanoate CAS RN: 14047-60-0

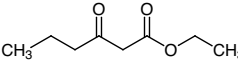
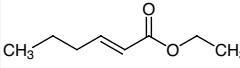
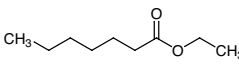
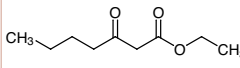
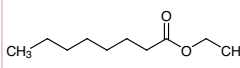
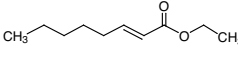
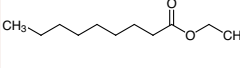
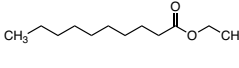
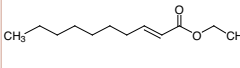
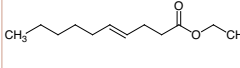
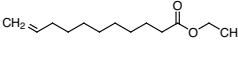
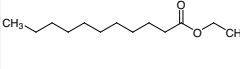
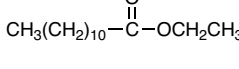
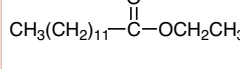
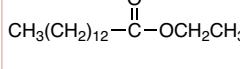
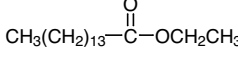
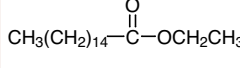
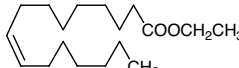
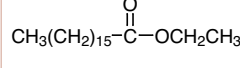
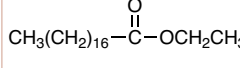
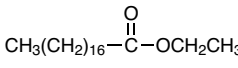
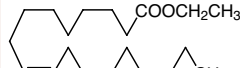
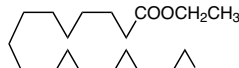
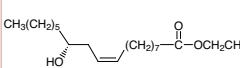
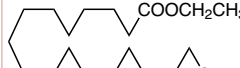
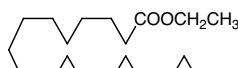
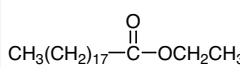
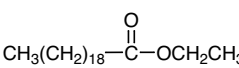
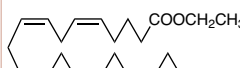

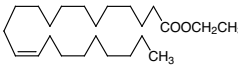
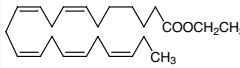
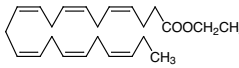
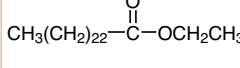
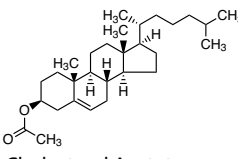
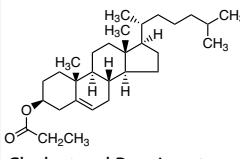
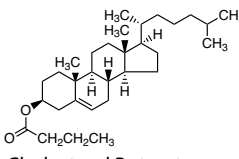
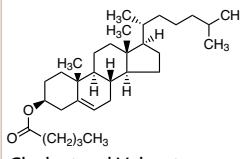
Lipids

L0016 25g 400g  Sodium Laurate CAS RN: 629-25-4	D0024 25g 100g 500g  Sodium Decanoate CAS RN: 1002-62-6	M0483 25g 100g 500g  Sodium Myristate CAS RN: 822-12-8	P0007 25g 100g 500g  Sodium Palmitate CAS RN: 408-35-5	S0081 25g 500g  Sodium Stearate CAS RN: 822-16-2
O0057 25g 100g 500g  Sodium Oleate CAS RN: 143-19-1	R0030 25g 500g  Sodium Ricinolate CAS RN: 5323-95-5	S0058 25g 500g  Sodium Sorbate CAS RN: 7757-81-5	L0056 5g 25g  Sodium Linoleate CAS RN: 822-17-3	Fatty Acid Halides
A0082 100g 500g  Acetyl Chloride CAS RN: 75-36-5	A0080 25g 500g  Acetyl Bromide CAS RN: 506-96-7	A0095 10g 25g  Acetyl Iodide CAS RN: 507-02-8	P0516 25g 500g  Propionyl Chloride CAS RN: 79-03-8	
B0770 25g 500g  Butyryl Chloride CAS RN: 141-75-3	V0010 25mL 100mL 500mL  Valeryl Chloride CAS RN: 638-29-9	V0038 10g  Valeryl Bromide CAS RN: 1889-26-5	H0117 25g 100g 500g  Hexanoyl Chloride CAS RN: 142-61-0	H0040 25g 100g 500g  Heptanoyl Chloride CAS RN: 2528-61-2
O0039 25mL 100mL 500mL  n-Octanoyl Chloride CAS RN: 111-64-8	N0372 25g 100g 500g  Nonanoyl Chloride (>95.0%) CAS RN: 764-85-2	N0813 25g  Nonanoyl Chloride (>97.0%) CAS RN: 764-85-2	D0027 25mL 100mL 500mL  Decanoyl Chloride CAS RN: 112-13-0	U0026 10mL 25mL  Undecanoyl Chloride CAS RN: 17746-05-3
D0972 25mL 500mL  Lauroyl Chloride CAS RN: 112-16-3	T0086 25g 400g  Myristoyl Chloride CAS RN: 112-64-1	P0009 25mL 500mL  Palmitoyl Chloride CAS RN: 112-67-4	H0782 25mL  Heptadecanoyl Chloride CAS RN: 40480-10-2	S0404 25g 250g  Stearoyl Chloride CAS RN: 112-76-5
C0424 25g 100g 500g  Crotonyl Chloride (cis- and trans- mixture) CAS RN: 10487-71-5	U0008 25mL 250mL  10-Undecenoyl Chloride CAS RN: 38460-95-6	O0053 25g 250g  Oleoyl Chloride CAS RN: 112-77-6	L0113 1g  Linoleoyl Chloride CAS RN: 7459-33-8	M0882 10g 25g  Malonyl Chloride CAS RN: 1663-67-8
S0110 25g 250g  Succinyl Chloride CAS RN: 543-20-4	G0202 25mL  Glutaryl Chloride CAS RN: 2873-74-7	A0169 25g 100g 500g  Adipoyl Chloride CAS RN: 111-50-2	S0420 25g  Suberoyl Chloride CAS RN: 10027-07-3	A0562 25mL  Azelaoyl Chloride CAS RN: 123-98-8

