

## PREFACE

Nu-Chek has been preparing your highly purified lipid compounds both as individual standards and as model mixtures for the past 45 years.

But that's not the entire story. We go back to times when criteria of purity was based on such things as Iodine value and melting point.

Pure Methyl Oleate was a compound that contained enough inherent Stearate and Linoleate to give the Oleate its theoretical Iodine value.

Palmitic Acid was often designated as pure when it contained enough Myristate and Stearate to give a correct melting point.

Before the advent of GLC and TLC, triglycerides were synthesized by the interesterification of what was assumed to be pure methyl ester. The reaction end product was made available to researchers as highly purified triglyceride. Of course, chromatography confirmed later that the best of these reactions never went to completion beyond 75%-80%.

Indeed, one can go on indefinitely over incorrect data which has been listed in the literature. Physical data on lipids even when listed in the handbooks is many times not valid.

Within more recent years, scientific research in the lipid field has made some fantastic progress. Chromatography along with other sophisticated instrumentation has eliminated analysis guess work.

Only those isolated fractions which contain no detectable impurities even with large overloads (as analyzed both by GLC and TLC) are able to pass our rigid purity requirements, and in turn are made available to the scientific community for research purposes.

**At Nu-Chek our pride is in our product.**

# GENERAL PRODUCT INFORMATION

## Purity Guarantee

Nu-Chek generally prepares chromatographically pure compounds listed in our catalog as having a purity greater than 99%+. Varying degrees of purity (i.e. relatively pure greater than 90%) are so listed. Compounds of lesser degree purity can also be obtained by special request.

All products made available under our label are guaranteed to meet the minimum specifications designated at the time of sale. Age or condition of storage may alter chemical properties for which change we cannot be held liable.

If at the time of sale any of our products are found to be inferior or of a degree purity less than specified, Nu-Chek will supply you (free of charge) an adequate replacement, or at our option, refund your purchase price. All claims must be made within 60 days of invoice date. (Antioxidants tend to alter normal compound functions therefore are never added.)

**INCORRECT ORDERS ON THE CUSTOMERS PART WILL RESULT  
IN A RE-STOCK FEE OF 25% OF THE RETURNED ITEMS.**

### **Warning of a Legal Nature**

The compounds listed in our catalog are offered strictly for scientific research purposes only.

**THEY ARE NOT INTENDED FOR HUMAN CONSUMPTION OR TO BE USED IN:**

1. FOOD OR FOOD ADDITIVES
2. MEDICINAL OR DRUG RELATED USES.

We assume no responsibility with respect to their use other than research.

While physical data and information included in our catalog are precise and accurate to the best of our knowledge, a total guarantee cannot always be substantiated; and therefore, final acceptance of such data must be voluntary.

**OUR UNSATURATED COMPOUNDS ARE INSERTED  
BY VOLUME RATHER THAN WEIGHT. EXACT WEIGHTS  
MAY BE OBTAINED IF DESIRED WITH A  
\$3.50 SERVICE CHARGE PER VIAL.**

**ALL OF OUR UNSATURATED COMPOUNDS ARE FLUSHED SEVERAL TIMES WITH  
NITROGEN AND SEALED UNDER HIGH VACUUM THUS ELIMINATING THE NEED TO  
SHIP ANY PRODUCT UNDER DRY ICE. OUR UNIQUE SYSTEM OF SEALING HAS BEEN  
TESTED FOR OVER 45 YEARS AND HAS PROVEN VERY EFFECTIVE.**

## ORDER INFORMATION

NU-CHEK-PREP has no minimum requirement. All orders are accepted and the same meticulous care is given to an order of a few milligrams as to one of kilogram quantities.

When ordering please use the name of compound and product code number. The prices listed are currently in effect; however, they are subject to change without notice.

**Substantial discounts are always available  
for quantities larger than those listed in our catalog.**

## TERMS

Net cash 30 days, FOB Elysian, Minnesota. Actual shipping charge is added as a separate item on our invoice.

## BUSINESS HOURS

8:00 A.M. - 4:30 P.M. CENTRAL STANDARD TIME

## TO PLACE YOUR ORDER

**WRITE: NU-CHEK-PREP, INC.  
P.O. BOX 295  
ELYSIAN, MINNESOTA 56028**

**PHONE: (507) 267-4689 or 267-4582**

**FAX: (507) 267-4790**

**E-MAIL: [info@nuchekprep.com](mailto:info@nuchekprep.com)**

### **JAPANESE DISTRIBUTOR:**

Funakoshi Co. Ltd.  
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Tokyo 113-0033, Japan  
e-mail: [reagent@funakoshi.co.jp](mailto:reagent@funakoshi.co.jp)  
Tel: 81-3-5684-1620  
Fax: 81-3-5684-1775  
or Fax directly (507) 267-4790 to USA

**VISA, MASTERCARD, AMERICAN EXPRESS  
AND DISCOVER ACCEPTED**

# NU-CHEK-POLICY

## LIPID RESEARCHERS THINK NU-CHEK

If you are contemplating the purchase of high purity lipids and have several options at your disposal, we think you should give our organization consideration.

At NU-CHEK the preparation of lipid organics is not a sideline!!! It is our total existence! Through long experience and technical know-how we offer our line of chemical compounds in a purity seldom equaled and never excelled with prices that can keep your research program within a realistic budget.

Pick up any of our competitors' catalogs and the message becomes obviously clear. After leafing through page after page of column packing, TLC and GLC accessories, reagents, syringe needles and tubing - somewhere in the catalog (usually as an afterthought) is a buried section called "Lipids" and indeed often at prices that tend to make your research program prohibitive.

Our entire catalog listing is categorized in a logical manner so as to give you maximum assistance in locating your specific interest.

As this catalog goes to press Nu-Chek-Prep., Inc. will be starting their 45th year in a continuing policy of making the finest lipid-organics available at the lowest possible prices to the world wide scientific community. Our objective is simply to serve the lipid organic field to the best of our abilities.

If we can be of service to you at any time please contact us.

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## FATTY ACIDS AND ESTER HOMOLOGS

Even numbered chains of saturated and unsaturated fatty acids occur predominately in many of nature's animal and vegetable fats and oils.

Until recently it was assumed that the occurrence of straight chain odd number fatty acids in natural fat were rare. Recent analytical instrumentation has proven this to be a fallacy, since the presence of odd number carbon fatty acids have been shown to occur as minor constituents in practically every natural fat. What role they actually play in nature's scheme may be eventually established by continued research.

Nu-Chek high purity lipids are isolated in our own laboratory from the best commercial vegetable oil source available. Fatty acid chains of odd numbered compounds are generally synthesized by chain extension. Saturated chains and the unsaturated series (other than polyunsaturated fats) are always purified by a final distillation on a hundred theoretical plate high vacuum fractionating column. This is done to remove color along with other extraneous trace impurities. Only those fractions on which impurities are unable to be detected even with large overloads both by GLC and TLC are made available for product sale.

The isolation of high purity unsaturated compounds are always protected under an atmosphere of inert gas (i.e. N<sub>2</sub>). The final product, with the exception of high melting saturated compounds, is always flushed with nitrogen, sealed in Pyrex glass ampules under vacuum, and stored under cold condition of 0°C or lower until ready for shipment.

Whenever possible, our pure fatty acids and esters are isolated from their natural source by various physical techniques holding the conversion of unwanted isomers to a negligible minimum.

### SATURATED SERIES (Straight Chain) Acids and Esters\*

Purity greater than 99%+  
unless otherwise listed

Prices per quantity

C No. CHAIN	FATTY ACID	PHYSICAL DATA**	COMPOUND DERIVATIVE	CODE	100MG	500MG	1GM	5GM	10GM
C3:0	TRIANOIC (PROPIONIC)	mw 74.08	ACID	N-3-A					
		bp 141°	METHYL	N-3-M	8.00	9.00	10.00	30.00	40.00
		mp -22.0°	ETHYL	N-3-E					
C4:0	TETRANOIC (BUTYRIC)	mw 88.11	ACID	N-4-A					
		bp 162°	METHYL	N-4-M	8.00	9.00	10.00	30.00	40.00
		mp -7.9°	ETHYL	N-4-E					
C5:0	PENTANOIC (VALERIC)	mw 102.4	ACID	N-5-A					
		bp 113°	METHYL	N-5-M	8.00	9.00	10.00	30.00	40.00
		mp -34.5°	ETHYL	N-5-E					
C6:0	HEXANOIC (CAPROIC)	mw 116.16	ACID	N-6-A					
		bp 205°	METHYL	N-6-M	8.00	9.00	10.00	30.00	40.00
		mp -3.4°	ETHYL	N-6-E					
C7:0	HEPTANOIC (ENANTHIC)	mw 130.19	ACID	N-7-A					
		bp 223°	METHYL	N-7-M	9.00	16.00	22.00	95.00	160.00
		mp -7.5°	ETHYL	N-7-E					
C8:0	OCTANOIC (CAPRYLIC)	mw 144.21	ACID	N-8-A					
		bp 240°	METHYL	N-8-M	8.00	9.00	10.00	30.00	40.00
		mp 16.5°	ETHYL	N-8-E					
C9:0	NONANOIC (PELARGONIC)	mw 158.24	ACID	N-9-A					
		bp 255°	METHYL	N-9-M	9.00	16.00	22.00	95.00	160.00
		mp 12.5°	ETHYL	N-9-E					
C10:0	DECANOIC (CAPRIC)	mw 172.27	ACID	N-10-A					
		bp 270°	METHYL	N-10-M	8.00	9.00	10.00	30.00	40.00
		mp 31.6°	ETHYL	N-10-E					

\*Higher ester homologs (Propyl-Butyl-etc.) can be made available by special request. Substantial discounts are available on quantities larger than those listed in our catalog.

\*\*Listed only for fatty acid.

## SATURATED SERIES (Con't)

### Acids and Esters\*

Purity greater than 99%+  
unless otherwise listed

C No. CHAIN	FATTY ACID	PHYSICAL DATA**	COMPOUND DERIVATIVE	CODE	Prices per quantity				
					100MG	500MG	1GM	5GM	10GM
C11:0	(HENDECANOIC)	mw 186.30	ACID	N-11-A					
		bp <sub>15</sub> 164°	METHYL	N-11-M	9.00	16.00	22.00	95.00	160.00
		mp 29.3°	ETHYL	N-11-E					
C12:0	(LAURIC)	mw 200.35	ACID	N-12-A					
		bp <sub>1</sub> 131°	METHYL	N-12-M	8.00	9.00	10.00	30.00	40.00
		mp 44.2°	ETHYL	N-12-E					
C13:0	TRIDECAANOIC	mw 214.35	ACID	N-13-A					
		bp <sub>1</sub> 140°	METHYL	N-13-M	22.00	32.00	42.00	160.00	275.00
		mp 41.5°	ETHYL	N-13-E					
C14:0	(MYRISTIC)	mw 228.38	ACID	N-14-A					
		bp <sub>1</sub> 149°	METHYL	N-14-M	8.00	9.00	10.00	35.00	45.00
		mp 54.4°	ETHYL	N-14-E					
C15:0	PENTADECANOIC	mw 242.41	ACID	N-15-A					
		bp <sub>1</sub> 158°	METHYL	N-15-M	22.00	32.00	42.00	160.00	285.00
		mp 52.3°	ETHYL	N-15-E					
C16:0	(PALMITIC)	mw 256.43	ACID	N-16-A					
		bp <sub>1</sub> 170°	METHYL	N-16-M	8.00	9.00	10.00	25.00	35.00
		mp 61.3°	ETHYL	N-16-E					
C17:0	(MARGARIC)	mw 270.48	ACID	N-17-A					
		bp <sub>100</sub> 232°	METHYL	N-17-M	22.00	32.00	42.00	160.00	285.00
		mp 61.3°	ETHYL	N-17-E					
C18:0	(STEARIC)	mw 284.48	ACID	N-18-A					
		bp <sub>15</sub> 230°	METHYL	N-18-M	8.00	9.00	10.00	25.00	35.00
		mp 69.6°	ETHYL	N-18-E					
C18:0	12-HYDROXY STEARI	mw 300.48	ACID	N-18HY-A					
			METHYL	N-18HY-M	16.00	30.00	35.00	140.00	250.00
			ETHYL	N-18HY-E					
C19:0	NONADECANOIC	mw 298.51	ACID	N-19-A					
		bp <sub>10</sub> 203°	METHYL	N-19-M	22.00	32.00	42.00	160.00	285.00
		mp 68.65°	ETHYL	N-19-E					
C20:0	(ARACHIDIC)	mw 312.54	ACID	N-20-A					
		bp <sub>1</sub> 203°	METHYL	N-20-M	18.00	25.00	35.00	110.00	155.00
		mp 75.35°	ETHYL	N-20-E					
C21:0	HENEICOSANOIC	mw 326.57	ACID	N-21-A					
		bp <sub>1</sub> 205°	METHYL	N-21-M	42.00	57.00	83.00	380.00	725.00
		mp 74.3°	ETHYL	N-21-E					
C22:0	(BEHENIC)	mw 340.59	ACID	N-22-A					
		bp <sub>10</sub> 306°	METHYL	N-22-M	18.00	25.00	35.00	85.00	130.00
		mp 79.95°	ETHYL	N-22-E					
C23:0	TRICOSANOIC	mw 354.61	ACID	N-23-A					
		mp 79.1°	METHYL	N-23-M	42.00	60.00	85.00	385.00	725.00
			ETHYL	N-23-E					
C24:0	(LIGNOCERIC)	mw 368.64	ACID	N-24-A					
		mp 84.15°	METHYL	N-24-M	42.00	60.00	85.00	385.00	725.00
			ETHYL	N-24-E					

\*Higher ester homologs (Propyl-Butyl-etc.) can be made available by special request. Substantial discounts are available on quantities larger than those listed in our catalog.

\*\*Listed only for fatty acid.

## UNSATURATED SERIES

Straight chain fatty acids, mono basic, aliphatic, terminating in a single carboxyl group and of reduced hydrogen content than their saturated counterparts, constitute the ethylenic family of unsaturated fatty acids. They are of considerable importance since linkage with other chemical radicals is readily accomplished at the double bond positions. Multiple unsaturation is found in almost all natural occurring vegetable and animal fats. Research in recent years has shown them to be of great significance.

Double bonds are susceptible to oxidation so that stability is a factor to be reckoned with (especially polyunsaturated compounds) when researching unsaturated fatty acids or their corresponding esters.

Hightly purified unsaturated compounds prepared in our laboratory are always flushed several times with nitrogen, sealed in glass under vacuum and stored under cold conditions until ready for shipment.

Nu-Chek suggests that when your shipment is received, that it should be stored under cold conditions; that it be used as soon as possible and that the hermetically sealed ampules are not opened until ready to use.

### UNSATURATED FATTY ACIDS (STRAIGHT CHAIN ALIPHATIC) Acids and Esters\*

Purity greater than 99%+

unless otherwise listed

C No. CHAIN	FATTY ACID	PHYSICAL DATA**	COMPOUND DERIVATIVE	TYPE	CODE	Prices per quantity				
						100MG	500MG	1GM	5GM	10GM
C11:1	10-UNDECENOIC (HENDECENOIC)	△ 10 cis	ACID	N1	U-31-A					
		mw 184.30	METHYL	OMEGA 1	U-31-M	20.00	30.00	35.00	125.00	200.00
		bp <sub>15</sub> 165°	ETHYL		U-31-E					
		mp 24.5°								
C12:1	11-DODECENOIC	△ 11 cis	ACID	N1	U-34-A					
		mw 198.35	METHYL	OMEGA 1	U-34-M	25.00	40.00	60.00	275.50	550.00
			ETHYL		U-34-E					
C13:1	12-TRIDEDECENOIC	△ 12 cis	ACID	N1	U-35-A					
		mw 212.35	METHYL	OMEGA 1	U-35-M	25.00	40.00	60.00	275.00	550.00
			ETHYL		U-35-E					
C14:1	9-TETRADECENOIC (MYRISTOLEIC)	△ 9 cis	ACID	N5	U-36-A					
		mw 226.38	METHYL	OMEGA 5	U-36-M	80.00	175.00	250.00	1125.00	2200.00
			ETHYL		U-36-E					
C14:1T	9-TRANS TETRADECENOIC (MYRISTELAIDIC)	△ 9 trans	ACID	N5	U-37-A					
		mw 226.38	METHYL	OMEGA 5	U-37-M	150.00	275.00	425.00		
			ETHYL		U-37-E					
C15:1	10-PENTADECENOIC	△ 10 cis	ACID	N5	U-38-A					
		mw 240.40	METHYL	OMEGA 5	U-38-M	150.00	280.00	375.00	1700.00	3250.00
			ETHYL		U-38-E					
C15:1	14-PENTADECENOIC	△ 14 cis	ACID	N1	U-38-AX					
		mw 240.40	METHYL	OMEGA 1	U-38-MX	90.00	130.00	225.00		
			ETHYL		U-38-EX					
C15:1T	10-TRANS-PENTADECENOIC	△ 10 trans	ACID	N5	U-39-A					
		mw 240.40	METHYL	OMEGA 5	U-39-M	225.00				
			ETHYL		U-39-E					
C16:1	9-HEXADECENOIC (PALMITOLEIC)	△ 9 cis	ACID	N7	U-40-A					
		mw 254.43	METHYL	OMEGA 7	U-40-M	30.00	40.00	50.00	225.00	375.00
		mp 0.5°	ETHYL		U-40-E					
C16:1T	9-TRANS-HEXADECENOIC (PALMITELAIDIC)	△ 9 trans	ACID	N7	U-41-A					
		mw 254.43	METHYL	OMEGA 7	U-41-M	35.00	50.00	65.00	280.00	575.00
			ETHYL		U-41-E					
C17:1	10-HEPTADECENOIC	△ 10 cis	ACID	N7	U-42-A					
		mw 268.48	METHYL	OMEGA 7	U-42-M	45.00	65.00	85.00	385.00	725.00
			ETHYL		U-42-E					

\*Bond position is shown by △ under physical data.

\*\*M.W. for fatty acid only.

# UNSATURATED FATTY ACIDS (Con't)

## Acids and Esters

Purity greater than 99%+  
unless otherwise listed

Prices per quantity

C No. CHAIN	FATTY ACID	PHYSICAL DATA*	COMPOUND DERIVATIVE	TYPE	CODE	100MG	500MG	1GM	5GM	10GM
C17:1T	10-TRANS-HEPTADECENOIC	△ 10 trans mw 268.48	ACID METHYL ETHYL	N7 OMEGA 7 U-43-E	U-43-A U-43-M U-43-E	80.00	230.00	325.00	1425.00	2700.00
C18:1	6-OCTADECENOIC (PETROSELINIC)	△ 6 cis mw 282.48 mp 30°	ACID METHYL ETHYL	N12 OMEGA 12 U-44-E	U-44-A U-44-M U-44-E	30.00	40.00	50.00	225.00	400.00
C18:1T	6-TRANS-OCTADECENOIC (PETROSELAIDIC)	△ 6 trans mw 282.48 mp 53°	ACID METHYL ETHYL	N12 OMEGA 12 U-45-E	U-45-A U-45-M U-45-E	50.00	60.00	75.00	350.00	650.00
C18:1	9-OCTADECENOIC (OLEIC)	△ 9 cis mw 282.48 mp 16.2°	ACID METHYL ETHYL	N9 OMEGA 9 U-46-E	U-46-A U-46-M U-46-E	10.00	12.00	15.00	40.00	60.00
C18:1T	9-TRANS-OCTADECENOIC (ELAIDIC)	△ 9 trans mw 282.48 mp 43.7°	ACID METHYL ETHYL	N9 OMEGA 9 U-47-E	U-47-A U-47-M U-47-E	20.00	30.00	35.00	85.00	125.00
C18:1	11-OCTADECENOIC (VACCENIC)	△ 11 cis mw 282.48 mp 12°	ACID METHYL ETHYL	N7 OMEGA 7 U-48-E	U-48-A U-48-M U-48-E	50.00	70.00	90.00	400.00	750.00
C18:1T	11-TRANS-OCTADECENOIC (TRANSVACCENIC)	△ 11 trans mw 282.48 mp 39°	ACID METHYL ETHYL	N7 OMEGA 7 U-49-E	U-49-A U-49-M U-49-E	75.00	100.00	150.00	600.00	1100.00
C18:1	9 cis-12 HYDROXY- OCTADECENOIC (RICINOLEIC)	△ 9 cis 12 (OH) mw 298.46	ACID METHYL ETHYL		U-50-A U-50-M U-50-E	25.00	35.00	45.00	180.00	325.00
C18:1T	9-TRANS-12 HYDROXY- OCTADECENOIC (RICINELAIDIC)	△ 9 trans 12 hydroxy mw 298.46	ACID METHYL ETHYL		U-51-A U-51-M U-51-E	40.00	60.00	70.00	325.00	600.00
C19:1	7-NONADECENOIC	△ 7 cis mw 296.48	ACID METHYL ETHYL	N12 OMEGA 12 U-52-E	U-52-A U-52-M U-52-E	60.00	175.00	200.00		
C19:1T	7-TRANS-NONADECENOIC	△ 7 trans mw 296.48	ACID METHYL ETHYL	N12 OMEGA 12 U-53-E	U-53-A U-53-M U-53-E	125.00	275.00	500.00		
C19:1	10-NONADECENOIC	△ 10 cis mw 296.48	ACID METHYL ETHYL	N9 OMEGA 9 U-54-E	U-54-A U-54-M U-54-E	50.00	60.00	80.00		
C19:1T	10-TRANS-NONADECENOIC	△ 10 trans mw 296.48	ACID METHYL ETHYL	N9 OMEGA 9 U-55-E	U-55-A U-55-M U-55-E	100.00	325.00	475.00		
C19:2	10-13 NONADECADIENOIC	△ 10 cis 13 cis mw 294.48	ACID METHYL ETHYL	N6 OMEGA 6 U-58-E	U-58-A U-58-M U-58-E	80.00	185.00	275.00		
C18:2	9-12 OCTADECADIENOIC (LINOLEIC)	△ 9 cis 12 cis mw 280.48 mp -6.5°	ACID METHYL ETHYL	N6 OMEGA 6 U-59-E	U-59-A U-59-M U-59-E	10.00	12.00	15.00	40.00	60.00