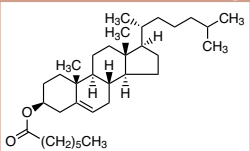
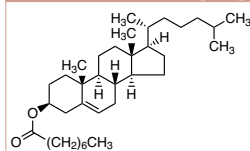
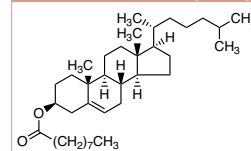
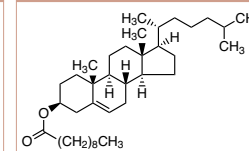
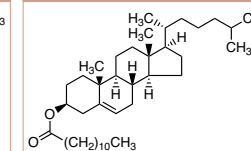
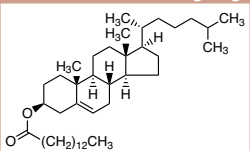
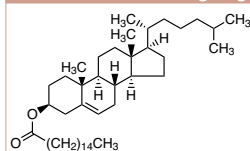
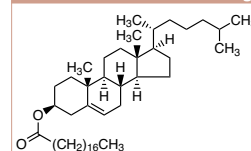
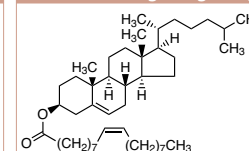
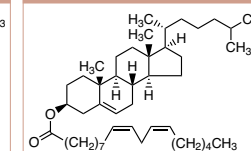
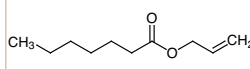
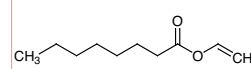
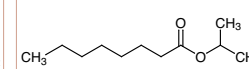
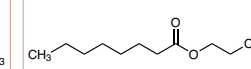
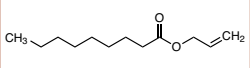
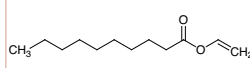
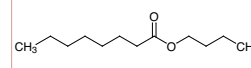
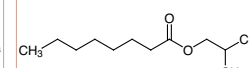
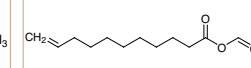
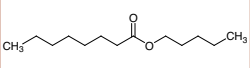
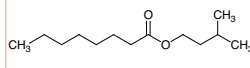
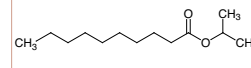
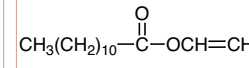
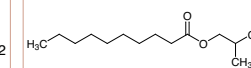
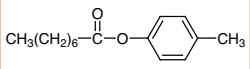
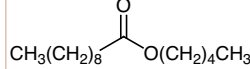
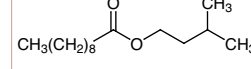
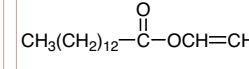
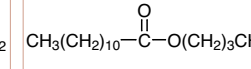
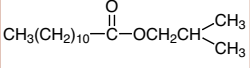
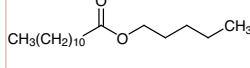
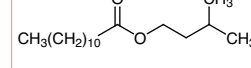
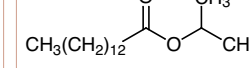
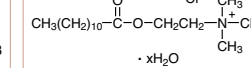
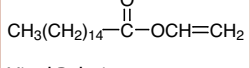
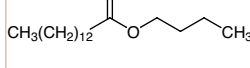
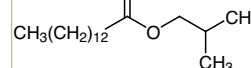
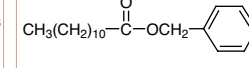
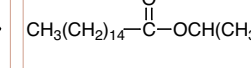
S0030 25mL 100mL 500mL  Sebacyl Chloride CAS RN: 111-19-3	D2544 5g 25g  Dodecanedioyl Dichloride CAS RN: 4834-98-4	Fatty Dicarboxylic Acids		G0245 500g  Glutaric Acid (ca. 50% in Water, ca. 4.3mol/L) CAS RN: 110-94-1	A0161 25g 500g  Adipic Acid CAS RN: 124-04-9	
O0023 25g 100g 500g  Suberic Acid CAS RN: 505-48-6	A0561 25g 500g  Azelaic Acid (>80.0%) CAS RN: 123-99-9	A1318 25g 250g  Azelaic Acid (>98.0%) CAS RN: 123-99-9	S0022 25g 500g  Sebamic Acid CAS RN: 111-20-6	N0333 5g 25g  1,9-Nonanedicarboxylic Acid CAS RN: 1852-04-6		
D0013 25g 500g  Dodecanedioic Acid CAS RN: 693-23-2	T0704 5g 25g  Tetradecanedioic Acid CAS RN: 821-38-5	H0293 1g 5g 25g  Hexadecanedioic Acid CAS RN: 505-54-4	O0222 1g 5g 25g  Octadecanedioic Acid CAS RN: 871-70-5	N0663 1g 5g  Nonadecanedioic Acid CAS RN: 6250-70-0		
Fatty Acid Esters		Fatty Acid Methyl Esters		P0508 25mL 500mL  Methyl Propionate CAS RN: 554-12-1	B0763 25mL 500mL  Methyl Butyrate CAS RN: 623-42-7	V0005 25mL 500mL  Methyl Valerate CAS RN: 624-24-8
H0111 25mL 500mL  Methyl Hexanoate CAS RN: 106-70-7	H0032 25mL 500mL  Methyl Heptanoate CAS RN: 106-73-0	H0705 10mL 25mL  Methyl (R)-(+)-3-Hydroxybutyrate CAS RN: 3976-69-0	H0704 5mL 25mL  Methyl (S)-(-)-3-Hydroxybutyrate CAS RN: 53562-86-0	A0650 25g 500g  Methyl Acetoacetate CAS RN: 105-45-3		
M1863 5g 25g  Methyl 2-Oxovalerate CAS RN: 6376-59-6	K0035 25g 100g 500g  Methyl 3-Oxovalerate CAS RN: 30414-53-0	P1210 5mL 25mL  Methyl trans-3-Pentenoate CAS RN: 20515-19-9	K0037 25mL 500mL  Methyl 3-Oxohexanoate CAS RN: 30414-54-1	S0056 25mL  Methyl Sorbate CAS RN: 1515-80-6		
O0246 25mL  Methyl 3-Oxoheptanoate CAS RN: 39815-78-6	O0033 25mL 500mL  Methyl n-Octanoate CAS RN: 111-11-5	M2014 5mL 25mL  Methyl trans-2-Octenoate CAS RN: 7367-81-9	N0290 25mL  Methyl Nonanoate CAS RN: 1731-84-6	H0835 1g 5g  Methyl 9-Hydroxynonanoate CAS RN: 34957-73-8		
M2263 1g 5g  Methyl 9-Formylnonanoate CAS RN: 14811-73-5	D0023 25mL 500mL  Methyl Decanoate CAS RN: 110-42-9	U0036 25mL 100mL 500mL  Methyl 10-Undecenoate CAS RN: 111-81-9	U0050 25mL  Methyl Undecanoate CAS RN: 1731-86-8	L0015 25mL 500mL  Methyl Laurate CAS RN: 111-82-0		

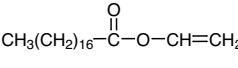
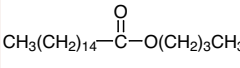
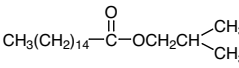
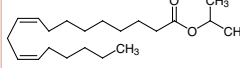
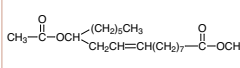
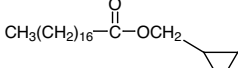
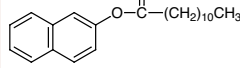
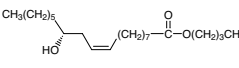
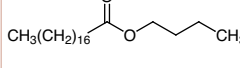
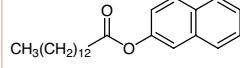
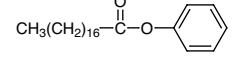
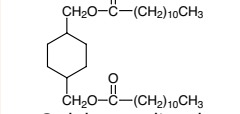
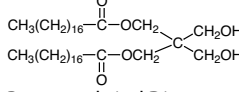
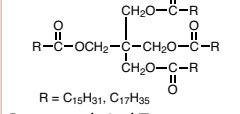
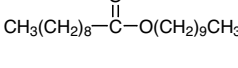
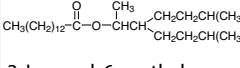
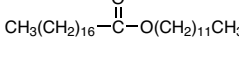
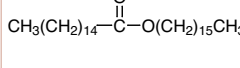
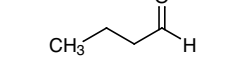
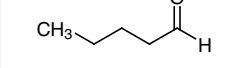
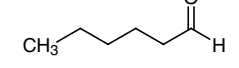
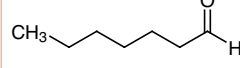
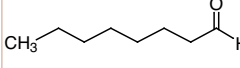
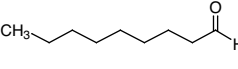
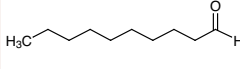
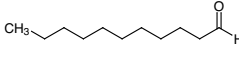
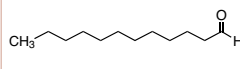
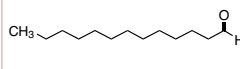
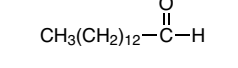
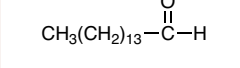
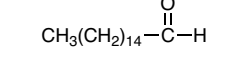
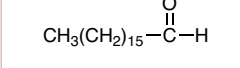
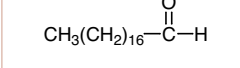
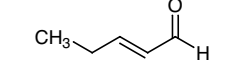
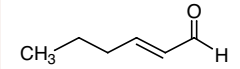
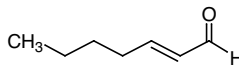
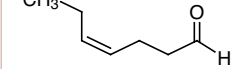
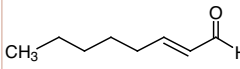
Lipids

T0960 5mL 25mL 100mL  Methyl Tridecanoate CAS RN: 1731-88-0	M0482 25mL 500mL  Methyl Myristate CAS RN: 124-10-7	P0869 5mL 25mL  Methyl Pentadecanoate CAS RN: 7132-64-1	P0006 25g 250g  Methyl Palmitate CAS RN: 112-39-0	P1958 100mg 1g  Methyl <i>cis</i> -9-Hexadecenoate CAS RN: 1120-25-8
H0566 5g 25g  Methyl Heptadecanoate CAS RN: 1731-92-6	S0080 25g 500g  Methyl Stearate CAS RN: 112-61-8	M2306 100mg 500mg  Methyl <i>cis</i> -6-Octadecenoate CAS RN: 2777-58-4	M2310 100mg 500mg  Methyl <i>trans</i> -6-Octadecenoate CAS RN: 14620-36-1	O0055 25mL 500mL  Methyl Oleate CAS RN: 112-62-9
O0226 1mL 5mL  Methyl <i>trans</i> -9-Octadecenoate CAS RN: 1937-62-8	R0029 25mL 500mL  Methyl Ricinoleate CAS RN: 141-24-2	M2308 100mg 500mg  Methyl <i>cis</i> -11-Octadecenoate CAS RN: 1937-63-9	M2309 100mg 500mg  Methyl <i>trans</i> -11-Octadecenoate CAS RN: 6198-58-9	L0078 25mL 100mL 500mL  Methyl Linoleate CAS RN: 112-63-0
M2307 100mg 500mg  Methyl Linoleidate CAS RN: 2566-97-4	L0051 25mL 100mL  Methyl Linolenate CAS RN: 301-00-8	N0460 5g 25g  Methyl Nonadecanoate CAS RN: 1731-94-8	A0900 5g 25g  Methyl Arachidate CAS RN: 1120-28-1	D1017 25mL 500mL  Methyl <i>cis</i> -13-Docosenoate CAS RN: 1120-34-9
B1748 10g  Methyl Behenate (>96.0%) CAS RN: 929-77-1	B1241 25g  Methyl Behenate (>90.0%) CAS RN: 929-77-1	L0112 1g 5g  Methyl Lignocerate CAS RN: 2442-49-1	T0812 100mg 1g  Methyl Triacontate CAS RN: 629-83-4	Fatty Acid Ethyl Esters
B0759 25mL 500mL  Ethyl Butyrate CAS RN: 105-54-4	H0229 5g 25g  Ethyl 2-Hydroxybutyrate CAS RN: 52089-54-0	H0230 25g 500g  Ethyl DL-3-Hydroxybutyrate CAS RN: 5405-41-4	H1029 1g 5g  Ethyl (<i>R</i>)-(-)-3-Hydroxybutyrate CAS RN: 24915-95-5	H0975 5g 25g  Ethyl (<i>S</i>)-(+)-3-Hydroxybutyrate CAS RN: 56816-01-4
A0649 25g 500g  Ethyl Acetoacetate CAS RN: 141-97-9	C0418 25mL 500mL  Ethyl Crotonate CAS RN: 623-70-1	V0004 25mL 500mL  Ethyl Valerate CAS RN: 539-82-2	K0031 5g 25g  Ethyl 3-Oxovalerate CAS RN: 4949-44-4	L0120 25mL 100mL 500mL  Ethyl Levulinate CAS RN: 539-88-8
H0108 25mL 500mL  Ethyl Hexanoate CAS RN: 123-66-0	E0345 25mL 500mL  Ethyl 2-Ethylbutyrate CAS RN: 2983-38-2	E0801 25mL 500mL  Ethyl 2-Methylvalerate CAS RN: 39255-32-8	E0803 5g 25g  Ethyl 3-Methylvalerate CAS RN: 5870-68-8	E0802 5g 25g  Ethyl DL-Leucate CAS RN: 10348-47-7