# UNSATURATED FATTY ACIDS (Con't)

## Acids and Esters

Purity greater than 99%+  
unless otherwise listed

Prices per quantity

C No. CHAIN	FATTY ACID	PHYSICAL DATA*	COMPOUND DERIVATIVE	TYPE	CODE	100MG	500MG	1GM	5GM	10GM
C18:2TT	9-TRANS 12-TRANS OCTADECADIENOIC (LINOELAIDIC)	△ 9 trans 12 trans mw 280.48 mp 29°	ACID METHYL ETHYL	N6 OMEGA 6 U-60-E	U-60-A U-60-M U-60-E	30.00	40.00	50.00	200.00	350.00
C18:2	OCTADECADIENOIC (CONJUGATED) 99%	△ 9, 11 △ 10, 12 cis & trans	ACID METHYL ETHYL		UC-59-A UC-59-M UC-59-E	25.00	35.00	50.00	225.00	400.00
C18:2	OCTADECADIENOIC (CONJUGATED) 95%	△ 9, 11 △ 10, 12 cis & trans	ACID METHYL ETHYL		UC-59-AX UC-59-MX UC-59-EX	10.00	15.00	20.00	80.00	125.00
C18:2	OCTADECADIENOIC (CONJUGATED) APPROXIMATELY 90%	△ 9 cis △ 11 trans	ACID METHYL		UC-60-A UC-60-M	35.00 35.00	55.00 55.00	80.00 80.00	380.00 380.00	750.00 750.00
C18:2	OCTADECADIENOIC (CONJUGATED) APPROXIMATELY 90%	△ 10 trans △ 12 cis mw 280.5	ACID METHYL		UC-61-A UC-61-M	35.00 35.00	55.00 55.00	80.00 80.00	380.00 380.00	750.00 750.00
C18:3	9-12-15 OCTADECATRIENOIC (ALPHA LINOLENIC)	△ 9 cis 12 cis 15 cis mw 278.48 mp -12.8°	ACID METHYL ETHYL	N3 OMEGA 3	U-62-A U-62-M U-62-E	25.00	35.00	45.00	200.00	350.00
C18:3	6-9-12 OCTADECATRIENOIC (GAMMA LINOLENIC)	△ 6 cis 9 cis 12 cis mw 278.48	ACID METHYL ETHYL	N6 OMEGA 6	U-63-A U-63-M U-63-E	40.00	55.00	75.00	350.00	600.00
C20:1T	11-TRANS-EICOSENOIC	△ 11 trans mw 310.54 mp 53°	ACID METHYL ETHYL	N9 OMEGA 9	U-64-A U-64-M U-64-E	35.00	45.00	55.00	250.00	425.00
C20:1	8-EICOSENOIC	△ 8 cis mw 310.54	ACID METHYL ETHYL	N12 OMEGA 12	U-65-A U-65-M U-65-E	50.00	175.00	275.00		
C20:1	11-EICOSENOIC GONDOLIC	△ 11 cis mw 310.54 mp 22°	ACID METHYL ETHYL	N9 OMEGA 9	U-66-A U-66-M U-66-E	25.00	35.00	45.00	180.00	350.00
C20:1	5-EICOSENOIC	△ 5 cis mw 310.54	ACID METHYL ETHYL	N15 OMEGA 15	UX-67-A UX-67-M UX-67-E	50.00	150.00	250.00		
C20:2	11-14 EICOSADIENOIC	△ 11 cis 14 cis mw 308.53	ACID METHYL ETHYL	N6 OMEGA 6	U-68-A U-68-M U-68-E	45.00	60.00	75.00	350.00	650.00
C20:3	8-11-14 EICOSATRIENOIC (HOMOGAMMA LINOLENIC)	△ 8 cis 11 cis 14 cis mw 306.53	ACID METHYL ETHYL	N6 OMEGA 6	U-69-A U-69-M U-69-E	10MG 25MG 50MG 100MG 500 MG 1GM	30.00 40.00 50.00 70.00 250.00 350.00			
C20:3	11-14-17 EICOSATRIENOIC	△ 11 cis 14 cis 17 cis mw 306.53	ACID METHYL ETHYL	N3 OMEGA 3	U-70-A U-70-M U-70-E	50.00	60.00	80.00	375.00	700.00

# UNSATURATED FATTY ACIDS (Con't)

## Acids and Esters

Purity greater than 99%+  
unless otherwise listed

Prices per quantity

C No. CHAIN	FATTY ACID	PHYSICAL DATA*	COMPOUND DERIVATIVE	TYPE	CODE	100MG	500MG	1GM	5GM	10GM
C20:4	5-8-11-14 EICOSATETRAENOIC (ARACHIDONIC)	△ 5 cis 8 cis 11 cis 14 cis mw 304.52	ACID METHYL ETHYL	N6 OMEGA 6 U-71-E	U-71-A U-71-M U-71-E	10MG 25MG 50MG	20.00 40.00 50.00	55.00 80.00 100.00		
C20:5	5-8-11-14-17 EICOSAPENTAENOIC (EPA)	all cis mw 302.52	ACID METHYL ETHYL	N3 OMEGA 3 U-99-M U-99-E	U-99-A U-99-M U-99-E	40.00 55.00 65.00	80.00 125.00 185.00			
C22:5	7-10-13-16-19 DOCOSAPENTAENOIC (DPA) N3	all cis mw 330.57	ACID METHYL ETHYL	N3 OMEGA 3 U-101-M U-101-E	U-101-A U-101-M U-101-E	55.00 70.00 90.00	120.00 230.00 300.00			
C22:5	4-7-10-13-16 DOCOSAPENTAENOIC N6	mw 330.57	ACID METHYL ETHYL	N6 OMEGA 6 U-102-M U-102-E	U-102-A U-102-M U-102-E	70.00 90.00 125.00	200.00 250.00 300.00			
C22:5	4-7-10-13-16 DOCOSAPENTAENOIC N6 95%+	mw 330.57	ACID METHYL ETHYL	N6 OMEGA 6 U-102-MX U-102-EX	U-102-AX U-102-MX U-102-EX	50.00 65.00 80.00	125.00 200.00 250.00			
C22:6	4-7-10-13-16-19 DOCOSAHEXAENOIC (DHA)	all cis mw 328.57	ACID METHYL ETHYL	N3 OMEGA 3 U-84-M U-84-E	U-84-A U-84-M U-84-E	20.00 40.00 50.00	55.00 80.00 100.00			
C20:4	ARACHIDONIC 90%+	all cis mw 304.52	ACID METHYL ETHYL	N6 OMEGA 6 U-72-M U-72-E	U-72-A U-72-M U-72-E	45.00 60.00 75.00	325.00 600.00			
C22:1	13-DOCOSENOIC (ERUCIC)	△ 13 cis mp 33° mw 338.59	ACID METHYL ETHYL	N9 OMEGA 9 U-79-M U-79-E	U-79-A U-79-M U-79-E	20.00 30.00 35.00	125.00 225.00			
C22:1T	13-TRANSDOCOSENOIC (BRASSIDIC)	△ 13 trans mp 60° mw 338.59	ACID METHYL ETHYL	N9 OMEGA 9 U-80-M U-80-E	U-80-A U-80-M U-80-E	30.00 45.00 60.00	275.00 500.00			
C22:2	13-16 DOCOSADIENOIC	△ 13 cis 16 cis mw 336.59	ACID METHYL ETHYL	N6 OMEGA 6 U-81-M U-81-E	U-81-A U-81-M U-81-E	10MG 25MG 50MG	100MG 200.00 325.00	500MG 400.00		
C22:3	13-16-19 DOCOSATRIENOIC	△ 13 cis 16 cis 19 cis mw 334.58	ACID METHYL ETHYL	N3 OMEGA 3 U-82-M U-82-E	U-82-A U-82-M U-82-E	50.00 60.00 70.00	80.00 325.00 400.00			
C22:4	7-10-13-16 DOCOSATETRAENOIC	△ 7 cis, 10 cis, 13 cis, 16 cis mw 332.57	ACID METHYL ETHYL	N6 OMEGA 6 U-83-M U-83-E	U-83-A U-83-M U-83-E	50.00 60.00 70.00	80.00 325.00 400.00			
C21:1	12-HENEICOSENOIC	△ 12 cis mw 324.57	ACID METHYL ETHYL	N9 OMEGA 9 U-85-M U-85-E	U-85-A U-85-M U-85-E	60.00 85.00 150.00				
C21:2	12-15 HENEICOSADIENOIC	△ 12-15 mw 322.57	ACID METHYL ETHYL	N6 OMEGA 6 U-86-M U-86-E	U-86-A U-86-M U-86-E	125.00				
C23:1	14-TRICOSENOIC	△ 14 cis mw 352.60	ACID METHYL ETHYL	N9 OMEGA 9 U-87-M U-87-E	U-87-A U-87-M U-87-E	70.00 90.00 160.00				
C24:1	15-TETRACOSENOIC (NERVONIC)	△ 15 cis mw 366.63	ACID METHYL ETHYL	N9 OMEGA 9 U-88-M U-88-E	U-88-A U-88-M U-88-E	35.00 50.00 65.00	275.00 525.00			

(Exact weights may be obtained if desired with an additional \$3.50 service charge per vial. State exact weight when ordering.)

## GLYCERIDES

The distribution of random fatty acids in naturally occurring fats and oils in the form of triglycerides dates back to antiquity.

Indeed, the use of soap-cosmetics and oil lubricants dates back thousands of years. While we at Nu-Chek do not profess to go back quite that far, we would like to say that we have been synthesizing pure glyceride standards for the scientific community for over 45 years.

The general procedure for all our triglyceride preparations is well exemplified in Nu-Chek's Triglyceride. Our starting material is chromatographically pure Methyl Oleate (isolated from the best vegetable oils available) which is then interesterified for the production of crude Triglyceride. To assure geometric stability of cis double bonds, the material is further purified by such physical techniques as low temperature crystallization and column chromatography. The final purity is followed both by gas liquid and thin layer chromatography.

Other triglycerides are prepared in a similar manner commencing with the particular oil which contains the best concentrates of the specific ester required.

### GLYCERIDES - SATURATED

Tri's - Di's - Mono's

All Greater Than 99%

**M.W. - WEIGHTS GIVEN ARE FOR TRIGLYCERIDES ONLY**

CHAIN	GLYCERIDE	CODE	10MG	25MG	50MG	100MG	500MG	1GM
C8:0	TRIOCTANOIN (CAPRYLIN)	T-110				25.00	30.00	45.00
	DICAPRYLIN	D-111				25.00	35.00	55.00
	1-3 ISOMER	D-112	15.00	20.00	30.00	45.00	55.00	75.00
	MONOCAPRYLIN	M-114				30.00	35.00	55.00
	M.W. 470.69							
C9:0	TRINONANOIN (PELARGONIN)	T-115				30.00	35.00	50.00
	DINONANOIN	D-116				30.00	45.00	65.00
	1-3 ISOMER	D-117	20.00	35.00	45.00	60.00		
	MONONONANOIN	M-119				30.00	40.00	60.00
	M.W. 512.77							
C10:0	TRIDECANOIN (CAPRIN)	T-120				25.00	35.00	50.00
	DICAPRIN	D-121				25.00	35.00	55.00
	1-3 ISOMER	D-122	10.00	25.00	30.00	45.00		
	MONOCAPRIN	M-124				30.00	40.00	60.00
	M.W. 554.85							
C11:0	TRIUNDECANOIN (HENDECANOIN)	T-125				25.00	35.00	50.00
	DIUNDECANOIN	D-126				25.00	45.00	65.00
	1-3 ISOMER	D-127	20.00	35.00	45.00	55.00		
	MONOUNDECANOIN	M-129				25.00	40.00	60.00
	M.W. 596.93							
C12:0	TRIDODECANOIN (LAURIN)	T-130				25.00	30.00	45.00
	DILAURIN	D-131				25.00	35.00	55.00
	1-3 ISOMER	D-132	10.00	25.00	30.00	45.00		
	MONOLAURIN	M-134				25.00	35.00	55.00
	M.W. 639.02							
C13:0	TRITRIDECANOIN	T-135				35.00	45.00	55.00
	DITRIDECANOIN	D-136				35.00	45.00	65.00
	1-3 ISOMER	D-137	20.00	35.00	45.00	60.00		
	MONOTRIDECANOIN	M-139				35.00	45.00	60.00
	M.W. 681.10							

# GLYCERIDES - SATURATED

## Tri's - Di's - Mono's

CHAIN	GLYCERIDE	CODE	10MG	25MG	50MG	100MG	500MG	1GM
C14:0	TRITETRADECANOIN (MYRISTIN)	T-140				30.00	35.00	45.00
	DIMYRISTIN	D-141				30.00	40.00	55.00
	1-3 ISOMER	D-142	10.00	20.00	30.00	45.00	50.00	65.00
	MONOMYRISTIN	M-144				35.00	45.00	55.00
	M.W. 723.18							
C15:0	TRIPENTADECANOIN	T-145				35.00	45.00	55.00
	DIPENTADECANOIN	D-146				35.00	50.00	65.00
	1-3 ISOMER	D-147	20.00	35.00	45.00	60.00	110.00	200.00
	MONOPENTADECANOIN	M-149				35.00	45.00	60.00
	M.W. 765.26							
C16:0	TRIHEXADECANOIN (PALMITIN)	T-150				30.00	35.00	45.00
	DIPALMITIN	D-151				30.00	40.00	60.00
	1-3 ISOMER	D-152	10.00	15.00	20.00	30.00	50.00	65.00
	MONOPALMITIN	M-154				35.00	45.00	55.00
	M.W. 807.34							
C17:0	TRIHEPTADECANOIN (MARGARIN)	T-155				35.00	45.00	55.00
	DIHEPTADECANOIN	D-156				35.00	50.00	65.00
	1-3 ISOMER	D-157	20.00	35.00	45.00	60.00	110.00	200.00
	MONOHEPTADECANOIN	M-159				35.00	45.00	60.00
	M.W. 849.42							
C18:0	TRIOCTADECANOIN (STEARIN)	T-160				30.00	35.00	45.00
	DISTEARIN	D-161				30.00	40.00	60.00
	1-3 ISOMER	D-162	10.00	15.00	20.00	30.00	50.00	65.00
	MONOSTEARIN	M-164				35.00	45.00	55.00
	M.W. 891.50							
C19:0	TRINONADECANOIN	T-165				35.00	45.00	55.00
	DINONADECANOIN	D-166				35.00	50.00	65.00
	1-3 ISOMER	D-167	20.00	35.00	45.00	60.00	110.00	200.00
	MONONONADECANOIN	M-169				45.00	55.00	70.00
	M.W. 933.58							
C20:0	TRIEICOSANOIN (ARACHIDIN)	T-170				35.00	50.00	65.00
	DIARACHIDIN	D-171				35.00	50.00	65.00
	1-3 ISOMER	D-172	10.00	20.00	30.00	45.00	80.00	110.00
	MONOARACHIDIN	M-174				45.00	55.00	70.00
	M.W. 975.66							
C21:0	TRIHENEICOSANOIN	T-175				65.00	80.00	110.00
	DIHENEICOSANOIN	D-176				65.00	80.00	130.00
	1-3 ISOMER	D-177	20.00	30.00	45.00	75.00	120.00	250.00
	MONOHENEICOSANOIN	M-179				75.00	225.00	325.00
	M.W. 1017.74							
C22:0	TRIDOCOSANOIN (BEHENIN)	T-180				40.00	55.00	65.00
	DIBEHENIN	D-181				40.00	55.00	65.00
	1-3 ISOMER	D-182	10.00	20.00	25.00	45.00	80.00	110.00
	MONOBEHENIN	M-184				40.00	55.00	70.00
	M.W. 1059.82							
23:0	TRITRICOSANOIN	T-185				80.00	95.00	160.00

**GLYCERIDES - UNSATURATED**  
**Tri's - Di's - Mono's**  
**M.W. - WEIGHTS GIVEN ARE FOR TRIGLYCERIDES ONLY**

CHAIN	GLYCERIDE	CODE	10MG	25MG	50MG	100MG	500MG	1GM
C11:1	TRIUNDECENOIN	T-200				35.00	45.00	60.00
	DIUNDECENOIN	D-201				40.00	50.00	65.00
	1-3 ISOMER	D-202	25.00	35.00	50.00	65.00	80.00	100.00
	MONOUNDECENOIN	M-204				35.00	45.00	60.00
Δ 10 cis	M.W. 590.93							
C12:1	TRIDODECENOIN	T-195				45.00	55.00	75.00
	DIDODECENOIN	D-196				50.00	60.00	80.00
	1-3 ISOMER	D-197	25.00	35.00	50.00	65.00		
	MONODODECENOIN	M-199				50.00	60.00	80.00
Δ 11 cis	M.W. 633.01							
C14:1	TRITETRADECENOIN (MYRISTOLEIN)	T-205				100.00	400.00	700.00
	DIMYRISTOLEIN	D-206	45.00	75.00	110.00	160.00		
	1-3 ISOMER	D-207	85.00	150.00	210.00	300.00		
	MONOMYRISTOLEIN	M-209				160.00	225.00	325.00
Δ 9 cis	M.W. 717.18							
C16:1	TRIHEXADECENOIN (PALMITOLEIN)	T-215				35.00	50.00	65.00
	DIPALMITOLEIN	D-216				45.00	65.00	90.00
	1-3 ISOMER	D-217	25.00	35.00	50.00	65.00	115.00	210.00
	MONOPALMITOLEIN	M-219				35.00	50.00	65.00
Δ 9 cis	M.W. 801.34							
C16:1T	TRIPALMITELAIDIN	T-220				45.00	65.00	90.00
	DIPALMITELAIDIN	D-221				65.00		
	1-3 ISOMER	D-222	30.00	40.00	55.00	75.00		
	MONOPALMITELAIDIN	M-224				65.00		
Δ 9 TRANS	M.W. 801.34							
C17:1	TRIHEPTADECENOIN	T-404				80.00	250.00	375.00
	DIHEPTADECENOIN	D-405	45.00	55.00	70.00	90.00	250.00	375.00
	1-3 ISOMER	D-406				90.00		
	MONOHEPTADECENOIN	M-407				70.00	260.00	385.00
Δ 10 Cis	M.W. 843.42							
C18:1	TRIOCTADECENOIN (PETROSELININ)	T-225				40.00	45.00	60.00
	DIPETROSELININ	D-226				40.00	45.00	90.00
	1-3 ISOMER	D-227	25.00	35.00	50.00	65.00		
	MONOPETROSELININ	M-229				40.00	45.00	60.00
Δ 6 Cis	M.W. 885.50							
C18:1T	TRIPETROSELAILIDIN	T-230				50.00	85.00	150.00
	DIPETROSELAILIDIN	D-231	25.00	35.00	45.00	60.00	95.00	150.00
	1-3 ISOMER	D-232	30.00	40.00	50.00	70.00		
	MONOPETROSELAILIDIN	M-234				60.00	95.00	150.00
Δ 6 TRANS	M.W. 885.50							
C18:1	TRIOCTADECENOIN (OLEIN)	T-235				25.00	30.00	35.00
	DIOLEIN	D-236				20.00	35.00	50.00
	1-3 ISOMER	D-237	10.00	15.00	20.00	25.00	60.00	95.00
	MONOOLEIN	M-239				35.00	45.00	60.00
Δ 9 Cis	M.W. 885.50							