K0030 25mL 500mL  Ethyl 3-Oxohexanoate CAS RN: 3249-68-1	E0787 25g  Ethyl <i>trans</i> -2-Hexenoate CAS RN: 27829-72-7	H0031 25mL 500mL  Ethyl Heptanoate CAS RN: 106-30-9	O0216 10g 25g  Ethyl 3-Oxoheptanoate CAS RN: 7737-62-4	O0030 25mL 500mL  Ethyl <i>n</i> -Octanoate CAS RN: 106-32-1
O0286 25mL  Ethyl <i>trans</i> -2-Octenoate CAS RN: 7367-82-0	N0289 25mL 500mL  Ethyl Nonanoate CAS RN: 123-29-5	D0022 25mL 500mL  Ethyl Decanoate CAS RN: 110-38-3	D2767 25mL  Ethyl <i>trans</i> -2-Decenoate CAS RN: 7367-88-6	D1931 10mL  Ethyl <i>trans</i> -4-Decenoate CAS RN: 76649-16-6
E0771 25g 250g  Ethyl 10-Undecenoate CAS RN: 692-86-4	U0049 25mL 250mL  Ethyl Undecanoate CAS RN: 627-90-7	L0013 25mL 500mL  Ethyl Laurate CAS RN: 106-33-2	T0959 5mL 25mL  Ethyl Tridecanoate CAS RN: 28267-29-0	M0479 25mL 100mL 500mL  Ethyl Myristate CAS RN: 124-06-1
P0868 5mL 25mL  Ethyl Pentadecanoate CAS RN: 41114-00-5	P0003 25mL 500mL  Ethyl Palmitate CAS RN: 628-97-7	H0501 100mg 1g  Ethyl <i>cis</i> -9-Hexadecenoate CAS RN: 56219-10-4	H0526 5g 25g  Ethyl Heptadecanoate CAS RN: 14010-23-2	S0079 25g 250g  Ethyl Stearate (>96.0%) CAS RN: 111-61-5
S0365 25g  Ethyl Stearate (>99.0%) CAS RN: 111-61-5	O0143 5mL 25mL  Ethyl Oleate (>95.0%) CAS RN: 111-62-6	O0054 25mL 500mL  Ethyl Oleate (>70.0%) CAS RN: 111-62-6	R0049 25mL  Ethyl Ricinoleate CAS RN: 55066-53-0	L0055 25mL 100mL 500mL  Ethyl Linoleate (>70.0%) CAS RN: 544-35-4
L0135 5mL 25mL  Ethyl Linoleate (>97.0%) CAS RN: 544-35-4	N0459 5g 25g  Ethyl Nonadecanoate CAS RN: 18281-04-4	A0899 5g 25g  Ethyl Arachidate CAS RN: 18281-05-5	E0442 200mg  EPA Ethyl Ester CAS RN: 86227-47-6	E0853 25g  EPA Ethyl Ester (stabilized with Tocopherols) CAS RN: 86227-47-6
D1014 5mL 25mL  Ethyl Erucate CAS RN: 37910-77-3	D2964 100mg  DPA Ethyl Ester CAS RN: 119818-40-5	D2195 100mg  DHA Ethyl Ester CAS RN: 84494-72-4	L0111 5g  Ethyl Lignocerate CAS RN: 24634-95-5	<div style="text-align: center;"> <p>Fatty Acid Cholesteryl Esters</p> </div>
C0319 25g  Cholesterol Acetate CAS RN: 604-35-3	C0676 10g 25g  Cholesterol Propionate CAS RN: 633-31-8	C0668 25g 500g  Cholesterol Butyrate CAS RN: 521-13-1	C0677 10g  Cholesterol Valerate CAS RN: 7726-03-6	

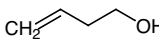
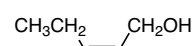
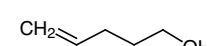
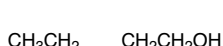
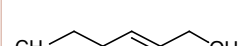
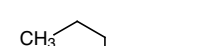






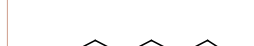

















Lipids

<p>C0672 25g</p>  <p>Cholesterol Heptanoate CAS RN: 1182-07-6</p>	<p>C0334 5g 25g</p>  <p>Cholesterol n-Octanoate CAS RN: 1182-42-9</p>	<p>N0347 25g 500g</p>  <p>Cholesterol Pelargonate CAS RN: 1182-66-7</p>	<p>C0618 25g</p>  <p>Cholesterol Decanoate CAS RN: 1183-04-6</p>	<p>C0620 25g</p>  <p>Cholesterol Laurate CAS RN: 1908-11-8</p>
<p>C0675 10g 25g</p>  <p>Cholesterol Myristate CAS RN: 1989-52-2</p>	<p>C0322 5g 25g</p>  <p>Cholesterol Palmitate CAS RN: 601-34-3</p>	<p>C0323 25g</p>  <p>Cholesterol Stearate CAS RN: 35602-69-8</p>	<p>C0559 25g 100g 500g</p>  <p>Cholesterol Oleate CAS RN: 303-43-5</p>	<p>C0321 25g</p>  <p>Cholesterol Linoleate CAS RN: 604-33-1</p>
<p>Other Fatty Acid Esters</p>				
	<p>A2119 25g 250g</p>  <p>Allyl Heptanoate CAS RN: 142-19-8</p>	<p>C0896 25mL 100mL 500mL</p>  <p>Vinyl n-Octanoate (stabilized with MEHQ) CAS RN: 818-44-0</p>	<p>O0157 25mL</p>  <p>Isopropyl n-Octanoate CAS RN: 5458-59-3</p>	<p>P2113 25mL</p>  <p>Propyl n-Octanoate CAS RN: 624-13-5</p>
<p>A2679 25mL</p>  <p>Allyl Nonanoate CAS RN: 7493-72-3</p>	<p>C0895 25mL 500mL</p>  <p>Vinyl Decanoate (stabilized with MEHQ) CAS RN: 4704-31-8</p>	<p>O0029 25mL</p>  <p>Butyl n-Octanoate CAS RN: 589-75-3</p>	<p>O0032 25mL 500mL</p>  <p>Isobutyl n-Octanoate CAS RN: 5461-06-3</p>	<p>U0057 25mL</p>  <p>Vinyl 10-Undecenoate (stabilized with MEHQ) CAS RN: 5299-57-0</p>
<p>O0028 25mL 500mL</p>  <p>Amyl n-Octanoate CAS RN: 638-25-5</p>	<p>O0031 25mL</p>  <p>Isoamyl n-Octanoate (contains 2-Methylbutyl n-Octanoate) CAS RN: 2035-99-6</p>	<p>C0843 25mL</p>  <p>Isopropyl Decanoate CAS RN: 2311-59-3</p>	<p>L0090 25mL 100mL 500mL</p>  <p>Vinyl Laurate (stabilized with MEHQ) CAS RN: 2146-71-6</p>	<p>D0021 25mL</p>  <p>Isobutyl Decanoate CAS RN: 30673-38-2</p>
<p>C1147 25mL</p>  <p>p-Tolyl n-Octanoate CAS RN: 59558-23-5</p>	<p>D0018 25mL</p>  <p>Amyl Decanoate CAS RN: 5933-87-9</p>	<p>D0019 25mL</p>  <p>Isoamyl Decanoate CAS RN: 2306-91-4</p>	<p>M0723 25mL 500mL</p>  <p>Vinyl Myristate (stabilized with MEHQ) CAS RN: 5809-91-6</p>	<p>L0083 25mL 500mL</p>  <p>Butyl Laurate CAS RN: 106-18-3</p>
<p>L0084 25mL 500mL</p>  <p>Isobutyl Laurate CAS RN: 37811-72-6</p>	<p>L0012 25mL 500mL</p>  <p>Amyl Laurate CAS RN: 5350-03-8</p>	<p>L0014 25mL 500mL</p>  <p>Isoamyl Laurate CAS RN: 6309-51-9</p>	<p>M0481 25mL 500mL</p>  <p>Isopropyl Myristate CAS RN: 110-27-0</p>	<p>D0973 1g 5g</p>  <p>Lauroylcholine Chloride Hydrate CAS RN: 25234-60-0</p>
<p>P0848 25mL 100mL 500mL</p>  <p>Vinyl Palmitate (stabilized with MEHQ) CAS RN: 693-38-9</p>	<p>M0477 25mL 500mL</p>  <p>Butyl Myristate CAS RN: 110-36-1</p>	<p>M0555 25mL 500mL</p>  <p>Isobutyl Myristate CAS RN: 25263-97-2</p>	<p>L0107 25mL</p>  <p>Benzyl Laurate CAS RN: 140-25-0</p>	<p>P0005 25mL 500mL</p>  <p>Isopropyl Palmitate CAS RN: 142-91-6</p>

S0241 25g 100g 500g  Vinyl Stearate (stabilized with MEHQ) CAS RN: 111-63-7	P0649 25mL  Butyl Palmitate CAS RN: 111-06-8	P0651 25mL  Isobutyl Palmitate CAS RN: 110-34-9	L0139 25mL 500mL  Isopropyl Linoleate CAS RN: 22882-95-7	A0879 25mL 500mL  Methyl O-Acetylricinoleate CAS RN: 140-03-4
S0366 5g 25g  Glycidyl Stearate CAS RN: 7460-84-6	L0122 25g  2-Naphthyl Laurate CAS RN: 6343-73-3	R0045 25mL 500mL  Butyl Ricinoleate CAS RN: 151-13-3	S0077 25g 400g  Butyl Stearate CAS RN: 123-95-5	M0780 10g  2-Naphthyl Myristate CAS RN: 7262-80-8
O0007 5g 25g  Phenyl Stearate CAS RN: 637-55-8	C1136 1g  1,4-Cyclohexanedimethanol Dilaurate CAS RN: 135025-34-2	P0738 25g  Pentaerythritol Distearate (mixture) CAS RN: 13081-97-5	P0739 25g 500g  Pentaerythritol Tetrastearate (contains palmitate) CAS RN: 115-83-3	<h2 style="color: #c07040;">Waxes</h2>
D1080 25mL 500mL  Decyl Decanoate CAS RN: 1654-86-0	I0662 25g 500g  3-Isoamyl-6-methyl-2-heptyl Myristate CAS RN: 88332-30-3	S0078 25g  Dodecyl Stearate CAS RN: 5303-25-3	P1077 25g 100g 500g  Hexadecyl Palmitate CAS RN: 540-10-3	
B0751 25mL 500mL  Butyraldehyde CAS RN: 123-72-8	V0001 25mL 500mL  Valeraldehyde CAS RN: 110-62-3	H0133 25mL 100mL 500mL  Hexanal CAS RN: 66-25-1	H0025 25mL 500mL  Heptanal CAS RN: 111-71-7	O0044 25mL 500mL  n-Octanal CAS RN: 124-13-0
N0296 25mL 100mL 500mL  Nonanal CAS RN: 124-19-6	D0032 25mL 500mL  Decanal CAS RN: 112-31-2	U0009 25mL 250mL  Undecanal CAS RN: 112-44-7	D0979 25mL 500mL  Dodecanal (stabilized with DL-α-Tocopherol) CAS RN: 112-54-9	T0410 5mL  Tridecanal CAS RN: 10486-19-8
T2696 1g  Tetradecanal CAS RN: 124-25-4	P1869 1g  Pentadecanal CAS RN: 2765-11-9	H1296 1g  Hexadecanal CAS RN: 629-80-1	H1295 1g  Heptadecanal CAS RN: 629-90-3	O0368 1g  Octadecanal CAS RN: 638-66-4
P1790 5g 25g  trans-2-Pentenal CAS RN: 1576-87-0	H0345 25mL 100mL 500mL  trans-2-Hexenal CAS RN: 6728-26-3	H0579 5mL 25mL  trans-2-Heptenal CAS RN: 18829-55-5	H0520 5mL 25mL  cis-4-Heptenal CAS RN: 6728-31-0	O0176 10mL 25mL  trans-2-Octenal CAS RN: 2548-87-0