# GLYCERIDES - UNSATURATED

## Tri's - Di's - Mono's

CHAIN	GLYCERIDE	CODE	10MG	25MG	50MG	100MG	500MG	1GM
C18:1T	TRIELAIDIN	T-240				30.00	35.00	45.00
	DIELAIDIN	D-241				40.00	55.00	65.00
	1-3 ISOMER	D-242	25.00	35.00	45.00	60.00	80.00	110.00
	MONOELAIDIN	M-244				40.00	55.00	75.00
$\Delta$ 9 TRANS M.W. 885.50								
C18:1	TRIOCTADECENOIN (VACCENIN)	T-245				50.00	170.00	300.00
	DIVACCENIN	D-246	30.00	40.00	50.00	70.00	225.00	375.00
	1-3 ISOMER	D-247	35.00	45.00	55.00	75.00	250.00	375.00
	MONOVACCENIN	M-249				70.00	225.00	375.00
$\Delta$ 11 Cis M.W. 885.50								
C18:2 Cis	TRIOCTADECADIENOIN (LINOLEIN)	T-250				25.00	30.00	35.00
	DILINOLEIN	D-251				20.00	35.00	50.00
	1-3 ISOMER	D-252	10.00	15.00	20.00	25.00	60.00	95.00
	MONOLINOLEIN	M-254				35.00	45.00	60.00
12 Cis M.W. 879.50								
C18:2TT	TRANS TRIOCTADECADIENOIN (LINOELAIDIN)	T-255				35.00	45.00	60.00
	DILINOELAIDIN	D-256				45.00	100.00	150.00
	1-3 ISOMER	D-257	30.00	40.00	50.00	75.00		
	MONOLINOELAIDIN	M-259				60.00	150.00	225.00
$\Delta$ 9 TRANS M.W. 879.50								
C18:3	TRIOCTADECATRIENOIN (ALPHA LINOLENIN)	T-260				40.00	50.00	60.00
	DILINOLENIN	D-261				40.00	85.00	130.00
	1-3 ISOMER	D-262	30.00	40.00	50.00	60.00	100.00	150.00
	MONOLINOLENIN	M-264				55.00	85.00	125.00
15 cis M.W. 873.50								
C18:3	TRIOCTADECATRIENOIN (GAMMA LINOLENIN)	T-265				45.00	60.00	80.00
	DIGAMMA LINOLENIN	D-266	25.00	35.00	45.00	50.00	175.00	320.00
	1-3 ISOMER	D-267	30.00	40.00	50.00	70.00		
	MONO (GAMMA) LINOLENIN	M-269				55.00	180.00	325.00
12 cis M.W. 873.50								
C19:1	TRINONADECENOIN	T-412				60.00		
	DINONADECENOIN	D-413	25.00	35.00	50.00	60.00		
	1-3 ISOMER	D-414	30.00	40.00	55.00	75.00		
	MONONONADECENOIN	M-415				60.00		
$\Delta$ 10 cis M.W. 873.50								
C19:2	TRINONADECADIENOIN	T-416				60.00		
	DINONADECADIENOIN	D-417	25.00	35.00	50.00	60.00		
	1-3 ISOMER	D-418	30.00	40.00	55.00	75.00		
	MONONONADECADIENOIN	M-419				60.00		
$\Delta$ 10 cis M.W. 873.50								
C20:1	TRIEICOSENOIN	T-270				40.00	50.00	65.00
	DIEICOSENOIN	D-271				40.00	50.00	65.00
	1-3 ISOMER	D-272	25.00	35.00	50.00	65.00	80.00	115.00
	MONOEICOSENOIN	M-274				50.00	60.00	85.00
$\Delta$ 11 cis M.W. 969.66								

# GLYCERIDES - UNSATURATED

## Tri's - Di's - Mono's

CHAIN	GLYCERIDE	CODE	10MG	25MG	50MG	100MG	500MG	1GM
C20:1T	△ 11-TRANS TRIEICOSENOIN	T-275				65.00		
	DITRANSEICOSENOIN	D-276	25.00	35.00	50.00	65.00		
	1-3 ISOMER	D-277	30.00	40.00	55.00	50.00		
	MONOTRANSEICOSENOIN	M-279				65.00		
	M.W. 969.66							
C20:2	△ 11-14 CIS TRIEICOSADIENOIN	T-280				70.00		
	DIEICOSADIENOIN	D-281				70.00		
	1-3 ISOMER	D-282	35.00	50.00	60.00	85.00		
	MONOEICOSADIENOIN	M-284				75.00		
	M.W. 963.66							
C20:3	△ 8-11-14 TRIEICOSATRIENOIN (HOMOGAMMA)	T-285				80.00	230.00	350.00
	DIEICOSATRIENOIN (HOMOGAMMA)	D-286				80.00		
	1-3 ISOMER	D-288	45.00	55.00	65.00	80.00		
	MONOEICOSATRIENOIN (HOMOGAMMA)	M-289				80.00		
all cis	M.W. 957.66							
C20:3	△ 11-14-17 TRIEICOSATRIENOIN	T-290				65.00		
	DIEICOSATRIENOIN	D-291				65.00		
	1-3 ISOMER	D-292	35.00	50.00	60.00	80.00		
	MONOEICOSATRIENOIN	M-294				65.00		
all cis	M.W. 957.66							
C20:4	△ 5-8-11-14 TRIEICOSATETRAENOIN (ARACHIDONIN)	T-295				75.00	240.00	375.00
	DIARACHIDONIN	D-296				75.00		
	1-3 ISOMER	D-297	40.00	50.00	60.00	80.00		
	MONOARACHIDONIN	M-299				75.00	275.00	375.00
all cis	M.W. 951.66							
C20:5	△ 5-8-11-14-17 all cis TRIEICOSAPENTAENOIN	T-325	70.00	85.00	120.00	150.00	400.00	625.00
C21:1	△ 12 CIS TRIHENEICOSENOIN	T-320				90.00		
C22:1	TRIDOCOSENOIN (ERUCIN)	T-300				35.00	45.00	60.00
	DIERUCIN	D-301				40.00	55.00	75.00
	1-3 ISOMER	D-302	25.00	35.00	45.00	60.00	110.00	160.00
	MONOERUCIN	M-304				40.00	55.00	75.00
△ 13 cis	M.W. 1053.82							
C22:1	TRIDOCOSENOIN (BRASSIDIN)	T-305				55.00	70.00	90.00
	DIBRASSIDIN	D-306				55.00		
	1-3 ISOMER	D-307	30.00	40.00	50.00	70.00		
	MONOBRASSIDIN	M-309				65.00		
△ 13 TRANS	M.W. 1053.82							
C22:6	TRIDOCOSAHEXAENOIN	T-310				90.00	250.00	375.00
	DIDOCOSAHEXAENOIN	D-311				90.00	250.00	375.00
△ 4-7-10	MONODOCOSAHEXAENOIN	M-314				90.00	275.00	425.00
13-16-19	M.W. 1023.82							

## GLYCERIDES - UNSATURATED

### Tri's - Di's - Mono's

CHAIN	GLYCERIDE	CODE	10MG	25MG	50MG	100MG	500MG	1GM
C24:1	TRITETRACOSENOIN (NERVONIN)	T-315				80.00	110.00	180.00
	DINERVONIN	D-316				80.00		
	1-3 ISOMER	D-317	35.00	45.00	55.00	85.00		
	MONONERVONIN	M-319				80.00		
△ 15 cis	M.W. 1137.98							

## FATTY ALCOHOLS

Fatty alcohols, or as they are sometimes called, higher alcohols, are monohydric aliphatic alcohols containing a large number of carbon atoms terminating with a hydroxyl group. They have many uses both commercially and in research, especially in the field of detergents and plasticizers.

Nu-Chek Fatty Alcohols are prepared by the reduction of the chromatographically pure methyl ester. Trace impurities are removed by high vacuum fractional distillation. The final product is analyzed both by GLC and TLC and only those fractions which meet our rigid purity specifications are designated for product availability.

### SATURATED SERIES

CHAIN	ALCOHOL	CODE	100MG	500MG	1GM	5GM	10GM	25GM
C8:0	OCTANOL M.W. 130.20	A-608	15.00	20.00	25.00	70.00	110.00	225.00
C9:0	NONANOL M.W. 144.20	A-609	25.00	35.00	50.00			
C10:0	DECANOL M.W. 158.27	A-610	15.00	20.00	25.00	70.00	110.00	225.00
C11:0	UNDECANOL M.W. 172.30	A-611	30.00	35.00	50.00			
C12:0	LAURYL M.W. 184.33	A-612	15.00	20.00	25.00	70.00	110.00	225.00
C13:0	TRIDECANOL M.W. 200.33	A-613	25.00	35.00	50.00			
C14:0	MYRISTYL M.W. 214.36	A-614	15.00	20.00	25.00	70.00	110.00	225.00
C15:0	PENTADECANOL M.W. 228.40	A-615	30.00	40.00	55.00			
C16:0	PALMITYL M.W. 242.42	A-616	15.00	20.00	25.00	70.00	110.00	225.00
C17:0	HEPTADECANOL M.W. 256.46	A-617	40.00	50.00	65.00			
C18:0	STEARYL M.W. 270.46	A-618	15.00	20.00	25.00	70.00	110.00	225.00
C18:0	12-HYDROXY STEARYL M.W. 286.46	A-619	40.00	50.00	65.00			

**FATTY ALCOHOLS**  
**(All Greater Than 99% Unless Otherwise Indicated)**  
**SATURATED SERIES**

CHAIN	ALCOHOL	CODE	100MG	500MG	1GM	5GM	10GM	25GM
C19:0	NONADECANOL M.W. 284.50	A-620	40.00	50.00	65.00	275.00	500.00	
C20:0	ARACHIDYL M.W. 298.52	A-621	30.00	35.00	45.00	180.00	325.00	
C21:0	HENEICOSANOL M.W. 312.54	A-622	65.00	85.00	100.00			
C22:0	BEHENYL M.W. 326.56	A-623	30.00	35.00	45.00	180.00	325.00	
C23:0	TRICOSANOL M.W. 340.60	A-624	65.00	85.00	100.00			
C24:0	LIGNOCEROL M.W. 354.62	A-625	65.00	85.00	100.00			

**FATTY ALCOHOLS**  
**(All Greater Than 99% Unless Otherwise Indicated)**  
**UNSATURATED SERIES**

CHAIN	ALCOHOL	CODE	100MG	500MG	1GM	5GM	10GM	25GM
C11:1	△ 10-UNDECENOL M.W. 170.30	A-626	30.00	40.00	55.00			
C12:1	△ 11-DODECENOL M.W. 184.33	A-627	45.00					
C13:1	△ 12-TRIDECENOL M.W. 198.33	A-628	50.00					
C14:1	△ 9 MYRISTOLEYL (TETRADECENOL) M.W. 212.36	A-629	80.00	225.00	275.00			
C14:1T	△ 9 TRANS-MYRISTELAIDYL M.W. 212.36	A-630	125.00					
C15:1	△ 10 PENTADECENOL M.W. 226.40	A-631	175.00					
C15:1T	△ 10 TRANS-PENTADECENOL M.W. 226.40	A-632	225.00					
C16:1	△ 9 PALMITOLEYL M.W. 240.42	A-633	35.00	45.00	60.00	230.00	460.00	1000.00
C16:1T	△ 9 TRANS-PALMITELAIDYL M.W. 240.42	A-634	40.00	55.00	70.00	280.00	560.00	1250.00

**FATTY ALCOHOLS**  
**(All Greater Than 99% Unless Otherwise Indicated)**  
**UNSATURATED SERIES**

CHAIN	ALCOHOL	CODE	100MG	500MG	1GM	5GM	10GM	25GM
C17:1	△ 10 HEPTADECENOL M.W. 254.46	A-635	<b>65.00</b>	<b>95.00</b>				
C17:1T	△ 10 TRANS-HEPTADECENOL M.W. 254.46	A-636	<b>75.00</b>	<b>110.00</b>				
C18:1	△ 9 OLEYL M.W. 268.46	A-637	<b>25.00</b>	<b>30.00</b>	<b>35.00</b>	<b>130.00</b>	<b>225.00</b>	<b>400.00</b>
C18:1T	△ 9 ELAIDYL M.W. 268.46	A-638	<b>35.00</b>	<b>45.00</b>	<b>65.00</b>			
C18:1	△ 6 PETROSELINYL M.W. 268.46	A-639	<b>35.00</b>	<b>45.00</b>	<b>65.00</b>			
C18:1T	△ 6 PETROSELAIDYL M.W. 268.46	A-640	<b>55.00</b>	<b>65.00</b>	<b>85.00</b>			
C18:1	△ 9-12 OH RICINOLEYL M.W. 284.46	A-641	<b>35.00</b>	<b>45.00</b>	<b>65.00</b>			
C18:1T	△ 9-12 OH RICINELAIDYL M.W. 284.46	A-642	<b>55.00</b>					
C18:1	△ 11 VACCENYL M.W. 268.46	A-643	<b>50.00</b>	<b>80.00</b>	<b>125.00</b>			
C18:1T	△ 11 TRANS-VACCENYL M.W. 268.46	A-644	<b>75.00</b>	<b>110.00</b>	<b>200.00</b>			
C18:2	△ 9-12 LINOLEYL M.W. 266.45	A-645	<b>25.00</b>	<b>30.00</b>	<b>35.00</b>	<b>130.00</b>	<b>225.00</b>	<b>400.00</b>
C18:2TT	△ 9-12 TRANS-LINOELAIDYL M.W. 266.45	A-646	<b>30.00</b>	<b>40.00</b>	<b>60.00</b>			
C18:3	△ 9-12-15 ALPHA LINOLENYL M.W. 264.44	A-647	<b>35.00</b>	<b>45.00</b>	<b>65.00</b>	<b>300.00</b>	<b>500.00</b>	
C18:3	△ 6-9-12 GAMMA LINOLENYL M.W. 264.44	A-648	<b>55.00</b>	<b>90.00</b>	<b>150.00</b>			
C19:1	△ 7-NONADECENYL M.W. 282.46	A-665	<b>85.00</b>					
C19:1T	△ 7-TRANS-NONADECENYL M.W. 282.46	A-666	<b>125.00</b>					

**FATTY ALCOHOLS**  
**(All Greater Than 99% Unless Otherwise Indicated)**  
**UNSATURATED SERIES**

CHAIN	ALCOHOL	CODE	100MG	500MG	1GM	5GM	10GM	25GM
C19:1	△ 10-NONADECENYL M.W. 282.46	A-667	65.00	90.00	150.00			
C19:1T	△ 10-TRANS-NONADECENYL M.W. 282.46	A-668	85.00	110.00	200.00			
C19:2	△ 10-13 NONADECADIENYL M.W. 280.46	A-671	85.00					
C20:1	△ 11-EICOSENOL M.W. 296.52	A-649	35.00	45.00	65.00			
C20:2	△ 11-14 EICOSADIENOL M.W. 294.52	A-650	55.00	65.00	85.00			
C20:3	△ 11-14-17 EICOSATRIENOL M.W. 292.51	A-651	55.00	65.00	90.00			
C20:3	△ 8-11-14 HOMO GAMMA LINOLENYL A-652 M.W. 292.51		10MG 40.00	25MG 55.00	50MG 70.00	100MG 85.00		
C20:4	△ 5-8-11-14 ARACHIDONYL M.W. 290.52	A-654	65.00	110.00	180.00	725.00	1375.00	3500.00
C20:5	△ 5-8-11-14-17 EICOSAPENTAENOL M.W. 288.52	A-655	135.00					
C22:1	△ 13 ERUCYL M.W. 324.56	A-657	35.00	45.00	60.00	240.00	460.00	
C22:1T	△ 13 BRASSIDYL M.W. 324.56	A-658	60.00	65.00	80.00	360.00	625.00	
C22:2	△ 13-16 DOCOSADIENOL M.W. 322.54	A-659	85.00					
C22:3	△ 13-16-19 DOCOSATRIENOL M.W. 320.53	A-660	85.00					
C22:4	△ 7-10-13-16 DOCOSATETRAENOL M.W. 318.52	A-661	85.00					
C22:5	△ 7-10-13-16-19 DOCOSAPENTAENOL M.W. 316.52	A-656	175.00					
C22:6	△ 4-7-10-13-16-19 DOCOSAHEXAENOL A-662 M.W. 314.50		65.00	110.00	180.00	725.00	1375.00	3500.00
C23:1	△ 14 TRICOSENOL M.W. 338.60	A-663	95.00					
C24:1	△ 15 NERVONYL M.W. 352.62	A-664	80.00					

**FATTY ACETATES**  
**(All Greater Than 99%, Unless Otherwise Indicated)**  
**SATURATED SERIES**

CHAIN	ACETATE	CODE	100MG	500MG	1GM
C8:0	OCTANYL M.W. 178.25	AC-705	10.00	15.00	20.00
C9:0	NONANYL M.W. 186.25	AC-706	20.00	30.00	45.00
C10:0	DECANYL M.W. 200.32	AC-707	10.00	15.00	20.00
C11:0	UNDECANYL M.W. 214.35	AC-708	20.00	30.00	45.00
C12:0	LAURYL M.W. 228.38	AC-709	10.00	15.00	20.00
C13:0	TRIDEDECANYL M.W. 242.38	AC-710	25.00	35.00	55.00
C14:0	MYRISTYL M.W. 256.41	AC-711	10.00	15.00	20.00
C15:0	PENTADECANYL M.W. 270.45	AC-712	30.00	40.00	60.00
C16:0	PALMITYL M.W. 284.47	AC-713	10.00	15.00	20.00
C17:0	HEPTADECANYL M.W. 298.51	AC-714	30.00	40.00	60.00
C18:0	STEARYL M.W. 312.51	AC-715	10.00	15.00	20.00
C19:0	NONADECANYL M.W. 326.55	AC-716	30.00	40.00	60.00
C20:0	ARACHIDYL M.W. 340.57	AC-717	15.00	25.00	30.00
C21:0	HENEICOSANYL M.W. 354.59	AC-718	50.00	70.00	85.00

**FATTY ACETATES**  
**(All Greater Than 99%, Unless Otherwise Indicated)**  
**SATURATED SERIES**

CHAIN	ACETATE	CODE	100MG	500MG	1GM
C22:0	BEHENYL M.W. 368.61	AC-719	15.00	25.00	30.00
C23:0	TRICOSANYL M.W. 382.65	AC-720	50.00	65.00	85.00
C24:0	LIGNOCERYL M.W. 396.67	AC-721	50.00	65.00	85.00

**FATTY ACETATES**  
**(All Greater Than 99%, Unless Otherwise Indicated)**  
**UNSATURATED SERIES**

CHAIN	ACETATE	CODE	100MG	500MG	1GM
C11:1	△ 10-UNDECENYL M.W. 212.35	AC-722	20.00	30.00	45.00
C12:1	△ 11-DODECENYL M.W. 226.38	AC-723	40.00		
C13:1	△ 12-TRIDEcenYL M.W. 240.38	AC-724	45.00		
C14:1	△ 9 MYRISTOLEYL M.W. 254.41	AC-725	150.00		
C15:1	△ 10 PENTADECENYL M.W. 268.45	AC-727	225.00		
C16:1	△ 9 PALMITOLEYL M.W. 282.47	AC-729	25.00	35.00	50.00
C16:1T	△ 9 PALMITELAIDYL M.W. 282.47	AC-730	30.00	45.00	60.00
C17:1	△ 10 HEPTADECENYL M.W. 296.51	AC-731	65.00		
C17:1T	△ 10 TRANS-HEPTADECENYL M.W. 296.51	AC-732	80.00		
C18:1	△ 9 OLEYL M.W. 310.51	AC-733	15.00	20.00	25.00
C18:1T	△ 9 ELAIDYL M.W. 310.51	AC-734	25.00	35.00	55.00
C18:1	△ 6 PETROSELINYL M.W. 310.51	AC-735	25.00	35.00	55.00
C18:1T	△ 6 PETROSELAIDYL M.W. 310.51	AC-736	50.00		

## UNSATURATED FATTY ACETATES (Cont.)

CHAIN	ACETATE	CODE	100MG	500MG	1GM	
C18:1	△ 11 VACCENYL M.W. 310.51	AC-739	40.00	55.00	80.00	
C18:1T	△ 11 TRANS VACCENYL M.W. 310.51	AC-740	60.00	85.00	150.00	
C18:2	△ 9-12 LINOLEYL M.W. 310.51	AC-741	15.00	20.00	25.00	
C18:2TT	△ 9 -12 LINOLEAIDYL M.W. 308.51	AC-742	25.00	35.00	55.00	
C18:3	△ 9-12-15 ALPHA LINOLENYL M.W. 306.51	AC-743	25.00	40.00	55.00	
C18:3	△ 6-9-12 GAMMA LINOLENYL M.W. 306.51	AC-744	50.00	85.00	125.00	
C20:1	△ 11-EICOSENYL M.W. 338.57	AC-745	25.00	35.00	55.00	
C20:2	△ 11-14 EICOSADIENYL M.W. 336.57	AC-746	45.00	55.00	75.00	
C20:3	△ 11-14-17 EICOSATRIENYL M.W. 334.57	AC-747	45.00	55.00	75.00	
C20:3	△ 8-11-14 HOMO GAMMA LINOLENYL M.W. 334.57	AC-748	10MG 40.00	25MG 50.00	50MG 55.00	100MG 75.00
C20:4	△ 5-8-11-14 ARACHIDONYL M.W. 332.57	AC-750	70.00			
C22:1	△ 13 ERUCYL M.W. 366.81	AC-753	25.00	35.00	55.00	
C22:1T	△ 13 BRASSIDYL M.W. 366.81	AC-754	45.00			
C22:2	△ 13-16 DOCOSADIENYL M.W. 364.81	AC-755	75.00			
C22:6	△ 4-7-10-13-16-19 DOCOSAHEXAENYL M.W. 356.81	AC-758	65.00			
C23:1	△ 14 TRICOSENOL M.W. 380.65	AC-759	60.00			
C24:1	△ 15 NERVONYL M.W. 394.65	AC-760	60.00			

## CHOLESTEROL (Lipid Derivatives)

Our cholesterol esters are prepared by the interaction of the appropriate chromatographically pure methyl ester and highly purified cholesterol. Further purification is followed by column chromatography and low temperature crystallization. Only those fractions which show no residuals (even with large overloads) are isolated, sealed in glass under vacuum and stored under cold conditions until ready for shipment.