Lipids

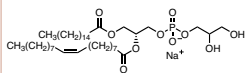
<p>N0483 5mL 25mL</p>  <p><i>trans</i>-2-Nonenal CAS RN: 18829-56-6</p>	<p>N0430 25mL</p>  <p><i>trans</i>-2-Nonenal (contains <i>trans</i>-2-Nonenal Diethyl Acetal) (ca. 10% in Ethanol, ca. 0.57mol/L) CAS RN: 18829-56-6</p>	<p>D1642 5mL 25mL</p>  <p><i>trans</i>-2-Decenal CAS RN: 3913-81-3</p>	<p>D1406 25mL</p>  <p><i>trans</i>-2-Decenal (contains <i>trans</i>-2-Decenal Diethyl Acetal) (10% in Ethanol, ca. 0.52mol/L) CAS RN: 3913-81-3</p>	<p>U0046 5mL 25mL</p>  <p><i>trans</i>-2-Undecenal CAS RN: 53448-07-0</p>
<p>U0011 25mL</p>  <p>10-Undecenal CAS RN: 112-45-8</p>	<p>D2068 25mL</p>  <p><i>trans</i>-2-Dodecenal CAS RN: 20407-84-5</p>	<p>H0679 1g 10g</p>  <p><i>cis</i>-11-Hexadecenal CAS RN: 53939-28-9</p>	<p>H0581 25mL</p>  <p>2,4-Hexadienal CAS RN: 142-83-6</p>	<p>H0681 5mL</p>  <p><i>trans,trans</i>-2,4-Heptadienal CAS RN: 4313-03-5</p>
<p>N0521 5mL 25mL</p>  <p><i>trans,trans</i>-2,4-Nonadienal CAS RN: 5910-87-2</p>	<p>N0836 1g 5g</p>  <p><i>ttrans,cis</i>-2,6-Nonadienal CAS RN: 557-48-2</p>	<p>D1934 5mL 25mL</p>  <p><i>trans,trans</i>-2,4-Decadienal CAS RN: 25152-84-5</p>	<p>Fatty Alcohols</p>	
<p>Saturated Fatty Alcohols</p>				
<p>P0491 25mL 500mL</p>  <p>1-Propanol CAS RN: 71-23-8</p>	<p>B0704 25mL 500mL</p>  <p>1-Butanol CAS RN: 71-36-3</p>	<p>P0055 25mL 500mL</p>  <p>1-Pentanol CAS RN: 71-41-0</p>	<p>H0130 25mL 500mL</p>  <p>1-Hexanol CAS RN: 111-27-3</p>	<p>H0033 25mL 500mL</p>  <p>1-Heptanol CAS RN: 111-70-6</p>
<p>O0036 25mL 500mL</p>  <p>1-Octanol CAS RN: 111-87-5</p>	<p>N0292 25mL 500mL</p>  <p>1-Nonanol CAS RN: 143-08-8</p>	<p>D0031 25mL 500mL</p>  <p>1-Decanol CAS RN: 112-30-1</p>	<p>U0005 25mL 100mL 500mL</p>  <p>1-Undecanol CAS RN: 112-42-5</p>	<p>D0978 25g 400g</p>  <p>1-Dodecanol CAS RN: 112-53-8</p>
<p>T0803 25g</p> <p>CH₃(CH₂)₁₂OH</p> <p>1-Tridecanol CAS RN: 112-70-9</p>	<p>T0414 25mL 500mL</p> <p>Tridecanol (mixture of isomers) CAS RN: 26248-42-0</p>	<p>T0084 25mL 500mL</p> <p>CH₃(CH₂)₁₃OH</p> <p>1-Tetradecanol CAS RN: 112-72-1</p>	<p>P0036 25g 100g 500g</p> <p>CH₃(CH₂)₁₄OH</p> <p>1-Pentadecanol CAS RN: 629-76-5</p>	<p>H0071 25g 500g</p> <p>CH₃(CH₂)₁₅OH</p> <p>1-Hexadecanol CAS RN: 36653-82-4</p>
<p>H0018 5g 25g</p> <p>CH₃(CH₂)₁₆OH</p> <p>1-Heptadecanol CAS RN: 1454-85-9</p>	<p>O0006 25g 500g</p> <p>CH₃(CH₂)₁₇OH</p> <p>1-Octadecanol CAS RN: 112-92-5</p>	<p>N0284 5g 25g</p> <p>CH₃(CH₂)₁₈OH</p> <p>1-Nonadecanol CAS RN: 1454-84-8</p>	<p>E0004 25g 100g 500g</p> <p>CH₃(CH₂)₁₉OH</p> <p>1-Eicosanol CAS RN: 629-96-9</p>	<p>H0011 10g</p> <p>CH₃(CH₂)₂₀OH</p> <p>1-Heneicosanol CAS RN: 15594-90-8</p>
<p>D0964 25g 500g</p> <p>CH₃(CH₂)₂₁OH</p> <p>1-Docosanol CAS RN: 661-19-8</p>	<p>T0403 100mg</p> <p>CH₃(CH₂)₂₂OH</p> <p>1-Tricosanol CAS RN: 3133-01-5</p>	<p>T0593 1g 5g</p> <p>CH₃(CH₂)₂₃OH</p> <p>1-Tetracosanol CAS RN: 506-51-4</p>	<p>H0342 100mg 1g</p> <p>CH₃(CH₂)₂₅OH</p> <p>1-Hexacosanol CAS RN: 506-52-5</p>	<p>O0199 100mg 1g</p> <p>CH₃(CH₂)₂₇OH</p> <p>1-Octacosanol CAS RN: 557-61-9</p>