### SATURATED SERIES All Greater Than 99%, Unless Otherwise Indicated

CHAIN		CODE	MOL. WT.	100MG	500MG	1GM
	CHOLESTEROL	CH-800	386.70	20.00	25.00	30.00
C2:0	CHOLESTEROL ACETATE	CH-801	428.70	20.00	25.00	30.00
C4:0	CHOLESTERYL BUTYRATE	CH-803	456.80	30.00	40.00	50.00
C5:0	CHOLESTERYL VALERATE	CH-804	470.80	30.00	40.00	50.00
C5:0	CHOLESTERYL ISOVALERATE	CH-804X	470.80	30.00	50.00	60.00
C6:0	CHOLESTERYL CAPROATE	CH-805	484.80	30.00	40.00	50.00
C7:0	CHOLESTERYL HEPTANOATE	CH-806	498.80	30.00	40.00	50.00
C8:0	CHOLESTERYL CAPRYLATE	CH-807	512.80	30.00	40.00	50.00
C9:0	CHOLESTERYL NONANOATE	CH-808	526.90	30.00	40.00	50.00
C10:0	CHOLESTERYL CAPRATE	CH-809	540.90	30.00	40.00	50.00
C11:0	CHOLESTERYL UNDECANOATE	CH-810	555.00	30.00	40.00	50.00
C12:0	CHOLESTERYL LAURATE	CH-811	569.00	30.00	40.00	50.00
C13:0	CHOLESTERYL TRIDEcanoate	CH-812	583.00	30.00	40.00	50.00
C14:0	CHOLESTERYL MYRISTATE	CH-813	597.00	30.00	40.00	50.00
C15:0	CHOLESTERYL PENTADECANOATE	CH-814	611.10	30.00	40.00	50.00
C16:0	CHOLESTERYL PALMITATE	CH-815	625.10	30.00	40.00	50.00
C17:0	CHOLESTERYL HEPTADECANOATE	CH-816	639.10	30.00	50.00	60.00
C18:0	CHOLESTERYL STEARATE	CH-817	653.10	30.00	40.00	50.00
C19:0	CHOLESTERYL NONADECANOATE	CH-818	667.20	30.00	50.00	60.00
C20:0	CHOLESTERYL ARACHIDATE	CH-819	681.20	30.00	45.00	55.00
C21:0	CHOLESTERYL HENEICOSANOATE	CH-820	695.20	60.00	150.00	180.00
C22:0	CHOLESTERYL BEHENATE	CH-821	709.20	30.00	45.00	55.00
C23:0	CHOLESTERYL TRICOSANOATE	CH-822	723.30	55.00	150.00	180.00
C24:0	CHOLESTERYL LIGNOCERATE	CH-823	737.30	70.00	150.00	210.00

**UNSATURATED SERIES**  
**(All greater than 99% unless otherwise indicated.)**

CHAIN		CODE	MOL WT.	100MG	500MG	1GM	
C14:1	CHOLESTERYL MYRISTOLEATE	CH-824	595.10	250.00			
C14:1T	CHOLESTERYL MYRISTELAIDATE	CH-825	595.10	300.00			
C16:1	CHOLESTERYL PALMITOLEATE	CH-826	623.10	35.00	45.00	60.00	
C16:1T	CHOLESTERYL PALMITELAIDATE	CH-827	623.10	55.00	80.00	100.00	
C18:1	CHOLESTERYL OLEATE	CH-828	651.10	35.00	45.00	60.00	
C18:1T	CHOLESTERYL ELAIDATE	CH-829	651.10	40.00	50.00	65.00	
C18:1	CHOLESTERYL PETROSELINATE	CH-830	651.10	35.00	50.00	65.00	
C18:1T	CHOLESTERYL PETROSELAIDATE	CH-831	651.10	60.00	85.00	140.00	
C18:1	CHOLESTERYL VACCENATE (CIS)	CH-832	651.10	50.00	65.00	90.00	
C18:1T	CHOLESTERYL VACCENATE (TRANS)	CH-833	651.10	85.00	175.00	250.00	
C18:2	CHOLESTERYL LINOLEATE	CH-836	649.10	35.00	45.00	60.00	
C18:2TT	CHOLESTERYL LINOELAIDATE	CH-837	649.10	40.00	50.00	65.00	
C18:3	CHOLESTERYL ALPHA LINOLENATE	CH-838	647.10	45.00	55.00	65.00	
C18:3	CHOLESTERYL GAMMA LINOLENATE	CH-839	647.10	70.00			
C20:1	CHOLESTERYL 11-EICOSENOATE	CH-840	679.20	40.00	50.00	60.00	
C20:2	CHOLESTERYL 11-14 EICOSADIENOATE	CH-841	677.20	45.00	60.00	75.00	
C20:3	CHOLESTERYL 11-14-17 EICOSATRIENOATE	CH-842	675.20	45.00	65.00	90.00	
C20:3	CHOLESTERYL HOMO GAMMA LINOLENATE	CH-843	675.20	10MG 45.00	25MG 55.00	50MG 65.00	100MG 95.00
C20:4	CHOLESTERYL ARACHIDONATE	CH-845	673.10	65.00	250.00	475.00	
C20:5	CHOLESTERYL EICOSAPENTAENOATE	CH-846	671.20	160.00			
C22:1	CHOLESTERYL ERUCATE	CH-848	707.20	35.00	45.00	60.00	
C22:1T	CHOLESTERYL BRASSIDATE	CH-849	707.20	55.00			
C22:5	CHOLESTERYL DOCOSAPENTAENOATE	CH-856	699.30	185.00			
C24:1	CHOLESTERYL NERVONATE	CH-855	735.30	45.00	55.00	70.00	

C INDICATES CHAIN LENGTH

**OTHER CHOLESTERYL ESTERS AVAILABLE UPON REQUEST.**

**ALKYL METHANE SULFONATES**  
**( $\text{ROSO}_2\text{CH}_3$ )**  
**SATURATED SERIES**  
**All Greater Than 99%**

CHAIN	ITEM	CODE	100MG	500MG	1GM	5GM	10GM	25GM
C6:0	HEXYL	MY-1000	10.00	25.00	45.00			
C7:0	HEPTYL	MY-1001	10.00	25.00	45.00			
C8:0	OCTYL	MY-1002	10.00	25.00	45.00	110.00	180.00	300.00
C9:0	NONYL	MY-1003	25.00	45.00	60.00			
C10:0	DECYL	MY-1004	15.00	25.00	30.00	110.00	180.00	300.00
C11:0	UNDECYL	MY-1005	30.00	40.00	50.00			
C12:0	DODECYL	MY-1006	15.00	25.00	30.00	110.00	180.00	300.00
C13:0	TRIDECYL	MY-1007	25.00	45.00	60.00			
C14:0	TETRADECYL	MY-1008	15.00	25.00	30.00	110.00	180.00	300.00
C15:0	PENTADECYL	MY-1009	25.00	45.00	60.00			
C16:0	HEXADECYL	MY-1010	15.00	25.00	30.00	110.00	180.00	300.00
C17:0	HEPTADECYL	MY-1011	40.00	55.00	75.00			
C18:0	OCTADECYL	MY-1012	15.00	25.00	30.00	110.00	180.00	300.00
C19:0	NONADECYL	MY-1013	40.00	55.00	75.00			
C20:0	EICOSYL	MY-1014	30.00	40.00	55.00	110.00	180.00	300.00
C21:0	HENEICOSYL	MY-1015	70.00	95.00	125.00			
C22:0	DOCOSYL	MY-1016	30.00	40.00	55.00	110.00	180.00	300.00

**ALKYL METHANE SULFONATES**  
**( $\text{ROSO}_2\text{CH}_3$ )**  
**UNSATURATED SERIES**

CHAIN	ITEM	CODE	100MG	500MG	1GM	5GM	10GM	25GM
C11:1	10-UNDECENYL	MY-1040	35.00	55.00	80.00			
C14:1	MYRISTOLEYL	MY-1017	100.00	250.00	350.00			
C14:1T	MYRISTELAIDYL	MY-1018	125.00	350.00	500.00			
C16:1	PALMITOLEYL	MY-1019	40.00	50.00	65.00			
C16:1T	PALMITELAIDYL	MY-1020	45.00	65.00	90.00			
C18:1	OLEYL	MY-1021	30.00	35.00	40.00	150.00	250.00	425.00
C18:1T	ELAIDYL	MY-1022	40.00	50.00	75.00			
C18:1	VACCENYL (CIS)	MY-1023	65.00	90.00	125.00			
C18:1T	VACCENYL (TRANS)	MY-1024	85.00	110.00	200.00			
C18:1	PETROSELINYL	MY-1025	40.00	50.00	75.00			
C18:1T	PETROSELAIIDYL	MY-1026	65.00	80.00	110.00			
C18:2	LINOLEYL	MY-1029	30.00	35.00	40.00	150.00	250.00	425.00
C18:2TT	LINOELAIDYL	MY-1030	35.00	45.00	65.00			
C18:3	ALPHA LINOLENYL	MY-1031	40.00	50.00	75.00	300.00	550.00	1200.00
C18:3	GAMMA LINOLENYL	MY-1050	65.00	100.00	150.00			
C20:1	11-EICOSENYL	MY-1032	40.00	50.00	75.00			
C20:2	11-14 EICOSADIENYL	MY-1033	60.00	75.00	95.00			
C20:3	11-14-17 EICOSATRIENYL	MY-1034	60.00	75.00	95.00			
C20:4	ARACHIDONYL	MY-1035	75.00	150.00	200.00	850.00	1600.00	
C22:1	ERUCYL	MY-1037	40.00	50.00	65.00			
C22:6	DOCOSAHEXAENOYL	MY-1038	70.00	125.00	200.00	850.00	1600.00	
C24:1	NERVONYL	MY-1039	85.00	100.00	150.00			

C INDICATES CHAIN LENGTH

**OTHER ALKYL METHANE SULFONATES OF OUR FATTY ACIDS  
AVAILABLE UPON REQUEST.**

# SOAPs

## All Greater Than 99%

CHAIN	SODIUM DERIVATIVE OF	CODE	100MG	500MG	1GM	5GM	10GM	25GM
C3:0	PROPIONATE	S-1138	15.00	25.00	30.00			
C4:0	BUTYRATE	S-1139	15.00	25.00	30.00			
C5:0	VALERATE	S-1140	15.00	25.00	30.00			
C6:0	CAPROATE	S-1100	15.00	25.00	30.00	60.00	80.00	100.00
C7:0	HEPTANOATE	S-1141	15.00	25.00	35.00			
C8:0	CAPRYLATE	S-1101	15.00	20.00	25.00	50.00	70.00	135.00
C9:0	NONANOATE	S-1102	15.00	25.00	30.00			
C10:0	CAPRATE	S-1103	15.00	20.00	25.00	50.00	70.00	135.00
C11:0	UNDECANOATE	S-1104	15.00	25.00	35.00			
C12:0	LAURATE	S-1105	15.00	20.00	25.00	50.00	70.00	135.00
C13:0	TRIDEcanoate	S-1106	15.00	25.00	35.00			
C14:0	MYRISTATE	S-1107	15.00	20.00	25.00	50.00	70.00	135.00
C15:0	PENTADECANOATE	S-1108	20.00	25.00	35.00			
C16:0	PALMITATE	S-1109	15.00	20.00	25.00	50.00	70.00	135.00
C17:0	HEPTADECANOATE	S-1110	20.00	25.00	40.00			
C18:0	STEARATE	S-1111	15.00	20.00	25.00	50.00	70.00	135.00
C19:0	NONADECANOATE	S-1112	20.00	30.00	45.00			
C20:0	ARACHIDATE	S-1113	20.00	30.00	35.00			
C21:0	HENEICOSANOATE	S-1114	50.00					
C22:0	BEHENATE	S-1115	20.00	30.00	40.00			
C11:1	10-UNDECENOATE	S-1142	45.00					
C14:1	MYRISTOLEATE	S-1116	175.00					
C14:1T	MYRISTELAIDATE	S-1117	225.00					
C16:1	PALMITOLEATE	S-1118	30.00	40.00	55.00			
C16:1T	PALMITELAIDATE	S-1119	45.00					
C18:1	OLEATE	S-1120	25.00	30.00	35.00			
C18:1T	ELAIDATE	S-1121	30.00	40.00	50.00			
C18:1	VACCENATE (CIS)	S-1122	45.00	65.00	95.00			
C18:1T	VACCENATE (TRANS)	S-1123	75.00					
C18:1	RICINOLEATE	S-1124	30.00	40.00	55.00			
C18:1T	RICINELAIDATE	S-1125	65.00	75.00	135.00			
C18:1	PETROSELINATE	S-1126	30.00	40.00	55.00			
C18:2	LINOLEATE	S-1127	25.00	30.00	35.00			
C18:2TT	LINOELAIDATE	S-1128	30.00	40.00	55.00			
C18:3	ALPHA LINOLENATE	S-1129	30.00	45.00	60.00			
C20:1	11-EICOSENOATE	S-1130	30.00	40.00	55.00			
C20:2	11-14 EICOSADIENOATE	S-1131	50.00	65.00	85.00			
C20:3	HOMOGAMMA LINOLENATE	S-1143	70.00	160.00	225.00			
C20:3	11-14-17 EICOSATRIENOATE	S-1132	50.00	70.00	95.00			
			10 MG	25MG	50MG	100MG	500 MG	1 GM
C20:4	ARACHIDONATE	S-1133	20.00	40.00	60.00	75.00	150.00	225.00
C20:5	EICOSAPENTAENOATE	S-1144	35.00	50.00	80.00	150.00		
C22:5 N3	DOCOSAPENTAENOATE	S-1145	55.00	100.00	180.00	275.00		
C22:5 N6	DOCOSAPENTAENOATE	S-1147	80.00	150.00	200.00	325.00		
C22:2	DOCOSADIENOATE	S-1148	55.00	80.00	135.00			
C22:3	DOCOSATRIENOATE	S-1149	55.00	80.00	135.00			
C22:4	DOCOSATETRAENOATE	S-1150	55.00	80.00	150.00			
C22:1	ERUCATE	S-1135	30.00	35.00	50.00			
C24:1	NERVONATE	S-1137	30.00	40.00	55.00			

**OTHER SOAPS OF OUR FATTY ACIDS AVAILABLE UPON REQUEST.**

Exact Weights may be obtained if desired with an additional \$3.50 service charge per vial. State exact weight when ordering.

## WAX ESTERS

### SATURATED SERIES

ITEM	CODE	100MG	500MG	1GM
LAURYL LAURATE	WE-1301	30.00	45.00	60.00
LAURYL MYRISTATE	WE-1302	30.00	45.00	60.00
LAURYL PALMITATE	WE-1303	30.00	45.00	60.00
LAURYL STEARATE	WE-1304	30.00	45.00	60.00
LAURYL ARACHIDATE	WE-1305	30.00	45.00	60.00
LAURYL BEHENATE	WE-1306	30.00	45.00	60.00
MYRISTYL LAURATE	WE-1307	30.00	45.00	60.00
MYRISTYL MYRISTATE	WE-1308	30.00	45.00	60.00
MYRISTYL PALMITATE	WE-1309	30.00	45.00	55.00
MYRISTYL STEARATE	WE-1310	30.00	45.00	55.00
MYRISTYL ARACHIDATE	WE-1311	30.00	45.00	60.00
MYRISTYL BEHENATE	WE-1312	30.00	45.00	60.00
PALMITYL LAURATE	WE-1313	30.00	45.00	55.00
PALMITYL MYRISTATE	WE-1314	30.00	45.00	55.00
PALMITYL PALMITATE	WE-1315	30.00	45.00	55.00
PALMITYL STEARATE	WE-1316	30.00	45.00	55.00
PALMITYL ARACHIDATE	WE-1317	30.00	45.00	60.00
PALMITYL BEHENATE	WE-1318	30.00	45.00	60.00
HEPTADECANYL HEPTADECANOATE	WE-1717	65.00	95.00	160.00
HEPTADECANYL STEARATE	WE-1718	50.00	65.00	90.00
STEARYL LAURATE	WE-1319	30.00	45.00	55.00
STEARYL MYRISTATE	WE-1320	30.00	45.00	55.00
STEARYL PALMITATE	WE-1321	30.00	45.00	55.00
STEARYL STEARATE	WE-1322	30.00	45.00	55.00
STEARYL ARACHIDATE	WE-1323	30.00	45.00	60.00
STEARYL BEHENATE	WE-1324	30.00	45.00	60.00
ARACHIDYL LAURATE	WE-1325	35.00	45.00	60.00
ARACHIDYL MYRISTATE	WE-1326	35.00	45.00	60.00
ARACHIDYL PALMITATE	WE-1327	35.00	45.00	60.00
ARACHIDYL STEARATE	WE-1328	35.00	45.00	60.00
ARACHIDYL ARACHIDATE	WE-1329	35.00	45.00	60.00
ARACHIDYL BEHENATE	WE-1330	35.00	45.00	60.00
BEHENYL LAURATE	WE-1331	35.00	45.00	60.00
BEHENYL MYRISTATE	WE-1332	35.00	45.00	60.00
BEHENYL PALMITATE	WE-1333	35.00	45.00	60.00
BEHENYL STEARATE	WE-1334	35.00	45.00	60.00
BEHENYL ARACHIDATE	WE-1335	35.00	45.00	60.00
BEHENYL BEHENATE	WE-1336	35.00	45.00	60.00
BEHENYL LIGNOCERATE	WE-2224	50.00	65.00	90.00
LIGNOCERYL LIGNOCERATE	WE-2424	50.00	65.00	90.00

## UNSATURATED SERIES

ITEM	CODE	100MG	500MG	1GM
LAURYL PALMITOLEATE	WE-1338	35.00	45.00	60.00
LAURYL OLEATE	WE-1339	30.00	45.00	60.00
LAURYL LINOLEATE	WE-1340	30.00	45.00	60.00

## UNSATURATED SERIES

ITEM	CODE	100MG	500MG	1GM
LAURYL LINOLENATE	WE-1341	35.00	45.00	60.00
LAURYL ARACHIDONATE	WE-1342	60.00		
LAURYL MYRISTOLEATE	WE-1343	275.00		
MYRISTYL PALMITOLEATE	WE-1344	35.00	45.00	60.00
MYRISTYL OLEATE	WE-1345	30.00	45.00	55.00
MYRISTYL LINOLEATE	WE-1346	30.00	45.00	55.00
MYRISTYL LINOLENATE	WE-1347	35.00	45.00	60.00
MYRISTYL ARACHIDONATE	WE-1348	60.00		
PALMITYL MYRISTOLEATE	WE-1349	250.00		
PALMITYL PALMITOLEATE	WE-1350	30.00	45.00	55.00
PALMITYL OLEATE	WE-1351	30.00	45.00	55.00
PALMITYL LINOLEATE	WE-1352	35.00	45.00	60.00
PALMITYL LINOLENATE	WE-1353	55.00		
PALMITYL ARACHIDONATE	WE-1354	65.00		
STEARYL MYRISTOLEATE	WE-1355	250.00		
STEARYL PALMITOLEATE	WE-1356	35.00	45.00	60.00
STEARYL OLEATE	WE-1357	30.00	45.00	55.00
STEARYL LINOLEATE	WE-1358	30.00	45.00	55.00
STEARYL LINOLENATE	WE-1359	35.00	45.00	60.00
STEARYL ARACHIDONATE	WE-1360	65.00		
ARACHIDYL MYRISTOLEATE	WE-1361	250.00		
ARACHIDYL PALMITOLEATE	WE-1362	35.00	45.00	60.00
ARACHIDYL OLEATE	WE-1363	30.00	45.00	60.00
ARACHIDYL LINOLEATE	WE-1364	30.00	45.00	60.00
ARACHIDYL LINOLENATE	WE-1365	35.00	45.00	60.00
ARACHIDYL ARACHIDONATE	WE-1366	65.00		
BEHENYL MYRISTOLEATE	WE-1367	250.00		
BEHENYL PALMITOLEATE	WE-1368	35.00	45.00	55.00
BEHENYL OLEATE	WE-1369	30.00	40.00	55.00
BEHENYL LINOLEATE	WE-1370	30.00	40.00	55.00
BEHENYL LINOLENATE	WE-1371	35.00	45.00	55.00
BEHENYL ARACHIDONATE	WE-1372	65.00		
MYRISTOLEYL LAURATE	WE-1373	250.00		
MYRISTOLEYL MYRISTATE	WE-1374	250.00		
MYRISTOLEYL PALMITATE	WE-1375	250.00		
MYRISTOLEYL STEARATE	WE-1376	250.00		
MYRISTOLEYL ARACHIDATE	WE-1377	250.00		
MYRISTOLEYL BEHENATE	WE-1378	250.00		
MYRISTOLEYL MYRISTOLEATE	WE-1379	250.00		
MYRISTOLEYL PALMITOLEATE	WE-1380	250.00		
MYRISTOLEYL OLEATE	WE-1381	250.00		
MYRISTOLEYL LINOLEATE	WE-1382	250.00		
MYRISTOLEYL LINOLENATE	WE-1383	250.00		
MYRISTOLEYL ARACHIDONATE	WE-1384	250.00		
PALMITOLEYL LAURATE	WE-1385	35.00	45.00	60.00
PALMITOLEYL MYRISTATE	WE-1386	35.00	45.00	60.00

## UNSATURATED SERIES

ITEM	CODE	100MG	500MG	1GM
PALMITOLEYL PALMITATE	WE-1387	35.00	45.00	60.00
PALMITOLEYL STEARATE	WE-1388	35.00	45.00	60.00
PALMITOLEYL ARACHIDATE	WE-1389	40.00	50.00	60.00
PALMITOLEYL BEHENATE	WE-1390	40.00	50.00	60.00
PALMITOLEYL MYRISTOLEATE	WE-1391	275.00		
PALMITOLEYL PALMITOLEATE	WE-1392	40.00	50.00	60.00
PALMITOLEYL OLEATE	WE-1393	35.00	45.00	60.00
PALMITOLEYL LINOLEATE	WE-1394	35.00	45.00	60.00
PALMITOLEYL LINOLENATE	WE-1395	40.00	45.00	60.00
PALMITOLEYL ARACHIDONATE	WE-1396	65.00	200.00	275.00
OLEYL LAURATE	WE-1397	30.00	45.00	55.00
OLEYL MYRISTATE	WE-1398	30.00	45.00	55.00
OLEYL PALMITATE	WE-1399	30.00	45.00	55.00
OLEYL STEARATE	WE-1400	30.00	45.00	55.00
OLEYL ARACHIDATE	WE-1401	30.00	45.00	55.00
OLEYL BEHENATE	WE-1402	30.00	45.00	55.00
OLEYL MYRISTOLEATE	WE-1403	275.00		
OLEYL PALMITOLEATE	WE-1404	30.00	45.00	55.00
OLEYL OLEATE	WE-1405	30.00	45.00	55.00
OLEYL LINOLEATE	WE-1406	30.00	45.00	55.00
OLEYL LINOLENATE	WE-1407	35.00	45.00	60.00
OLEYL ARACHIDONATE	WE-1408	65.00	200.00	275.00
LINOLEYL LAURATE	WE-1409	30.00	45.00	55.00
LINOLEYL MYRISTATE	WE-1410	30.00	45.00	55.00
LINOLEYL PALMITATE	WE-1411	30.00	45.00	55.00
LINOLEYL STEARATE	WE-1412	30.00	45.00	55.00
LINOLEYL ARACHIDATE	WE-1413	30.00	45.00	55.00
LINOLEYL BEHENATE	WE-1414	30.00	45.00	55.00
LINOLEYL MYRISTOLEATE	WE-1415	275.00		
LINOLEYL PALMITOLEATE	WE-1416	30.00	45.00	55.00
LINOLEYL OLEATE	WE-1417	30.00	45.00	55.00
LINOLEYL LINOLEATE	WE-1418	30.00	45.00	55.00
LINOLEYL LINOLENATE	WE-1419	30.00	45.00	55.00
LINOLEYL ARACHIDONATE	WE-1420	65.00		
LINOLENYL LAURATE	WE-1421	30.00	45.00	55.00
LINOLENYL MYRISTATE	WE-1422	35.00	45.00	60.00
LINOLENYL PALMITATE	WE-1423	35.00	45.00	60.00
LINOLENYL STEARATE	WE-1424	35.00	45.00	60.00
LINOLENYL ARACHIDATE	WE-1425	35.00	45.00	60.00
LINOLENYL BEHENATE	WE-1426	35.00	45.00	60.00
LINOLENYL MYRISTOLEATE	WE-1427	275.00		
LINOLENYL PALMITOLEATE	WE-1428	35.00	45.00	60.00
LINOLENYL OLEATE	WE-1429	35.00	45.00	60.00
LINOLENYL LINOLEATE	WE-1430	35.00	45.00	60.00
LINOLENYL LINOLENATE	WE-1431	35.00	45.00	60.00

**OTHER WAX ESTERS OF OUR FATTY ACIDS AVAILABLE ON REQUEST.  
(INCLUDES ODD CHAINS OF OUR FATTY ACIDS)**

## A LOOK AT NU-CHEK GLC & TLC STANDARDS

Our association with Lipid Researchers over the past 45 years; during meetings, seminars and conventions, has brought about suggestions in ways to improve product listing. One of these suggestions was that a larger listing of model mixtures that would be more representative of a specific oil would be of special interest. In this listing, we have included many new model standards along with our original series of exact weights in various percentages to assist you in GLC correlations.

If you have a special oil in mind which is not listed either as a natural oil or as a preweighed standard, please contact us.

Nu-Chek-Prep reference standards are prepared from individual chromatographically pure lipid esters. Each component used in making up our reference mixture is carefully checked by GLC using large overloads. Only those fractions which meet our rigid requirements go into the final make-up. After being weighed to the nearest tenth of a milligram, the combined material is again analyzed as a total mixture. They are then flushed with nitrogen, sealed in glass ampules under vacuum, and finally stored at -30 degrees C. until ready for shipment.

## WHY NU-CHEK-PREP A B C MODEL STANDARDS?

From conversations with many GLC analysts throughout the country it was brought to our attention that many instruments were missing minor components by merely reading the top of peaks where base line shifts have occurred. In other words, equal weight quantities of various compounds are not always a true test for GLC analysis. To give you the most accurate test possible, we have designed a series of three standards:

(A) In Equal Weights

(B) Small to Large

(C) Large to Small

Price: 100 MG

## SPECIAL SERVICE

Upon request, our glass-blowing department will seal your 100 mg ampule (at no extra charge) into 2 by 50 mg or 4 by 25 mg quantities. This special service is designed to assist GLC analysts in avoiding oxidation, especially when working with unsaturated standards.

% BY WEIGHT AS INDICATED				
CHAIN	ITEM	CODE		PRICE
		1A	1B	1C
C16:0	METHYL PALMITATE	20	5	35
C18:0	METHYL STEARATE	20	15	25
C18:1	METHYL OLEATE	20	20	20
C18:2	METHYL LINOLEATE	20	25	15
C18:3	METHYL ALPHA LINOLENATE	20	35	5
		2A	2B	2C
C18:0	METHYL STEARATE	20	5	35
C18:1	METHYL OLEATE	20	15	25
C18:2	METHYL LINOLEATE	20	20	20
C18:3	METHYL ALPHA LINOLENATE	20	25	15
C20:4	METHYL ARACHIDONATE	20	35	5
		3A	3B	3C
C18:2	METHYL LINOLEATE	25	10	45
C18:3	METHYL ALPHA LINOLENATE	25	20	25
C20:4	METHYL ARACHIDONATE	25	25	20
C22:6	METHYL DOCOSAHEXAENOATE	25	45	10

C INDICATES CHAIN LENGTH

# GLC MODEL MIXTURE REFERENCE STANDARDS

CHAIN	ITEM % BY WT. AS INDICATED	CODE	PRICE
C6:0	METHYL CAPROATE	4A	4B      4C
C8:0	METHYL CAPRYLATE	20	5      35
C10:0	METHYL CAPRATE	20	15      25
C12:0	METHYL LAURATE	20	20      15
C14:0	METHYL MYRISTATE	20	35      5
		5A	5B      5C
C8:0	METHYL CAPRYLATE	20	5      35
C10:0	METHYL CAPRATE	20	15      25
C12:0	METHYL LAURATE	20	20      20
C14:0	METHYL MYRISTATE	20	25      15
C16:0	METHYL PALMITATE	20	35      5
		6A	6B      6C
C16:0	METHYL PALMITATE	25	10      45
C18:0	METHYL STEARATE	25	20      25
C20:0	METHYL ARACHIDATE	25	25      20
C22:0	METHYL BEHENATE	25	45      10
		06A	06B      06C
C16:0	METHYL PALMITATE	20	5      35
C18:0	METHYL STEARATE	20	15      25
C20:0	METHYL ARACHIDATE	20	20      20
C22:0	METHYL BEHENATE	20	25      15
C24:0	METHYL LIGNOCERATE	20	35      5
		7A	7B      7C
C16:1	METHYL PALMITOLEATE	20	5      35
C18:1	METHYL OLEATE	20	15      25
C20:1	METHYL 11-EICOSENOATE	20	20      20
C22:1	METHYL ERUCATE	20	25      15
C24:1	METHYL NERVONATE	20	35      5
		8A	8B      8C
C20:0	METHYL ARACHIDATE	25	10      45
C20:1	METHYL 11-EICOSENOATE	25	20      25
C20:2	METHYL EICOSADIENOATE	25	25      20
C20:3	METHYL EICOSATRIENOATE	25	45      10
		08A	08B      08C
C20:0	METHYL EICOSANOATE	20	5      35
C20:1	METHYL 11-EICOSENOATE	20	15      25
C20:2	METHYL EICOSADIENOATE	20	20      20
C20:3	METHYL HOMO GAMMA LINOLENATE	20	25      15
C20:4	METHYL ARACHIDONATE	20	35      5
		9A	9B      9C
C6:0	METHYL HEXANOATE	20	5      35
C7:0	METHYL HEPTANOATE	20	15      25
C8:0	METHYL OCTANOATE	20	20      20
C9:0	METHYL NONANOATE	20	25      15
C10:0	METHYL DECANOATE	20	35      5
		10A	10B      10C
C11:0	METHYL UNDECANOATE	20	5      35
C12:0	METHYL LAURATE	20	15      25
C13:0	METHYL TRIDEcanoate	20	20      20
C14:0	METHYL MYRISTATE	20	25      15
C15:0	METHYL PENTADECANOATE	20	35      5

**C** INDICATES CHAIN LENGTH

## GLC MODEL MIXTURE REFERENCE STANDARDS (Continued)

ITEM % BY WT. AS INDICATED		CODE	PRICE		
CHAIN		11A	11B	11C	
C16:0	METHYL PALMITATE	20	5	35	
C17:0	METHYL HEPTADECANOATE	20	15	25	\$45.00 EACH
C18:0	METHYL STEARATE	20	20	20	\$80.00 ALL THREE
C19:0	METHYL NONADECANOATE	20	25	15	
C20:0	METHYL ARACHIDATE	20	35	5	
		12A	12B	12C	
C18:0	METHYL STEARATE	20	5	35	
C19:0	METHYL NONADECANOATE	20	15	25	\$45.00 EACH
C20:0	METHYL ARACHIDATE	20	20	20	\$80.00 ALL THREE
C21:0	METHYL HENEICOSANOATE	20	25	15	
C22:0	METHYL BEHENATE	20	35	5	
		13A	13B	13C	
C7:0	METHYL HEPTANOATE	20	5	35	
C9:0	METHYL NONANOATE	20	15	25	\$45.00 EACH
C11:0	METHYL UNDECANOATE	20	20	20	\$80.00 ALL THREE
C13:0	METHYL TRIDEcanoate	20	25	15	
C15:0	METHYL PENTADECANOATE	20	35	5	
		14A	14B	14C	
C13:0	METHYL TRIDEcanoate	20	5	35	
C15:0	METHYL PENTADECANOATE	20	15	25	\$45.00 EACH
C17:0	METHYL HEPTADECANOATE	20	20	20	\$80.00 ALL THREE
C19:0	METHYL NONADECANOATE	20	25	15	
C21:0	METHYL HENEICOSANOATE	20	35	5	
		XA	XB	XC	
C16:0	METHYL PALMITATE	20	5	35	
C16:1	METHYL PALMITOLEATE	20	15	25	\$45.00 EACH
C18:0	METHYL STEARATE	20	20	20	\$80.00 ALL THREE
C18:1	METHYL OLEATE	20	25	15	
C18:2	METHYL LINOLEATE	20	35	5	
		1XA	1XB	1XC	
C12:0	METHYL LAURATE	20	5	35	
C14:0	METHYL MYRISTATE	20	15	25	\$45.00 EACH
C14:1	METHYL MYRISTOLEATE	20	20	20	\$80.00 ALL THREE
C16:0	METHYL PALMITATE	20	25	15	
C16:1	METHYL PALMITOLEATE	20	35	5	

**C** INDICATES CHAIN LENGTH

**ALL ABOVE STANDARDS ALSO AVAILABLE AS FREE ACIDS.  
A SETUP FEE MAY APPLY.**

**GLC REFERENCE MIXTURES**  
**Also Available As Free Acids. Please Specify.**  
**Prepared as a quantitative aid in analyzing oils**  
**(AOCS-tentative method CE 1-62)**

**PRICE ON ALL AOCS STANDARDS: \$45.00/100MG**

CHAIN	ITEM	CODE	% BY WT.	SUITABLE OIL
C16:0	METHYL PALMITATE		6.0	CORN, POPPY SEED,
C18:0	METHYL STEARATE		3.0	COTTON SEED,
C18:1	METHYL OLEATE	15A	35.0	SOYBEAN, WALNUT,
C18:2	METHYL LINOLEATE		50.0	SAFFLOWER, RAPOK,
C18:3	METHYL ALPHA LINOLENATE		3.0	SUNFLOWER, RICE
C20:0	METHYL ARACHIDATE		3.0	BRAN, SESAME
C16:0	METHYL PALMITATE		7.0	LINSEED,
C18:0	METHYL STEARATE		5.0	PERILLA,
C18:1	METHYL OLEATE	16A	18.0	HEMPSEED,
C18:2	METHYL LINOLEATE		36.0	RUBBERSEED
C18:3	METHYL ALPHA LINOLENATE		34.0	
C14:0	METHYL MYRISTATE		1.0	PEANUT,
C16:0	METHYL PALMITATE		4.0	RAPESEED,
C18:0	METHYL STEARATE		3.0	MUSTARDSEED
C18:1	METHYL OLEATE		45.0	
C18:2	METHYL LINOLEATE	17A	15.0	
C18:3	METHYL ALPHA LINOLENATE		3.0	
C20:0	METHYL ARACHIDATE		3.0	
C22:0	METHYL BEHENATE		3.0	
C22:1	METHYL ERUCATE		20.0	
C24:0	METHYL LIGNOCERATE		3.0	
C16:0	METHYL PALMITATE		11.0	OLIVE,
C18:0	METHYL STEARATE		3.0	TEASEED,
C18:1	METHYL OLEATE	18A	80.0	NEATSFOOT
C18:2	METHYL LINOLEATE		6.0	
C8:0	METHYL CAPRYLATE		7.0	COCONUT,
C10:0	METHYL CAPRATE		5.0	PALM KERNEL,
C12:0	METHYL LAURATE		48.0	BABASSU,
C14:0	METHYL MYRISTATE	19A	15.0	OURI-CURI
C16:0	METHYL PALMITATE		7.0	
C18:0	METHYL STEARATE		3.0	
C18:1	METHYL OLEATE		12.0	
C18:2	METHYL LINOLEATE		3.0	
C14:0	METHYL MYRISTATE		2.0	LARD,
C16:0	METHYL PALMITATE		30.0	BEEF TALLOW,
C16:1	METHYL PALMITOLEATE		3.0	MUTTON TALLOW,
C18:0	METHYL STEARATE	20A	14.0	PALM
C18:1	METHYL OLEATE		41.0	
C18:2	METHYL LINOLEATE		7.0	
C18:3	METHYL ALPHA LINOLENATE		3.0	

## GLC REFERENCE STANDARDS

Also Available As Free Acids. Please Specify.

(Originally composed for National Institutes of Health, according to Horning, Ahrens, Lipsky, Mattson, Mead, Turner and Goldwater: J. Lipid Res. 5, 20-27, 1964.)

**PRICE ON ALL NIH STANDARDS: \$45.00/100MG**

CHAIN	ITEM	NIH CODE	% BY WT.
C14:0	METHYL MYRISTATE		25.0
C16:0	METHYL PALMITATE	A	10.0
C18:0	METHYL STEARATE		65.0
C14:0	METHYL MYRISTATE		4.0
C16:0	METHYL PALMITATE	B	40.0
C18:0	METHYL STEARATE		56.0
C8:0	METHYL CAPRYLATE		1.5
C10:0	METHYL CAPRATE		3.0
C12:0	METHYL LAURATE		6.0
C14:0	METHYL MYRISTATE	C	12.0
C16:0	METHYL PALMITATE		19.4
C18:0	METHYL STEARATE		24.9
C20:0	METHYL ARACHIDATE		33.2
C14:0	METHYL MYRISTATE		11.8
C16:0	METHYL PALMITATE		23.6
C16:1	METHYL PALMITOLEATE	D	6.9
C18:0	METHYL STEARATE		13.1
C18:1	METHYL OLEATE		44.6
C8:0	METHYL CAPRYLATE		6.3
C10:0	METHYL CAPRATE		9.1
C12:0	METHYL LAURATE	E	12.1
C14:0	METHYL MYRISTATE		23.3
C16:0	METHYL PALMITATE		49.2
C14:0	METHYL MYRISTATE		2.5
C16:0	METHYL PALMITATE		4.2
C18:0	METHYL STEARATE		7.3
C20:0	METHYL ARACHIDATE	F	13.6
C22:0	METHYL BEHENATE		25.4
C24:0	METHYL LIGNOCERATE		47.0

**C INDICATES CHAIN LENGTH**

# GLC REFERENCE STANDARDS

## Alcohol Series

CHAIN	ITEM % BY WT. AS INDICATED	CODE NO.	PRICE/100MG
		29A	29B
C6:0	HEXANOL	20	5
C7:0	HEPTANOL	20	15
C8:0	OCTANOL	20	20
C9:0	NONANOL	20	25
C10:0	DECANOL	20	35
		30A	30B
C6:0	HEXANOL	20	5
C8:0	OCTANOL	20	15
C10:0	DECANOL	20	20
C12:0	DODECANOL	20	25
C14:0	TETRADECANOL	20	35
		31A	31B
C10:0	DECANOL	20	5
C11:0	UNDECANOL	20	15
C12:0	DODECANOL	20	20
C13:0	TRIDECANOL	20	25
C14:0	TETRADECANOL	20	35
		32A	32B
C16:0	HEXADECANOL	20	5
C18:0	OCTADECANOL	20	15
C20:0	EICOSANOL	20	20
C22:0	DOCOSANOL	20	25
C24:0	TETRACOSANOL	20	35
		33A	33B
C17:0	HEPTADECANOL	20	5
C18:0	OCTADECANOL	20	15
C19:0	NONADECANOL	20	20
C20:0	EICOSANOL	20	25
C21:0	HENEICOSANOL	20	35
		34A	34B
C16:1	HEXADECENOL	20	5
C18:1	OCTADECENOL	20	15
C20:1	EICOSENOL	20	20
C22:1	DOCOSENOL	20	25
C24:1	TETRACOSENOL	20	35
		35A	35B
C16:0	PALMITYL ALCOHOL	20	5
C18:0	STEARYL ALCOHOL	20	15
C18:1	OLEYL ALCOHOL	20	20
C18:2	LINOLEYL ALCOHOL	20	25
C18:3	ALPHA LINOLENYL ALCOHOL	20	35
		36A	36B
C20:0	ARACHIDYL ALCOHOL	20	5
C20:1	EICOSENYL ALCOHOL	20	15
C20:2	EICOSADIENYL ALCOHOL	20	20
C20:3	EICOSATRIENYL ALCOHOL	20	25
C20:4	ARACHIDONYL ALCOHOL	20	35

**C** INDICATES CHAIN LENGTH

# GLC REFERENCE STANDARDS

## Acetate Series

CHAIN	ITEM % BY WT. AS INDICATED	CODE NO.	PRICE/100MG
		41A	41B
C16:0	PALMITYL ACETATE	20	5
C18:0	STEARYL ACETATE	20	15
C20:0	ARACHIDYL ACETATE	20	20
C22:0	BEHENYL ACETATE	20	25
C24:0	LIGNOCERYL ACETATE	20	35
		43A	43B
C11:0	UNDECYL ACETATE	20	5
C12:0	LAURYL ACETATE	20	15
C13:0	TRIDECYL ACETATE	20	20
C14:0	MYRISTYL ACETATE	20	25
C15:0	PENTADECYL ACETATE	20	35
		44A	44B
C16:0	PALMITYL ACETATE	20	5
C17:0	HEPTADECYL ACETATE	20	15
C18:0	STEARYL ACETATE	20	20
C19:0	NONADECYL ACETATE	20	25
C20:0	ARACHIDYL ACETATE	20	35
		45A	45B
C18:0	STEARYL ACETATE	20	5
C19:0	NONADECYL ACETATE	20	15
C20:0	ARACHIDYL ACETATE	20	20
C21:0	HENEICOSYL ACETATE	20	25
C22:0	BEHENYL ACETATE	20	35
		46A	46B
C16:0	PALMITYL ACETATE	20	5
C18:0	STEARYL ACETATE	20	15
C18:1	OLEYL ACETATE	20	20
C18:2	LINOLEYL ACETATE	20	25
C18:3	ALPHA LINOLENYL ACETATE	20	35
		47A	47B
C18:0	STEARYL ACETATE	20	5
C18:1	OLEYL ACETATE	20	15
C18:2	LINOLEYL ACETATE	20	20
C18:3	ALPHA LINOLENYL ACETATE	20	25
C20:4	ARACHIDONYL ACETATE	20	35
		47C	

**C** INDICATES CHAIN LENGTH

## GLC REFERENCE STANDARDS TRIGLYCERIDE SERIES

CHAIN	ITEM % BY WT. AS INDICATED	CODE NO.		PRICE/100MG
		51A	51B	51C
C10:0	TRICAPRIN	20	5	35
C12:0	TRILAUrin	20	15	25
C14:0	TRIMYRISTIN	20	20	20
C16:0	TRIPALMITIN	20	25	15
C18:0	TRISTEARIN	20	35	5
		52A	52B	52C
C14:0	TRIMYRISTIN	20	5	35
C16:0	TRIPALMITIN	20	15	25
C18:0	TRISTEARIN	20	20	20
C20:0	TRIARACHIDIN	20	25	15
C22:0	TRIBEHENIN	20	35	5
		53A	53B	53C
C16:1	TRIPALMITOLEIN	25	10	40
C18:1	TRIOLEIN	25	20	30
C20:1	TRI-11-EICOSENOIN	25	30	20
C22:1	TRIERUCIN	25	40	10
		54A	54B	54C
C16:0	TRIPALMITIN	20	5	35
C16:1	TRIPALMITOLEIN	20	15	25
C18:0	TRISTEARIN	20	20	20
C18:1	TRIOLEIN	20	25	15
C18:2	TRILINOLEIN	20	35	5