T1049 100mg 1g $\text{CH}_3(\text{CH}_2)_{29}\text{OH}$ 1-Triacontanol CAS RN: 593-50-0	Unsaturated Fatty Alcohols	B0236 10mL 25mL 500mL  3-Buten-1-ol CAS RN: 627-27-0	B0696 25mL $\text{CH}_3\text{CH}=\text{CHCH}_2\text{OH}$ Crotyl Alcohol (cis- and trans- mixture) CAS RN: 6117-91-5	P1199 5mL 25mL  cis-2-Penten-1-ol CAS RN: 1576-95-0
P1243 25mL 250mL  4-Penten-1-ol CAS RN: 821-09-0		H0478 25g $\text{CH}_3\text{CH}=\text{CHCH}=\text{CHCH}_2\text{OH}$ 2,4-Hexadien-1-ol CAS RN: 111-28-4	H0124 25mL 100mL  cis-3-Hexen-1-ol CAS RN: 928-96-1	H0346 25g 250g  trans-2-Hexen-1-ol CAS RN: 928-95-0
H0751 25mL  cis-2-Hexen-1-ol CAS RN: 928-94-9	H0754 10mL  cis-4-Hexen-1-ol CAS RN: 928-91-6	H0682 5mL 25mL  trans-2-Hepten-1-ol CAS RN: 33467-76-4	H0833 5mL 25mL  cis-4-Hepten-1-ol CAS RN: 6191-71-5	H0949 5g 25g  6-Hepten-1-ol CAS RN: 4117-10-6
O0247 10mL 100mL  trans-2-Octen-1-ol CAS RN: 18409-17-1	O0248 25mL  cis-3-Octen-1-ol CAS RN: 20125-84-2	O0250 10mL  cis-5-Octen-1-ol CAS RN: 64275-73-6	O0280 5mL 25mL  7-Octen-1-ol CAS RN: 13175-44-5	N0469 10mL  cis-6-Nonen-1-ol CAS RN: 35854-86-5
N0586 10mL  cis-2-Nonen-1-ol CAS RN: 41453-56-9	N0587 10mL  trans-2-Nonen-1-ol CAS RN: 31502-14-4	N0588 10mL 25mL  cis-3-Nonen-1-ol CAS RN: 10340-23-5	N0650 5g 25g  8-Nonen-1-ol CAS RN: 13038-21-6	D1892 25mL 100mL 500mL  9-Decen-1-ol CAS RN: 13019-22-2
D2293 5mL  cis-4-Decen-1-ol CAS RN: 57074-37-0	D3308 1g 5g  trans-5-Decen-1-ol CAS RN: 56578-18-8	U0047 25mL 100mL 500mL  10-Undecen-1-ol CAS RN: 112-43-6	T1502 10mL  trans-2-Tridecen-1-ol CAS RN: 68480-25-1	O0225 5mL 25mL $\text{CH}_3(\text{CH}_2)_4\text{CH}=\text{CHCH}_2\text{CH}=\text{CH}(\text{CH}_2)_7\text{CH}_2\text{OH}$ Linoleyl Alcohol CAS RN: 506-43-4
O0058 25mL 500mL  Oleyl Alcohol CAS RN: 143-28-2	O0228 1g 5g $\text{CH}_3(\text{CH}_2)_7\text{CH}=\text{CH}(\text{CH}_2)_8\text{OH}$ trans-9-Octadecenol CAS RN: 506-42-3	D1936 5mL  trans-2-Dodecenol CAS RN: 69064-37-5	D2174 1g 5g  cis-13-Docosenol CAS RN: 629-98-1	Eicosanoids
Prostaglandins	P1884 1mg 10mg  Prostaglandin E ₂ CAS RN: 363-24-6	P1885 1mg 10mg  Prostaglandin F _{2α} CAS RN: 551-11-1	L0262 10mg 50mg  Latanoprost CAS RN: 130209-82-4	

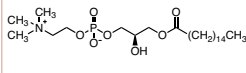
Glycerolipids

Glycerolipids		M1071 1g 5g Monocaprylin CAS RN: 26402-26-6	M1072 1g 5g Monocaprin CAS RN: 26402-22-2	M1073 1g 5g Monomyristin CAS RN: 589-68-4		
		G0081 5g 25g Monolaurin CAS RN: 142-18-7	G0083 25g Monopalmitin CAS RN: 542-44-9	G0085 25g 500g Monostearin CAS RN: 123-94-4	G0082 25g 500g Monoolein CAS RN: 111-03-5	M1075 1g Monoelaidin CAS RN: 2716-53-2
		G0079 10g α, α' -Dilaurin CAS RN: 539-93-5	T0364 25mL 500mL Tributyrin CAS RN: 60-01-5	T0441 10mL 25mL Tricaprin CAS RN: 621-70-5	T0365 25mL Tricaprylin CAS RN: 538-23-8	T0413 10g 25g Tricaprin CAS RN: 621-71-6
		G0087 25g 100g 500g Trilaurin CAS RN: 538-24-9	G0088 25g Trimyrstin CAS RN: 555-45-3	T3096 25g 100g Tripalmitin (>80.0%) CAS RN: 555-44-2	G0213 25g 250g Tripalmitin (>85.0%) CAS RN: 555-44-2	G0212 25g 250g Tristearin CAS RN: 555-43-1
		G0089 25g 100g Triolein CAS RN: 122-32-7	T1389 1g 5g Triarachidin CAS RN: 620-64-4	T1391 1g 5g Tribehenin CAS RN: 18641-57-1	T1388 5g 25g Trilinolein CAS RN: 537-40-6	T1392 1g 5g Trielaidin CAS RN: 537-39-3
Phospholipids		L0022 25g 100g Lecithin from Egg CAS RN: 8002-43-5	L0023 25g 500g Lecithin from Soybean CAS RN: 8002-43-5	D3924 200mg 1g DMPC CAS RN: 18194-24-6		
		D3925 200mg 1g L-DPPC CAS RN: 63-89-8	D3926 200mg 1g DSPC CAS RN: 816-94-4	D4250 250mg DOPC CAS RN: 4235-95-4	D5319 250mg DEPC CAS RN: 51779-95-4	D4249 250mg L-DMPE CAS RN: 998-07-2
		D4213 250mg L-DPPE CAS RN: 923-61-5	D4214 250mg DSPE CAS RN: 1069-79-0	D4251 250mg DOPE CAS RN: 4004-05-1	D3946 1g DMPG Sodium Salt CAS RN: 200880-40-6	D5318 250mg DOPG Sodium Salt CAS RN: 67254-28-8