**GLC REFERENCE STANDARDS**  
**All of the following are available as free acids or methyl esters.**  
**A setup fee may apply.**

CHAIN	ITEM	CODE	% BY WT.	PRICE/100MG
C14:0	METHYL MYRISTATE		0.5	
C16:0	METHYL PALMITATE		6.0	
C18:0	METHYL STEARATE		3.0	
C18:1	METHYL OLEATE	GLC 15A' (PRIME)	35.0	\$45.00
C18:2	METHYL LINOLEATE		49.5	
C18:3	METHYL ALPHA LINOLENATE		3.0	
C20:0	METHYL ARACHIDATE		3.0	
C16:0	METHYL PALMITATE		6.0	
C18:0	METHYL STEARATE		3.0	
C18:1	METHYL OLEATE	GLC 15AA' (PRIME)	35.0	\$50.00
C18:2	METHYL LINOLEATE		50.0	
C18:3	METHYL ALPHA LINOLENATE		3.0	
C20:4	METHYL ARACHIDONATE		3.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C8:0	METHYL OCTANOATE		2.0	
C10:0	METHYL DECANOATE		3.0	
C12:0	METHYL LAURATE		4.0	
C14:0	METHYL MYRISTATE		8.0	
C16:0	METHYL PALMITATE		10.0	
C18:0	METHYL STEARATE		7.0	
C18:1	METHYL OLEATE	GLC 17A' (PRIME)	8.0	
C18:2	METHYL LINOLEATE		8.0	\$60.00
C18:3	METHYL ALPHA LINOLENATE		10.0	
C20:0	METHYL ARACHIDATE		8.0	
C22:0	METHYL BEHENATE		10.0	
C22:1	METHYL ERUCATE		10.0	
C24:0	METHYL LIGNOCERATE		12.0	
C8:0	METHYL OCTANOATE		2.0	
C10:0	METHYL DECANOATE		3.0	
C12:0	METHYL LAURATE		4.0	
C14:0	METHYL MYRISTATE		4.0	
C16:0	METHYL PALMITATE		10.0	
C16:1	METHYL PALMITOLEATE		1.0	
C17:0	METHYL HEPTADECANOATE		1.0	
C18:0	METHYL STEARATE	GLC 17AA' (PRIME)	8.0	\$60.00
C18:1	METHYL OLEATE		10.0	
C18:2	METHYL LINOLEATE		10.0	
C18:3	METHYL ALPHA LINOLENATE		10.0	
C20:0	METHYL ARACHIDATE		5.0	
C22:0	METHYL BEHENATE		10.0	
C22:1	METHYL ERUCATE		10.0	
C24:0	METHYL LIGNOCERATE		12.0	
C16:0	METHYL PALMITATE		10.0	REPRESENTATIVE OF
C18:0	METHYL STEARATE		3.0	PEANUT OIL
C18:1	METHYL OLEATE		50.0	
C18:2	METHYL LINOLEATE	GLC 21A	30.0	
C20:0	METHYL ARACHIDATE		1.5	
C20:1	METHYL 11-EICOSENOATE		1.5	\$50.00
C22:0	METHYL BEHENATE		3.0	
C24:0	METHYL LIGNOCERATE		1.0	
C4:0	METHYL BUTYRATE		4.0	
C6:0	METHYL CAPROATE		2.0	
C8:0	METHYL CAPRYLATE		1.0	
C10:0	METHYL CAPRATE		3.0	
C12:0	METHYL LAURATE		4.0	
C14:0	METHYL MYRISTATE		10.0	
C14:1	METHYL MYRISTOLEATE	GLC-60	2.0	
C16:0	METHYL PALMITATE		25.0	\$60.00
C16:1	METHYL PALMITOLEATE		5.0	
C18:0	METHYL STEARATE		10.0	
C18:1	METHYL OLEATE		25.0	
C18:2	METHYL LINOLEATE		3.0	
C18:3	METHYL ALPHA LINOLENATE		4.0	
C20:0	METHYL ARACHIDATE		2.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE	% BY WT.	PRICE/100MG
C4:0	METHYL BUTYRATE		2.70	
C6:0	METHYL HEXANOATE		2.70	
C8:0	METHYL OCTANOATE		2.70	
C10:0	METHYL DECANOATE		2.70	
C11:0	METHYL UNDECANOATE		2.70	
C12:0	METHYL LAURATE		2.70	
C13:0	METHYL TRIDEcanoate		2.70	
C14:0	METHYL MYRISTATE		2.70	
C14:1	METHYL MYRISTOLEATE		2.70	
C15:0	METHYL PENTADECANOATE		2.70	
C15:1	METHYL 10-PENTADECENOATE		2.70	
C16:0	METHYL PALMITATE		5.40	
C16:1	METHYL PALMITOLEATE		2.70	
C17:0	METHYL HEPTADECANOATE		2.70	
C17:1	METHYL 10-HEPTADECENOATE		2.70	
C18:0	METHYL STEARATE		2.70	
C18:1	METHYL OLEATE		2.70	
C18:1T	METHYL ELAIDATE	GLC 36	2.70	\$135.00
C18:2	METHYL LINOLEATE		2.70	
C18:2T	METHYL LINOLEAIDATE		2.70	
C18:3	METHYL LINOLENATE		2.70	
C18:3	METHYL GAMMA LINOLENATE		2.70	
C20:0	METHYL ARACHIDATE		2.70	
C20:1	METHYL 11-EICOSENOATE		2.70	
C21:0	METHYL HENEICOSANOATE		2.70	
C20:2	METHYL 11-14 EICOSADIENOATE		2.70	
C22:0	METHYL BEHENATE		2.70	
C22:1	METHYL ERUCATE		2.70	
C20:3	METHYL 11-14-17 EICOSATRIENOATE		2.70	
C20:3	METHYL HOMOGAMMA LINOLENATE		2.70	
C20:4	METHYL ARACHIDONATE		2.70	
C22:2	METHYL DOCOSADIENOATE		2.70	
C24:0	METHYL LIGNOCERATE		2.70	
C20:5	METHYL EICOSAPENTAENOATE		2.70	
C24:1	METHYL NERVONATE		2.70	
C22:6	METHYL DOCOSAHEXAENOATE		2.70	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE	% BY WT.	PRICE/100MG
C4:0	METHYL BUTYRATE		2.63	
C6:0	METHYL HEXANOATE		2.63	
C8:0	METHYL OCTANOATE		2.63	
C10:0	METHYL DECANOATE		2.63	
C11:0	METHYL UNDECANOATE		2.63	
C12:0	METHYL LAURATE		2.63	
C13:0	METHYL TRIDEcanoate		2.63	
C14:0	METHYL MYRISTATE		2.63	
C14:1	METHYL MYRISTOLEATE		2.63	
C15:0	METHYL PENTADECANOATE		2.63	
C15:1	METHYL 10-PENTADECENOATE		2.63	
C16:0	METHYL PALMITATE		5.26	
C16:1	METHYL PALMITOLEATE		2.63	
C17:0	METHYL HEPTADECANOATE		2.63	
C17:1	METHYL 10-HEPTADECENOATE		2.63	
C18:0	METHYL STEARATE		2.63	
C18:1	METHYL OLEATE		2.63	
C18:1T	METHYL ELAIDATE	GLC 37	2.63	\$135.00
C18:2	METHYL LINOLEATE		2.63	
C18:2T	METHYL LINOLEAIDATE		2.63	
C18:3	METHYL LINOLENATE		2.63	
C18:3	METHYL GAMMA LINOLENATE		2.63	
C20:0	METHYL ARACHIDATE		2.63	
C20:1	METHYL 11-EICOSENOATE		2.63	
C21:0	METHYL HENEICOSANOATE		2.63	
C20:2	METHYL 11-14 EICOSADIENOATE		2.63	
C22:0	METHYL BEHENATE		2.63	
C22:1	METHYL ERUCATE		2.63	
C20:3	METHYL 11-14-17 EICOSATRIENOATE		2.63	
C20:3	METHYL HOMOGAMMA LINOLENATE		2.63	
C20:4	METHYL ARACHIDONATE		2.63	
C23:0	METHYL TRICOSANOATE		2.63	
C22:2	METHYL DOCOSADIENOATE		2.63	
C24:0	METHYL LIGNOCERATE		2.63	
C20:5	METHYL EICOSAPENTAENOATE		2.63	
C24:1	METHYL NERVONATE		2.70	
C22:6	METHYL DOCOSAHEXAENOATE		2.70	
C12:0	METHYL LAURATE		3.0	Representative of PLASMA
C14:0	METHYL MYRISTATE		3.0	
C14:1	METHYL MYRISTOLEATE		3.0	
C16:0	METHYL PALMITATE		26.0	
C16:1	METHYL PALMITOLEATE		2.0	
C17:0	METHYL HEPTADECANOATE		1.0	
C18:0	METHYL STEARATE	GLC-63C	10.0	\$65.00
C18:1	METHYL OLEATE		22.0	
C18:2	METHYL LINOLEATE		20.0	
C18:3	METHYL LINOLENATE		2.0	
C18:3	METHYL GAMMA LINOLENATE		2.0	
C20:4	METHYL ARACHIDONATE		2.0	
C20:5	METHYL EICOSAPENTAENOATE		2.0	
C22:6	METHYL DOCOSAHEXAENOATE		2.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE	% BY WT.	PRICE/100MG
C16:0	METHYL PALMITATE		20.0	
C18:0	METHYL STEARATE		20.0	
C18:1	METHYL OLEATE	GLC-61	20.0	\$55.00
C18:2	METHYL LINOLEATE		20.0	
C20:4	METHYL ARACHIDONATE		20.0	
C16:0	METHYL PALMITATE		4.0	
C18:0	METHYL STEARATE		1.0	
C18:1	METHYL OLEATE		58.0	
C18:2	METHYL LINOLEATE		20.0	
C18:3	METHYL ALPHA LINOLENATE	GLC-62	10.0	\$55.00
C20:0	METHYL ARACHIDATE		1.0	
C20:1	METHYL EICOSENOATE		2.0	
C22:0	METHYL BEHENATE		1.0	
C22:1	METHYL ERUCATE		2.0	
C24:0	METHYL LIGNOCERATE		1.0	
			A      B	
C12:0	METHYL LAURATE		2.0	9.1
C14:0	METHYL MYRISTATE		2.0	9.1
C14:1	METHYL MYRISTOLEATE		1.0	9.1
C16:0	METHYL PALMITATE		22.0	9.1
C16:1	METHYL PALMITOLEATE		5.0	9.1
C17:0	METHYL HEPTADECANOATE	GLC-63	10.0	9.1
C18:0	METHYL STEARATE		10.0	9.1
C18:1	METHYL OLEATE		32.0	9.1
C18:2	METHYL LINOLEATE		8.0	9.1
C18:3	METHYL ALPHA LINOLENATE		4.0	9.1
C20:4	METHYL ARACHIDONATE		4.0	9.1
C16:0	METHYL PALMITATE		10.0	
C18:0	METHYL STEARATE		5.0	
C18:1	METHYL OLEATE	GLC-64	30.0	\$45.00
C18:2	METHYL LINOLEATE		50.0	
C18:3	METHYL ALPHA LINOLENATE		5.0	
C14:0	METHYL MYRISTATE		12.5	
C16:0	METHYL PALMITATE		12.5	
C16:1	METHYL PALMITOLEATE		12.5	
C18:0	METHYL STEARATE	GLC-65	12.5	\$50.00
C18:1	METHYL OLEATE		12.5	
C18:2	METHYL LINOLEATE		12.5	
C18:3	METHYL ALPHA LINOLENATE		12.5	
C20:0	METHYL ARACHIDATE		12.5	
			A      B	
C16:0	METHYL PALMITATE		35.0	10.0
C16:1	METHYL PALMITOLEATE		—	10.0
C18:0	METHYL STEARATE	GLC-66	33.7	—
C18:1	METHYL OLEATE		30.0	75.0
C18:2	METHYL LINOLEATE		0.8	4.0
C18:3	METHYL ALPHA LINOLENATE		0.5	1.0

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG		
C14:0	METHYL MYRISTATE		1.0			
C16:0	METHYL PALMITATE		10.0			
C18:0	METHYL STEARATE		6.0			
C18:1	METHYL OLEATE		25.0			
C18:1T	METHYL ELAIDATE		20.0	<b>\$50.00</b>		
C18:2	METHYL LINOLEATE	GLC-67	34.0			
C18:2TT	METHYL LINOLEAIDATE		2.0			
C18:3	METHYL ALPHA LINOLENATE		1.0			
C20:0	METHYL ARACHIDATE		0.5			
C22:0	METHYL BEHENATE		0.5			
				A	B	C
C8:0	METHYL OCTANOATE		—	—	2.0	—
C10:0	METHYL DECANOATE		—	—	3.0	—
C12:0	METHYL LAURATE		—	—	4.0	—
C14:0	METHYL MYRISTATE		5.0	3.0	3.0	6.0
C14:1	METHYL MYRISTOLEATE		5.0	1.0	1.0	1.0
C16:0	METHYL PALMITATE		10.0	10.0	10.0	16.0
C16:1	METHYL PALMITOLEATE		5.0	2.0	2.0	5.0
C18:0	METHYL STEARATE		5.0	15.0	15.0	8.0
C18:1	METHYL OLEATE		5.0	25.0	16.0	13.0
C18:1	METHYL VACCENATE		—	—	—	4.0
C18:2	METHYL LINOLEATE		5.0	10.0	10.0	2.0
C18:3	METHYL ALPHA LINOLENATE		5.0	4.0	4.0	2.0
C20:0	METHYL ARACHIDATE	GLC-68	5.0	2.0	2.0	1.0
C20:1	METHYL 11-EICOSENOATE	\$65.00 EACH	5.0	2.0	2.0	9.0
C20:2	METHYL 11-14-EICOSADIENOATE		5.0	2.0	2.0	1.0
C20:3	METHYL HOMOGAMMA LINOLENATE		5.0	4.0	4.0	—
C20:4	METHYL ARACHIDONATE		5.0	4.0	4.0	3.0
C20:3	METHYL 11-14-17-EICOSATRIENOATE		5.0	—	—	1.0
C20:5	METHYL EICOSAPENTAENOATE		—	—	—	10.0
C22:0	METHYL BEHENATE		5.0	4.0	4.0	7.0
C22:1	METHYL ERUCATE		5.0	2.0	2.0	2.0
C22:6	METHYL DOCOSAHEXAENOATE		5.0	4.0	4.0	28.0
C24:0	METHYL LIGNOCERATE		5.0	2.0	2.0	1.0
C24:1	METHYL NERVONATE		5.0	4.0	4.0	1.0
C14:0	METHYL MYRISTATE	GLC-69	2.0			
C16:0	METHYL PALMITATE		88.0			
C16:1	METHYL PALMITOLEATE		2.0	<b>\$45.00</b>		
C18:1	METHYL OLEATE		2.0			
C18:2	METHYL LINOLEATE		6.0			
C16:0	METHYL PALMITATE	GLC-70	2.0			
C18:0	METHYL STEARATE		5.0			
C18:1	METHYL OLEATE		25.0	<b>\$50.00</b>		
C18:2	METHYL LINOLEATE		63.0			
C18:3	METHYL ALPHA LINOLENATE		5.0			
C16:0	METHYL PALMITATE	GLC-71	2.0			
C18:0	METHYL STEARATE		1.0			
C18:1	METHYL OLEATE		85.0	<b>\$45.00</b>		
C18:2	METHYL LINOLEATE		12.0			
C16:0	METHYL PALMITATE	GLC-72	6.0			
C18:0	METHYL STEARATE		4.0			
C18:1	METHYL OLEATE		18.7	<b>\$50.00</b>		
C18:2	METHYL LINOLEATE		70.0			
C18:3	METHYL ALPHA LINOLENATE		0.3			
C22:0	METHYL BEHENATE		1.0			

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C4:0	METHYL BUTYRATE		4.0	
C6:0	METHYL HEXANOATE		3.0	
C8:0	METHYL OCTANOATE		2.0	
C10:0	METHYL DECANOATE		3.0	
C12:0	METHYL LAURATE		3.0	\$55.00
C14:0	METHYL MYRISTATE	GLC-73	12.0	
C16:0	METHYL PALMITATE		30.0	
C18:0	METHYL STEARATE		10.0	
C18:1	METHYL OLEATE		30.0	
C18:2	METHYL LINOLEATE		2.0	
C18:3	METHYL ALPHA LINOLENATE		1.0	
C4:0	METHYL BUTYRATE		7.7	
C6:0	METHYL HEXANOATE		7.7	
C8:0	METHYL OCTANOATE		7.7	
C10:0	METHYL DECANOATE		7.7	
C12:0	METHYL LAURATE		7.7	
C14:0	METHYL MYRISTATE		7.7	\$55.00
C16:0	METHYL PALMITATE	GLC-74	7.7	
C18:0	METHYL STEARATE		7.7	
C18:1	METHYL OLEATE		7.7	
C18:2	METHYL LINOLEATE		7.7	
C18:3	METHYL ALPHA LINOLENATE		7.7	
C20:0	METHYL ARACHIDATE		7.7	
C22:0	METHYL BEHENATE		7.7	
C8:0	METHYL OCTANOATE		6.66	
C10:0	METHYL DECANOATE		6.66	
C12:0	METHYL LAURATE		6.66	
C13:0	METHYL TRIDEcanoate		6.66	
C14:0	METHYL MYRISTATE		6.66	
C15:0	METHYL PENTADECANOATE		6.66	\$60.00
C16:0	METHYL PALMITATE		6.66	
C16:1	METHYL PALMITOLEATE	GLC-74X	6.66	
C17:0	METHYL HEPTADECANOATE		6.66	
C18:0	METHYL STEARATE		6.66	
C18:1	METHYL OLEATE		6.66	
C18:2	METHYL LINOLEATE		6.66	
C18:3	METHYL ALPHA LINOLENATE		6.66	
C20:0	METHYL EICOSANOATE		6.66	
C22:0	METHYL BEHENATE		6.66	
C16:0	METHYL PALMITATE		6.0	REPRESENTATIVE OF
C18:0	METHYL STEARATE		4.0	SUNFLOWER OIL
C18:1	METHYL OLEATE		20.0	
C18:2	METHYL LINOLEATE		68.0	
C18:3	METHYL ALPHA LINOLENATE	GLC-75	0.2	\$50.00
C20:0	METHYL ARACHIDATE		0.4	
C20:1	METHYL EICOSENOATE		0.2	
C22:0	METHYL BEHENATE		0.9	
C24:0	METHYL LIGNOCERATE		0.3	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C8:0	METHYL OCTANOATE		3.0	
C10:0	METHYL DECANOATE		3.0	
C12:0	METHYL LAURATE		10.0	
C13:0	METHYL TRIDEcanoate		1.0	
C14:0	METHYL MYRISTATE		10.0	
C15:0	METHYL PENTADECANOATE		1.0	
C16:0	METHYL PALMITATE		12.0	
C16:1	METHYL PALMITOLEATE	GLC-76	4.0	\$50.00
C17:0	METHYL HEPTADECANOATE		2.0	
C18:0	METHYL STEARATE		12.0	
C18:1	METHYL OLEATE		12.0	
C18:2	METHYL LINOLEATE		10.0	
C18:3	METHYL ALPHA LINOLENATE		10.0	
C20:0	METHYL EICOSANOATE		10.0	
C12:0	METHYL LAURATE		5.0	
C14:0	METHYL MYRISTATE		10.0	
C16:0	METHYL PALMITATE		15.0	\$45.00
C18:0	METHYL STEARATE	GLC-77	20.0	
C18:1	METHYL OLEATE		30.0	
C18:2	METHYL LINOLEATE		20.0	
C16:0	METHYL PALMITATE		7.0	
C18:0	METHYL STEARATE		15.0	
C18:1	METHYL OLEATE		26.0	
C18:2	METHYL LINOLEATE	GLC-78	45.0	\$50.00
C18:3	METHYL ALPHA LINOLENATE		5.0	
C20:0	METHYL ARACHIDATE		2.0	
C6:0	METHYL HEXANOATE		1.0	
C8:0	METHYL OCTANOATE		1.0	
C10:0	METHYL DECANOATE		1.0	
C12:0	METHYL LAURATE		8.0	
C14:0	METHYL MYRISTATE		6.0	
C14:1	METHYL MYRISTOLEATE		0.5	
C15:0	METHYL PENTADECANOATE		0.5	
C15:1	METHYL 10-PENTADECENOATE		0.5	
C16:0	METHYL PALMITATE	GLC-79	24.0	\$55.00
C16:1	METHYL PALMITOLEATE		2.0	
C17:0	METHYL HEPTADECANOATE		1.0	
C17:1	METHYL 10-HEPTADECENOATE		0.5	
C18:0	METHYL STEARATE		21.0	
C18:1	METHYL OLEATE		31.0	
C18:2	METHYL LINOLEATE		1.0	
C18:3	METHYL ALPHA LINOLENATE		0.5	
C20:0	METHYL ARACHIDATE		0.5	
C13:1	METHYL 12-TRIDEcanoate		14.3	
C15:1	METHYL 10-PENTADECENOATE		14.3	
C17:1	METHYL 10-HEPTADECENOATE		14.3	
C19:1	METHYL 10-NONADECENOATE	GLC-80	14.3	\$70.00
C19:2	METHYL 10-13-NONADECADIEENOATE		14.3	
C21:1	METHYL 12-HENEICOSENOATE		14.3	
C23:1	METHYL 14-TRICOSENOATE		14.3	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C8:0	METHYL OCTANOATE		2.0	
C10:0	METHYL DECANOATE		2.0	
C12:0	METHYL LAURATE		5.0	
C13:0	METHYL TRIDECCANOATE		1.0	
C14:0	METHYL MYRISTATE		5.0	
C15:0	METHYL PENTADECANOATE		1.0	
C16:0	METHYL PALMITATE		10.0	
C16:1	METHYL PALMITOLEATE		2.0	\$50.00
C17:0	METHYL HEPTADECANOATE	GLC-81	1.0	
C18:0	METHYL STEARATE		10.0	
C18:1	METHYL OLEATE		10.0	
C18:2	METHYL LINOLEATE		10.0	
C20:0	METHYL ARACHIDATE		5.0	
C20:1	METHYL 11-EICOSENOATE		10.0	
C22:0	METHYL BEHENATE		3.0	
C22:1	METHYL ERUCATE		20.0	
C24:0	METHYL LIGNOCERATE		3.0	
C16:0	METHYL PALMITATE		5.0	
C18:0	METHYL STEARATE		45.0	
C18:1	METHYL OLEATE	GLC-82	38.0	\$50.00
C18:2	METHYL LINOLEATE		2.0	
C18:3	METHYL ALPHA LINOLENATE		10.0	
C14:0	METHYL MYRISTATE		1.0	
C16:0	METHYL PALMITATE		31.0	
C18:0	METHYL STEARATE	GLC-83	32.0	\$45.00
C18:1	METHYL OLEATE		34.0	
C18:2	METHYL LINOLEATE		2.0	
C16:0	METHYL PALMITATE		10.0	
C17:0	METHYL HEPTADECANOATE		5.0	
C18:0	METHYL STEARATE		10.0	
C18:1	METHYL OLEATE		5.0	
C18:2	METHYL LINOLEATE		20.0	
C18:3	METHYL ALPHA LINOLENATE	GLC-84	5.0	\$65.00
C20:0	METHYL ARACHIDATE		10.0	
C20:1	METHYL 11-EICOSENOATE		10.0	
C20:4	METHYL ARACHIDONATE		15.0	
C22:6	METHYL DOCOSAHEXAENOATE		10.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C4:0	METHYL BUTYRATE		3.03	
C6:0	METHYL HEXANOATE		3.03	
C8:0	METHYL OCTANOATE		3.03	
C10:0	METHYL DECANOATE		3.03	
C11:0	METHYL UNDECANOATE		3.03	
C12:0	METHYL LAURATE		3.03	
C13:0	METHYL TRIDEcanoate		3.03	
C14:0	METHYL MYRISTATE		3.03	
C14:1	METHYL MYRISTOLEATE		3.03	
C15:0	METHYL PENTADECANOATE		3.03	
C15:1	METHYL 10-PENTADECENOATE		3.03	
C16:0	METHYL PALMITATE		6.06	
C16:1	METHYL PALMITOLEATE		3.03	
C17:0	METHYL HEPTADECANOATE		3.03	
C17:1	METHYL 10-HEPTADECANOATE		3.03	
C18:0	METHYL STEARATE		3.03	\$100.00
C18:1	METHYL OLEATE	GLC-85	3.03	
C18:1T	METHYL ELAIDATE		3.03	
C18:2	METHYL LINOLEATE		3.03	
C18:3	METHYL ALPHA LINOLENATE		3.03	
C18:3	METHYL GAMMA LINOLENATE		3.03	
C20:0	METHYL EICOSANOATE		3.03	
C20:1	METHYL 11-EICOSENOATE		3.03	
C20:2	METHYL 11-14-EICOSADIENOATE		3.03	
C22:0	METHYL BEHENATE		3.03	
C22:1	METHYL ERUCATE		3.03	
C20:3	METHYL 11-14-17-EICOSATRIENOATE		3.03	
C20:3	METHYL HOMOGAMMA LINOLENATE		3.03	
C20:4	METHYL ARACHIDONATE		3.03	
C24:1	METHYL NERVONATE		3.03	
C22:2	METHYL DOCOSADIENOATE		3.03	
C22:6	METHYL DOCOSAHEXAENOATE		3.03	
C6:0	METHYL HEXANOATE		1.0	
C8:0	METHYL OCTANOATE		5.0	
C10:0	METHYL DECANOATE		4.0	
C12:0	METHYL LAURATE		27.0	
C14:0	METHYL MYRISTATE		10.0	\$55.00
C16:0	METHYL PALMITATE	GLC-86	10.0	
C18:0	METHYL STEARATE		2.0	
C18:1	METHYL OLEATE		15.0	
C18:2	METHYL LINOLEATE		25.0	
C18:3	METHYL ALPHA LINOLENATE		1.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C12:0	METHYL LAURATE		3.0	
C13:0	METHYL TRIDECCANOATE		3.0	
C14:0	METHYL MYRISTATE		3.0	
C14:1	METHYL MYRISTOLEATE		0.5	
C15:0	METHYL PENTADECANOATE		3.0	
C16:0	METHYL PALMITATE		18.5	
C16:1T	METHYL PALMITELAIDATE		0.5	
C16:1	METHYL PALMITOLEATE		1.5	
C17:0	METHYL HEPTADECCANOATE		1.0	
C18:0	METHYL STEARATE		6.5	
C18:1T	METHYL ELAIDATE		2.0	
C18:1	METHYL OLEATE		16.0	
C18:2TT	METHYL LINOLELAIDATE		3.0	
C18:2	METHYL LINOLEATE	GLC-87	23.0	\$100.00
C18:3	METHYL GAMMA LINOLENATE		0.5	
C19:0	METHYL NONADECCANOATE		0.5	
C18:3	METHYL ALPHA LINOLENATE		3.0	
C20:0	METHYL EICOSANOATE		0.5	
C20:1	METHYL 11-EICOSENOATE		0.4	
C20:3	METHYL HOMOGAMMA LINOLENATE		1.5	
C20:4	METHYL ARACHIDONATE		5.0	
C20:3	METHYL 11-14-17-EICOSATRIENOATE		0.5	
C22:0	METHYL BEHENATE		1.2	
C22:1	METHYL ERUCATE		0.4	
C22:2	METHYL DOCOSADIENOATE		0.5	
C22:6	METHYL DOCOSAHEXAENOATE		1.0	
C24:1	METHYL NERVONATE		0.5	
C8:0	METHYL OCTANOATE		1.0	
C10:0	METHYL DECANOATE		1.0	
C12:0	METHYL LAURATE		13.0	
C14:0	METHYL MYRISTATE	GLC-88	5.0	\$50.00
C16:0	METHYL PALMITATE		38.0	
C18:0	METHYL STEARATE		4.0	
C18:1	METHYL OLEATE		32.0	
C18:2	METHYL LINOLEATE		6.0	
C16:0	METHYL PALMITATE		5.0	
C18:0	METHYL STEARATE		2.0	
C18:1	METHYL OLEATE	GLC-89	15.0	\$50.00
C18:2	METHYL LINOLEATE		70.0	
C18:3	METHYL GAMMA LINOLENATE		8.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C6:0	METHYL HEXANOATE		1.0	
C8:0	METHYL OCTANOATE		2.0	
C10:0	METHYL DECANOATE		3.0	
C11:0	METHYL UNDECANOATE		4.0	
C12:0	METHYL LAURATE		4.0	
C14:0	METHYL MYRISTATE		5.0	
C14:1	METHYL MYRISTOLEATE		3.0	
C15:0	METHYL PENTADECANOATE		3.0	
C16:0	METHYL PALMITATE		10.0	
C16:1	METHYL PALMITOLEATE		1.0	\$70.00
C17:0	METHYL HEPTADECANOATE	GLC-90	1.0	
C18:0	METHYL STEARATE		8.0	
C18:1	METHYL OLEATE		8.0	
C18:2	METHYL LINOLEATE		10.0	
C18:3	METHYL ALPHA LINOLENATE		5.0	
C20:0	METHYL ARACHIDATE		5.0	
C20:1	METHYL 11-TRANSEICOSENOATE		5.0	
C21:0	METHYL HENEICOSANOATE		5.0	
C22:0	METHYL BEHENATE		6.0	
C22:1	METHYL ERUCATE		6.0	
C24:0	METHYL LIGNOCERATE		5.0	
C14:0	METHYL MYRISTATE		7.69	
C16:0	METHYL PALMITATE		7.69	
C16:1	METHYL PALMITOLEATE		7.69	
C18:0	METHYL STEARATE		7.69	
C18:1	METHYL OLEATE		7.69	
C18:1	METHYL PETROSELINATE		7.69	
C18:2	METHYL LINOLEATE	GLC-91	7.69	\$70.00
C18:3	METHYL ALPHA LINOLENATE		7.69	
C18:3	METHYL GAMMA LINOLENATE		7.69	
C20:3	METHYL EICOSATRIENOATE		7.69	
C20:3	METHYL HOMOGAMMA LINOLENATE		7.69	
C20:4	METHYL ARACHIDONATE		7.69	
C22:6	METHYL DOCOSAHEXAENOATE		7.69	
C6:0	METHYL HEXANOATE		0.5	
C8:0	METHYL OCTANOATE		3.0	
C10:0	METHYL DECANOATE		3.0	
C12:0	METHYL LAURATE		50.0	
C13:0	METHYL TRIDEcanoate		0.5	
C14:0	METHYL MYRISTATE	GLC-92	15.0	\$55.00
C16:0	METHYL PALMITATE		8.0	
C18:0	METHYL STEARATE		4.0	
C18:1	METHYL OLEATE		10.0	
C18:2	METHYL LINOLEATE		4.0	
C18:3	METHYL ALPHA LINOLENATE		1.0	
C20:0	METHYL EICOSANOATE		1.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C14:0	METHYL MYRISTATE		0.1	REPRESENTATIVE OF
C16:0	METHYL PALMITATE		26.3	COCO BUTTER
C16:1	METHYL PALMITOLEATE		0.4	
C17:0	METHYL HEPTADECANOATE		0.3	
C18:0	METHYL STEARATE		33.7	
C18:1	METHYL OLEATE	GLC-93	34.3	\$60.00
C18:2	METHYL LINOLEATE		3.1	
C18:3	METHYL ALPHA LINOLENATE		0.2	
C20:0	METHYL EICOSANOATE		1.3	
C20:1	METHYL 11-EICOSENOATE		0.1	
C22:0	METHYL BEHENATE		0.2	
C16:0	METHYL PALMITATE		6.0	REPRESENTATIVE OF
C18:0	METHYL STEARATE		4.0	FLAX
C18:1	METHYL OLEATE	GLC-94	17.0	
C18:2	METHYL LINOLEATE		17.0	\$50.00
C18:3	METHYL ALPHA LINOLENATE		56.0	
With 1% BHT added as antioxidant.				
C18:1	METHYL OLEATE		5.0	
C18:2	METHYL LINOLEATE	GLC-95	15.0	\$45.00
C18:3	METHYL GAMMA LINOLENATE		80.0	
C14:0	METHYL MYRISTATE		1.0	
C16:0	METHYL PALMITATE		11.0	
C16:1	METHYL PALMITOLEATE		2.0	
C17:0	METHYL HEPTADECANOATE		8.0	
C18:0	METHYL STEARATE		11.0	
C18:1	METHYL OLEATE		17.0	
C18:2	METHYL LINOLEATE		8.0	
C18:3	METHYL ALPHA LINOLENATE		3.0	
C20:0	METHYL EICOSANOATE		1.0	
C20:1	METHYL 11-EICOSENOATE	GLC-96	1.0	\$110.00
C20:2	METHYL 11-14-EICOSADIEENOATE		1.0	
C20:3	METHYL HOMOGAMMA LINOLENATE		3.0	
C20:4	METHYL ARACHIDONATE		18.0	
C22:0	METHYL BEHENATE		2.0	
C22:1	METHYL ERUCATE		2.0	
C22:2	METHYL DOCOSADIEENOATE		2.0	
C22:4	METHYL DOCOSATETRAENOATE		3.0	
C22:6	METHYL DOCOSAHEXAENOATE		4.0	
C24:0	METHYL LIGNOCERATE		1.0	
C24:1	METHYL NERVONATE		1.0	
C8:0	METHYL OCTANOATE		5.0	
C10:0	METHYL DECANOATE	GLC-97	28.5	\$45.00
C12:0	METHYL LAURATE		66.5	
C14:0	METHYL MYRISTATE		21.0	
C16:0	METHYL PALMITATE		21.0	
C18:0	METHYL STEARATE	GLC-98	21.0	\$45.00
C22:0	METHYL BEHENATE		1.0	
C22:1	METHYL ERUCATE		36.0	
C18:0	METHYL STEARATE		5.0	
C18:1	METHYL OLEATE	GLC-100	30.0	
C18:2	METHYL LINOLEATE		60.0	\$45.00
C18:3	METHYL ALPHA LINOLENATE		5.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C14:0	METHYL MYRISTATE	GLC-132	2.2	
C15:0	METHYL PENTADECANOATE		0.7	
C16:0	METHYL PALMITATE		48.7	
C17:0	METHYL HEPTADECANOATE		2.0	
C18:0	METHYL STEARATE		45.0	\$50.00
C18:1	METHYL OLEATE		0.5	
C19:0	METHYL NONADECANOATE		0.3	
C20:0	METHYL EICOSANOATE		0.6	
C14:0	METHYL MYRISTATE	GLC-200-F	3.0	
C16:0	METHYL PALMITATE		70.0	
C16:1	METHYL PALMITOLEATE		7.0	
C18:0	METHYL STEARATE		4.0	
C18:1	METHYL OLEATE		9.0	\$50.00
C18:2	METHYL LINOLEATE		3.0	
C18:3	METHYL ALPHA LINOLENATE		2.0	
C20:4	METHYL ARACHIDONATE		2.0	
C10:0	METHYL DECANOATE	GLC-211	0.1	
C12:0	METHYL LAURATE		0.2	
C14:0	METHYL MYRISTATE		2.6	
C14:1	METHYL MYRISTOLEATE		0.8	
C15:0	METHYL PENTADECANOATE		0.2	
C15:1	METHYL 10-PENTADECENOATE		0.2	
C16:0	METHYL PALMITATE		4.2	
C16:1	METHYL PALMITOLEATE		5.8	
C16:1T	METHYL PALMITELAIDATE		0.2	
C17:0	METHYL HEPTADECANOATE		0.2	\$70.00
C17:1	METHYL 10-HEPTADECENOATE		1.1	
C18:0	METHYL STEARATE		0.7	
C18:1T	METHYL ELAIDATE		2.8	
C18:1	METHYL OLEATE		69.2	
C18:2TT	METHYL LINOLELAIDATE		0.4	
C18:2	METHYL LINOLEATE		9.4	
C18:3	METHYL ALPHA LINOLENATE		0.6	
C20:1	METHYL 11-EICOSENOATE		1.1	
C20:2	METHYL 11-14-EICOSADIENOATE		0.2	
C14:0	METHYL MYRISTATE	GLC-PSA #1	2.2	
C15:0	METHYL PENTADECANOATE		0.7	
C16:0	METHYL PALMITATE		47.0	
C16:1	METHYL PALMITOLEATE		0.5	
C17:0	METHYL HEPTADECANOATE		2.0	
C18:0	METHYL STEARATE		36.0	\$50.00
C18:1	METHYL OLEATE		9.0	
C18:2	METHYL LINOLEATE		1.0	
C18:3	METHYL ALPHA LINOLENATE		0.5	
C19:0	METHYL NONADECANOATE		0.6	
C20:0	METHYL EICOSANOATE		0.5	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C6:0	METHYL HEXANOATE		5.0	
C8:0	METHYL OCTANOATE		5.0	
C10:0	METHYL DECANOATE		5.0	
C12:0	METHYL LAURATE		5.0	
C12:1	METHYL 11-DODECENOATE		5.0	
C14:0	METHYL MYRISTATE		5.0	
C14:1	METHYL MYRISTOLEATE		5.0	
C16:0	METHYL PALMITATE		10.0	
C16:1	METHYL PALMITOLEATE	GLC-401	5.0	\$55.00
C18:0	METHYL STEARATE		10.0	
C18:1	METHYL OLEATE		5.0	
C20:0	METHYL ARACHIDATE		10.0	
C20:1	METHYL 11-EICOSENOATE		5.0	
C22:0	METHYL BEHENATE		5.0	
C22:1	METHYL ERUCATE		5.0	
C24:0	METHYL LIGNOCERATE		5.0	
C24:1	METHYL NERVONATE		5.0	
C14:0	METHYL MYRISTATE		1.0	
C16:0	METHYL PALMITATE		4.0	
C18:0	METHYL STEARATE		3.0	
C18:1	METHYL OLEATE		60.0	
C18:2	METHYL LINOLEATE		12.0	
C18:3	METHYL ALPHA LINOLENATE	GLC-402	5.0	\$55.00
C20:0	METHYL ARACHIDATE		3.0	
C20:1	METHYL 11-EICOSENOATE		1.0	
C22:0	METHYL BEHENATE		3.0	
C22:1	METHYL ERUCATE		5.0	
C24:0	METHYL LIGNOCERATE		3.0	
C6:0	METHYL HEXANOATE		2.0	
C8:0	METHYL OCTANOATE		2.0	
C10:0	METHYL DECANOATE		2.0	
C12:0	METHYL LAURATE		2.0	
C12:1	METHYL 11-DODECENOATE		2.0	
C14:0	METHYL MYRISTATE		2.0	
C14:1	METHYL MYRISTOLEATE		2.0	
C16:0	METHYL PALMITATE		8.0	
C16:1	METHYL PALMITOLEATE		4.0	
C17:0	METHYL HEPTADECANOATE		4.0	
C18:0	METHYL STEARATE		8.0	
C18:1	METHYL OLEATE		16.0	
C18:2	METHYL LINOLEATE		4.0	
C18:3	METHYL ALPHA LINOLENATE	GLC-403	4.0	\$100.00
C20:0	METHYL ARACHIDATE		8.0	
C20:1	METHYL 11-EICOSENOATE		4.0	
C20:2	METHYL 11-14-EICOSADIENOATE		2.0	
C20:3	METHYL 11-14-17-EICOSATRIENOATE		2.0	
C20:4	METHYL ARACHIDONATE		2.0	
C20:3	METHYL HOMOGAMMA LINOLENATE		2.0	