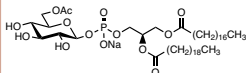
P2522 250mg

POPG Sodium Salt
CAS RN: 268550-95-4

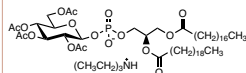
P2694 250mg

1-Palmitoyl-*sn*-glycerol-3-phosphocholine
CAS RN: 17364-16-8

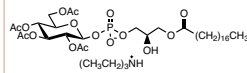
A2638 Please contact us.

6-OAc PtdGlc(di-acyl Chain)
CAS RN: 1065483-61-5

P2079 Please contact us.

2,3,4,6-Tetra-O-acetyl-PtdGlc(di-acyl Chain)
CAS RN: 1037195-49-5

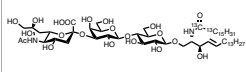
P2080 Please contact us.



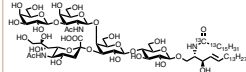
2,3,4,6-Tetra-O-acetyl-PtdGlc(mono-acyl Chain)

Glycolipids

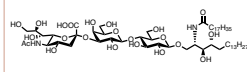
G0419 Please contact us.

Ganglioside GM₃[d18:1, (Carbon-13)C16:0]

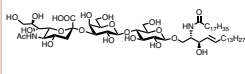
G0421 Please contact us.

Ganglioside GM₁[d18:1, (Carbon-13)C16:0]

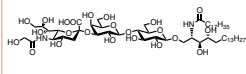
G0422 Please contact us.

Ganglioside GM₃ (phyto-type)
CAS RN: 1046791-63-2

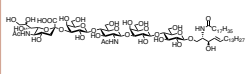
G0489 Please contact us.

Ganglioside GM₃
CAS RN: 124579-05-1

G0510 Please contact us.

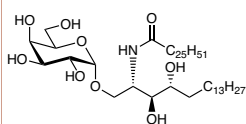
Ganglioside GM₃ (Neu5Gc) (phyto-type)

S0910 Please contact us.

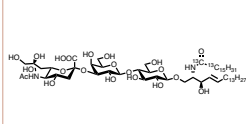
Sialyl nLc₄Cer
CAS RN: 128529-29-3

Sphingolipids

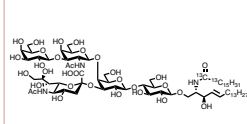
G0509 1mg

 α -Galactosylceramide
CAS RN: 158021-47-7

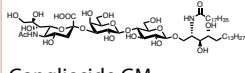
G0419 Please contact us.

Ganglioside GM₃[d18:1, (Carbon-13)C16:0]

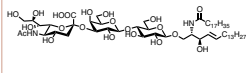
G0421 Please contact us.

Ganglioside GM₁[d18:1, (Carbon-13)C16:0]

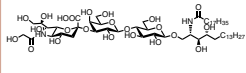
G0422 Please contact us.

Ganglioside GM₃ (phyto-type)
CAS RN: 1046791-63-2

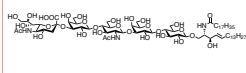
G0489 Please contact us.

Ganglioside GM₃
CAS RN: 124579-05-1

G0510 Please contact us.

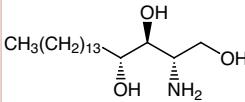
Ganglioside GM₃ (Neu5Gc) (phyto-type)

S0910 Please contact us.

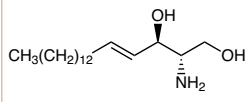
Sialyl nLc₄Cer
CAS RN: 128529-29-3

Sphingoid Base

P1765 1g 5g

Phytosphingosine
CAS RN: 554-62-1

S0874 25mg

D-Sphingosine
CAS RN: 123-78-4

Lipid Extracts, Oils

C0421 5mL 25mL

Croton Oil
CAS RN: 8001-28-3

C0626 25mL 100mL 500mL

Cedar Oil
CAS RN: 8000-27-9

O0051 25g

Origanum Oil
CAS RN: 8007-11-2

**Ordering and
Customer Service**

TCI AMERICA

Tel : 800-423-8616 / 503-283-1681
Fax : 888-520-1075 / 503-283-1987
E-mail : Sales-US@TCIchemicals.com

TCI EUROPE N.V.

Tel : +32 (0)3 735 07 00
Fax : +32 (0)3 735 07 01
E-mail : Sales-EU@TCIchemicals.com

TCI Deutschland GmbH

Tel : +49 (0)6196 64053-00
Fax : +49 (0)6196 64053-01
E-mail : Sales-DE@TCIchemicals.com

Tokyo Chemical Industry UK Ltd.

Tel : +44 (0)1865 784560
Fax : +44 (0)1865 784561
E-mail : Sales-UK@TCIchemicals.com

TCI Chemicals (India) Pvt. Ltd.

Tel : 1800 425 7889 / 044-2262 0909
Fax : 044-2262 8902
E-mail : Sales-IN@TCIchemicals.com

梯希爱(上海)化成工业发展有限公司

Tel : 800-988-0390 / 021-67121386
Fax : 021-6712-1385
E-mail : Sales-CN@TCIchemicals.com

TOKYO CHEMICAL INDUSTRY CO., LTD.

Tel : +81 (0)3-5640-8878
Fax : +81 (0)3-5640-8902
E-mail : globalbusiness@TCIchemicals.com

Availability, price or specification of the listed products are subject to change without prior notice. Reproduction forbidden without the prior written consent of Tokyo Chemical Industry Co., Ltd.