C22:0	METHYL BEHENATE		2.0	
C22:1	METHYL ERUCATE		2.0	
C23:0	METHYL TRICOSANOATE		8.0	
C24:0	METHYL LIGNOCERATE		2.0	
C22:6	METHYL DOCOSAHEXAENOATE		2.0	
C24:1	METHYL NERVONATE		2.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C16:0	METHYL PALMITATE		3.0	
C18:1	METHYL OLEATE		17.0	
C18:2	METHYL LINOLEATE		13.0	
C18:3	METHYL ALPHA LINOLENATE	GLC-404	8.0	\$50.00
C20:1	METHYL 11-EICOSENOATE		8.0	
C22:0	METHYL BEHENATE		1.0	
C22:1	METHYL ERUCATE		50.0	
C12:0	METHYL LAURATE		0.1	
C14:0	METHYL MYRISTATE		1.8	
C15:0	METHYL PENTADECANOATE		0.2	
C16:0	METHYL PALMITATE		74.5	
C17:0	METHYL HEPTADECANOATE	GLC-407	0.6	\$50.00
C18:0	METHYL STEARATE		22.0	
C18:1	METHYL OLEATE		0.4	
C19:0	METHYL NONADECANOATE		0.2	
C20:0	METHYL ARACHIDATE		0.2	
C14:1	METHYL MYRISTOLEATE		9.1	
C15:1	METHYL 10-PENTADECENOATE		9.1	
C16:1	METHYL PALMITOLEATE		9.1	
C18:1	METHYL OLEATE		9.1	
C18:2	METHYL LINOLEATE		9.1	
C18:3	METHYL ALPHA LINOLENATE	GLC-408	9.1	\$70.00
C20:1	METHYL 11-EICOSENOATE		9.1	
C20:4	METHYL ARACHIDONATE		9.1	
C22:1	METHYL ERUCATE		9.1	
C22:6	METHYL DOCOSAHEXAENOATE		9.1	
C24:1	METHYL NERVONATE		9.1	
C12:0	METHYL LAURATE		9.1	
C14:0	METHYL MYRISTATE		9.1	
C15:0	METHYL PENTADECANOATE		9.1	
C16:0	METHYL PALMITATE		9.1	
C17:0	METHYL HEPTADECANOATE		9.1	
C18:0	METHYL STEARATE	GLC-409	9.1	\$55.00
C19:0	METHYL NONADECANOATE		9.1	
C20:0	METHYL ARACHIDATE		9.1	
C21:0	METHYL HENEICOSANOATE		9.1	
C22:0	METHYL BEHENATE		9.1	
C24:0	METHYL LIGNOCERATE		9.1	
C14:0	METHYL MYRISTATE		1.0	
C16:0	METHYL PALMITATE		37.0	
C16:1	METHYL PALMITOLEATE		1.0	
C18:0	METHYL STEARATE	GLC-410	2.0	\$50.00
C18:1	METHYL OLEATE		14.0	
C18:2	METHYL LINOLEATE		45.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C8:0	METHYL OCTANOATE		3.23	
C10:0	METHYL DECANOATE		3.23	
C12:0	METHYL LAURATE		3.23	
C12:1	METHYL 11 DODECENOATE		3.23	
C14:0	METHYL MYRISTATE		3.23	
C14:1	METHYL MYRISTOLEATE		3.23	
C16:0	METHYL PALMITATE		3.23	
C16:1	METHYL PALMITOLEATE		3.23	
C18:0	METHYL STEARATE		3.23	
C18:1	METHYL OLEATE		3.23	
C18:1	METHYL PETROSELINATE		3.23	
C18:1	METHYL VACCENATE		3.23	
C18:2	METHYL LINOLEATE		3.23	
C20:0	METHYL ARACHIDATE		3.23	
C18:3	METHYL ALPHA LINOLENATE		3.23	
C18:3	METHYL GAMMA LINOLENATE	GLC-411	3.23	\$140.00
C20:1	METHYL 5-EICOSENOATE		3.23	
C20:1	METHYL 8-EICOSENOATE		3.23	
C20:1	METHYL 11-EICOSENOATE		3.23	
C20:2	METHYL 11-14-EICOSADIENOATE		3.23	
C22:0	METHYL BEHENATE		3.23	
C22:1	METHYL ERUCATE		3.23	
C20:3	METHYL 11-14-17-EICOSATRIENOATE		3.23	
C20:3	METHYL HOMO GAMMA LINOLENATE		3.23	
C20:4	METHYL ARACHIDONATE		3.23	
C22:2	METHYL 13-16-DOCOSADIENOATE		3.23	
C22:3	METHYL 13-16-19-DOCOSATRIENOATE		3.23	
C22:4	METHYL 7-10-13-16-DOCOSATETRAENOATE		3.23	
C24:0	METHYL LIGNOCERATE		3.23	
C24:1	METHYL NERVONATE		3.23	
C22:6	METHYL DOCOSAHEXAENOATE		3.23	
C16:0	METHYL PALMITATE		7.0	REPRESENTATIVE OF
C18:0	METHYL STEARATE		1.5	EVENING PRIMROSE
C18:1	METHYL OLEATE		10.5	
C18:2	METHYL LINOLEATE		71.0	
C18:3	METHYL GAMMA LINOLENATE	GLC-411-EP	9.4	
C18:3	METHYL ALPHA LINOLENATE		0.2	\$55.00
C20:0	METHYL ARACHIDATE		0.2	
C20:1	METHYL 11-EICOSENOATE		0.2	
C4:0	METHYL BUTYRATE		10.53	
C5:0	METHYL PENTANOATE		10.53	
C6:0	METHYL HEXANOATE		10.53	
C7:0	METHYL HEPTANOATE		10.53	
C8:0	METHYL OCTANOATE		5.26	
C9:0	METHYL NONANOATE		5.26	
C10:0	METHYL DECANOATE		5.26	
C11:0	METHYL HENDECANOATE		5.26	\$50.00
C12:0	METHYL DODECANOATE		5.26	
C13:0	METHYL TRIDECCANOATE		5.26	
C14:0	METHYL TETRADECANOATE		5.26	
C15:0	METHYL PENTADECANOATE		5.26	
C16:0	METHYL HEXADECANOATE		5.26	
C17:0	METHYL HEPTADECANOATE		5.26	
C18:0	METHYL OCTADECANOATE		5.26	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C16:0	METHYL PALMITATE		10.0	REPRESENTATIVE OF
C16:1	METHYL PALMITOLEATE		0.3	BORAGE SEED
C18:0	METHYL STEARATE		3.0	
C18:1	METHYL OLEATE		14.5	
C18:2	METHYL LINOLEATE		39.0	
C18:3	METHYL GAMMA LINOLENATE	GLC-412-BS	25.0	
C18:3	METHYL ALPHA LINOLENATE		0.2	\$70.00
C20:0	METHYL ARACHIDATE		0.2	
C20:1	METHYL 11-EICOSENOATE		3.8	
C22:1	METHYL ERUCATE		2.5	
C24:1	METHYL NERVONATE		1.5	
C4:0	METHYL BUTYRATE		9.09	
C5:0	METHYL PENTANOATE		9.09	
C6:0	METHYL HEXANOATE		9.09	
C7:0	METHYL HEPTANOATE		9.09	
C8:0	METHYL OCTANOATE		4.55	
C9:0	METHYL NONANOATE		4.55	
C10:0	METHYL DECANOATE		4.55	
C11:0	METHYL HENDECANOATE		4.55	
C12:0	METHYL LAURATE		4.55	
C13:0	METHYL TRIDECCANOATE	GLC-413	4.55	\$60.00
C14:0	METHYL MYRISTATE		4.55	
C15:0	METHYL PENTADECANOATE		4.55	
C16:0	METHYL PALMITATE		4.55	
C17:0	METHYL HEPTADECANOATE		4.55	
C18:0	METHYL STEARATE		4.55	
C18:1	METHYL OLEATE		4.55	
C18:2	METHYL LINOLEATE		4.55	
C18:3	METHYL ALPHA LINOLENATE		4.55	
C8:0	METHYL OCTANOATE		4.0	
C10:0	METHYL DECANOATE		3.0	
C12:0	METHYL LAURATE		26.0	
C14:0	METHYL MYRISTATE		11.0	
C16:0	METHYL PALMITATE	GLC-414	10.0	\$50.00
C18:0	METHYL STEARATE		3.0	
C18:1	METHYL OLEATE		13.0	
C18:2	METHYL LINOLEATE		27.0	
C18:3	METHYL ALPHA LINOLENATE		3.0	
C14:0	METHYL MYRISTATE		1.0	
C16:0	METHYL PALMITATE		9.0	
C16:1	METHYL PALMITOLEATE		1.0	
C18:0	METHYL STEARATE		5.0	
C18:1	METHYL OLEATE		45.0	
C18:2	METHYL LINOLEATE	GLC-415	33.0	\$55.00
C18:3	METHYL ALPHA LINOLENATE		3.0	
C20:0	METHYL ARACHIDATE		1.0	
C20:1	METHYL 11-EICOSENOATE		1.0	
C22:0	METHYL BEHENATE		1.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C12:0	METHYL LAURATE		3.0	
C14:0	METHYL MYRISTATE		2.0	
C16:0	METHYL PALMITATE		19.0	
C16:1	METHYL PALMITOLEATE		1.0	
C18:0	METHYL STEARATE		4.0	
C18:1	METHYL OLEATE		23.0	
C18:2	METHYL LINOLEATE	GLC-416	42.0	\$55.00
C18:3	METHYL ALPHA LINOLENATE		2.0	
C20:0	METHYL ARACHIDATE		1.0	
C20:1	METHYL 11-EICOSENOATE		1.0	
C22:0	METHYL BEHENATE		1.0	
C24:0	METHYL LIGNOCERATE		1.0	
C16:0	METHYL PALMITATE		30.0	
C18:0	METHYL STEARATE		15.0	
C18:1	METHYL OLEATE		25.0	
C18:2	METHYL LINOLEATE	GLC-418	20.0	\$55.00
C20:4	METHYL ARACHIDONATE		5.0	
C22:6	METHYL DOCOSAHEXAENOATE		5.0	
C16:0	METHYL PALMITATE		10.0	
C16:1	METHYL PALMITOLEATE		.1	
C18:0	METHYL STEARATE		4.5	
C18:1	METHYL OLEATE		61.5	
C18:2	METHYL LINOLEATE	GLC-419	22.0	\$50.00
C18:3	METHYL ALPHA LINOLENATE		1.0	
C20:0	METHYL ARACHIDATE		0.3	
C20:1	METHYL 11-EICOSENOATE		0.3	
C22:0	METHYL BEHENATE		0.3	
C8:0	METHYL OCTANOATE		3.0	
C10:0	METHYL DECANOATE		2.0	
C12:0	METHYL LAURATE		21.0	
C14:0	METHYL MYRISTATE		7.0	
C16:0	METHYL PALMITATE	GLC-420	9.0	\$50.00
C18:0	METHYL STEARATE		4.0	
C18:1	METHYL OLEATE		19.0	
C18:2	METHYL LINOLEATE		31.0	
C18:3	METHYL ALPHA LINOLENATE		4.0	
C16:0	METHYL PALMITATE		3.0	
C16:1	METHYL PALMITOLEATE		1.0	
C18:0	METHYL STEARATE		1.0	
C18:1	METHYL OLEATE		15.0	
C18:2	METHYL LINOLEATE		12.0	
C18:3	METHYL ALPHA LINOLENATE		10.0	
C20:0	METHYL ARACHIDATE		1.0	
C20:1	METHYL 11-EICOSENOATE	GLC-421	5.0	\$60.00
C20:2	METHYL 11-14-EICOSADIENOATE		1.0	
C22:0	METHYL BEHENATE		1.0	
C22:1	METHYL ERUCATE		45.0	
C22:2	METHYL DOCOSADIENOATE		2.0	
C24:0	METHYL LIGNOCERATE		1.0	
C24:1	METHYL NERVONATE		2.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C16:0	METHYL PALMITATE		3.0	REPRESENTATIVE OF
C16:1	METHYL PALMITOLEATE		1.0	MUSTARD SEED
C18:0	METHYL STEARATE		2.0	
C18:1	METHYL OLEATE		20.0	
C18:2	METHYL LINOLEATE		15.0	
C18:3	METHYL ALPHA LINOLENATE		10.0	
C20:0	METHYL ARACHIDATE		1.0	
C20:1	METHYL 11-EICOSENOATE	GLC-421-A	10.0	
C20:2	METHYL 11-14-EICOSADIENOATE		2.0	\$60.00
C22:0	METHYL BEHENATE		1.0	
C22:1	METHYL ERUCATE		30.0	
C22:2	METHYL DOCOSADIENOATE		2.0	
C24:0	METHYL LIGNOCERATE		1.0	
C24:1	METHYL NERVONATE		2.0	
C11:1	METHYL 10-UNDECENOATE		10.0	
C12:1	METHYL 11-DODECENOATE		10.0	
C13:1	METHYL 12-TRIDECCENOATE		10.0	
C14:1	METHYL 9-TETRADECENOATE		10.0	
C15:1	METHYL 10-PENTADECENOATE		10.0	
C16:1	METHYL 9-HEXADECENOATE	GLC-423	10.0	\$50.00
C17:1	METHYL 10-HEPTADECENOATE		10.0	
C18:1	METHYL 9-OCTADECENOATE		10.0	
C19:1	METHYL 10-NONADECENOATE		10.0	
C20:1	METHYL 11-EICOSENOATE		10.0	
			A      B      C	
C18:3	METHYL GAMMA LINOLENATE	GLC-424	50.0	75.0    25.0    \$50.00 EACH
C18:3	METHYL ALPHA LINOLENATE		50.0	25.0    75.0    \$85.00 ALL THREE
C18:1	METHYL OLEATE		20.0	
C18:2	METHYL LINOLEATE	GLC-425	25.0	\$50.00
C22:1	METHYL ERUCATE		55.0	
C6:0	METHYL HEXANOATE		2.0	
C8:0	METHYL OCTANOATE		4.0	
C10:0	METHYL DECANOATE		8.0	
C12:0	METHYL LAURATE		8.0	
C14:0	METHYL MYRISTATE		12.0	
C14:1	METHYL MYRISTOLEATE		2.0	
C15:0	METHYL PENTADECANOATE		2.0	
C16:0	METHYL PALMITATE		16.0	
C16:1	METHYL PALMITOLEATE		2.0	
C17:0	METHYL HEPTADECANOATE		2.0	
C17:1	METHYL 10-HEPTADECENOATE	GLC-426	2.0	\$70.00
C18:0	METHYL STEARATE		12.0	
C18:1	METHYL OLEATE		8.0	
C18:2	METHYL LINOLEATE		6.0	
C18:3	METHYL ALPHA LINOLENATE		2.0	
C19:0	METHYL NONADECANOATE		2.0	
C20:0	METHYL ARACHIDATE		2.0	
C20:1	METHYL 11-EICOSENOATE		4.0	
C22:0	METHYL BEHENATE		2.0	
C24:0	METHYL LIGNOCERATE		2.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C12:0	METHYL LAURATE		0.5	
C14:0	METHYL MYRISTATE		0.5	
C16:0	METHYL PALMITATE		4.0	
C16:1	METHYL PALMITOLEATE		0.5	
C18:0	METHYL STEARATE		1.0	
C18:1	METHYL OLEATE		55.5	
C18:2	METHYL LINOLEATE		20.0	
C18:3	METHYL ALPHA LINOLENATE	GLC-428	10.0	\$55.00
C20:0	METHYL ARACHIDATE		1.0	
C20:1	METHYL 11 EICOSENOATE		2.0	
C20:2	METHYL 11-14 EICOSADIENOATE		0.5	
C22:0	METHYL BEHENATE		1.0	
C22:1	METHYL ERUCATE		2.0	
C24:0	METHYL LIGNOCERATE		0.5	
C24:1	METHYL NERVONATE		1.0	
C17:0	METHYL HEPTADECANOATE		38.0	
C20:5	METHYL EICOSAPENTAENOATE	GLC-443	38.0	\$90.00
C22:6	METHYL DOCOSAHEXANNOATE		24.0	
C6:0	METHYL HEXANOATE		1.0	
C8:0	METHYL OCTANOATE		1.0	
C10:0	METHYL DECANOATE		1.0	
C12:0	METHYL LAURATE		5.0	
C14:0	METHYL MYRISTATE		2.0	
C16:0	METHYL PALMITATE		10.0	
C16:1	METHYL PALMITOLEATE		1.0	
C18:0	METHYL STEARATE	GLC-447	1.0	\$55.00
C18:1	METHYL OLEATE		32.0	
C18:2	METHYL LINOLEATE		40.0	
C18:3	METHYL ALPHA LINOLENATE		2.0	
C20:0	METHYL ARACHIDATE		1.0	
C20:1	METHYL 11-EICOSENOATE		1.0	
C22:0	METHYL BEHENATE		1.0	
C24:0	METHYL LIGNOCERATE		1.0	
C4:0	METHYL BUTYRATE		2.0	
C6:0	METHYL HEXANOATE		2.0	
C8:0	METHYL OCTANOATE		2.0	
C10:0	METHYL DECANOATE		2.0	
C12:0	METHYL LAURATE		2.0	
C14:0	METHYL MYRISTATE		2.0	
C14:1	METHYL MYRISTOLEATE		2.0	
C15:0	METHYL PENTADECANOATE		2.0	
C16:0	METHYL PALMITATE		12.0	
C16:1	METHYL PALMITOLEATE		2.0	
C17:0	METHYL HEPTADECANOATE		2.0	
C17:1	METHYL 10-HEPTADECENOATE	GLC-448	2.0	\$70.00
C18:0	METHYL STEARATE		2.0	
C18:1	METHYL OLEATE		25.0	
C18:1T	METHYL ELAIDATE		2.0	
C18:2	METHYL LINOLEATE		25.0	
C18:2TT	METHYL LINOLEAIDATE		2.0	
C18:3	METHYL ALPHA LINOLENATE		2.0	
C20:0	METHYL ARACHIDATE		2.0	
C20:1	METHYL 11-EICOSENOATE		2.0	
C22:0	METHYL BEHENATE		2.0	
C24:0	METHYL LIGNOCERATE		2.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C6:0	METHYL HEXANOATE		1.0	POLYSORBATE 20
C8:0	METHYL OCTANOATE		8.0	
C10:0	METHYL DECANOATE		7.0	
C12:0	METHYL LAURATE		46.0	
C14:0	METHYL MYRISTATE	GLC-450	18.0	\$40.00
C16:0	METHYL PALMITATE		8.0	
C18:0	METHYL STEARATE		3.0	
C18:1	METHYL OLEATE		7.0	
C18:2	METHYL LINOLEATE		2.0	
C14:0	METHYL MYRISTATE		6.25	
C16:0	METHYL PALMITATE		6.25	
C16:1	METHYL PALMITOLEATE		6.25	
C17:0	METHYL HEPTADECANOATE		6.25	
C18:0	METHYL STEARATE		6.25	
C18:1	METHYL OLEATE		6.25	
C18:2	METHYL LINOLEATE		6.25	
C18:3	METHYL ALPHA LINOLENATE	GLC-455	6.25	\$90.00
C18:3	METHYL GAMMA LINOLENATE		6.25	
C20:2	METHYL 11-14 EICOSADIENOATE		6.25	
C20:3	METHYL HOMOGAMMA LINOLENATE		6.25	
C20:4	METHYL ARACHIDONATE		6.25	
C20:5	METHYL EICOSAPENTAENOATE		6.25	
C22:4	METHYL DOCOSATETRAENOATE		6.25	
C22:5N3	METHYL DOCOSAPENTAENOATE		6.25	
C22:6	METHYL DOCOSAHEXAENOATE		6.25	
C4:0	METHYL BUTYRATE		1.0	
C6:0	METHYL HEXANOATE		0.5	
C8:0	METHYL OCTANOATE		4.0	
C10:0	METHYL DECANOATE		4.0	
C12:0	METHYL LAURATE		8.0	
C13:0	METHYL TRIDEcanoate		15.0	
C14:0	METHYL MYRISTATE		5.0	
C14:1	METHYL MYRISTOLEATE		0.5	
C15:0	METHYL PENTADECANOATE		0.2	
C16:0	METHYL PALMITATE		20.0	
C16:1	METHYL PALMITOLEATE		0.4	
C17:0	METHYL HEPTADECANOATE		0.2	
C18:0	METHYL STEARATE		5.0	
C18:1	METHYL OLEATE	GLC-458	20.0	\$130.00
C18:2	METHYL LINOLEATE		10.0	
C18:3	METHYL ALPHA LINOLENATE		1.0	
C18:3	METHYL GAMMA LINOLENATE		0.4	
C20:0	METHYL ARACHIDATE		0.5	
C20:1T	METHYL 11 TRANSEICOSENOATE		0.2	
C20:2	METHYL 11-14 EICOSADIENOATE		0.2	
C20:3	METHYL 11-14-17 EICOSATRIENOATE		0.2	
C20:3	METHYL HOMOGAMMA LINOLENATE		0.2	
C20:4	METHYL ARACHIDONATE		0.3	
C20:5	METHYL EICOSAPENTAENOATE		0.3	
C22:0	METHYL BEHENATE		0.5	
C22:1T	METHYL BRASSIDATE		0.2	
C22:6	METHYL DOCOSAHEXAENOATE		0.5	
C23:0	METHYL TRICOSANOATE		1.5	
C24:0	METHYL LIGNOCERATE		0.2	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C6:0	METHYL HEXANOATE		0.2	
C8:0	METHYL OCTANOATE		3.5	
C10:0	METHYL DECANOATE		3.0	
C12:0	METHYL LAURATE		26.0	
C14:0	METHYL MYRISTATE		10.0	
C16:0	METHYL PALMITATE		15.0	
C16:1	METHYL PALMITOLEATE		0.1	
C17:0	METHYL HEPTADECANOATE	GLC-459	0.1	\$60.00
C18:0	METHYL STEARATE		3.0	
C18:1	METHYL OLEATE		18.7	
C18:2	METHYL LINOLEATE		17.7	
C18:3	METHYL ALPHA LINOLENATE		1.5	
C20:0	METHYL ARACHIDATE		0.3	
C20:1	METHYL 11-EICOSENOATE		0.2	
C22:0	METHYL BEHENATE		0.1	
C24:0	METHYL LIGNOCERATE		0.1	
C6:0	METHYL HEXANOATE		0.1	
C8:0	METHYL OCTANOATE		1.6	
C10:0	METHYL DECANOATE		1.0	
C12:0	METHYL LAURATE		9.5	
C14:0	METHYL MYRISTATE		4.0	
C16:0	METHYL PALMITATE		24.5	
C16:1	METHYL PALMITOLEATE		0.1	
C17:0	METHYL HEPTADECANOATE	GLC-460	0.1	\$60.00
C18:0	METHYL STEARATE		3.3	
C18:1	METHYL OLEATE		28.0	
C18:2	METHYL LINOLEATE		25.0	
C18:3	METHYL ALPHA LINOLENATE		2.0	
C20:0	METHYL ARACHIDATE		0.3	
C20:1	METHYL 11-EICOSENOATE		0.2	
C22:0	METHYL BEHENATE		0.1	
C24:0	METHYL LIGNOCERATE		0.1	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C4:0	METHYL BUTYRATE		3.125	3.03
C6:0	METHYL CAPROATE		3.125	3.03
C8:0	METHYL CAPRYLATE		3.125	3.03
C10:0	METHYL CAPRATE		3.125	3.03
C12:0	METHYL LAURATE		3.125	3.03
C13:0	METHYL TRIDEcanoate		—	3.03
C14:0	METHYL MYRISTATE		3.125	3.03
C14:1	METHYL MYRISTOLEATE		3.125	3.03
C15:0	METHYL PENTADECANOATE		3.125	3.03
C16:0	METHYL PALMITATE		3.125	3.03
C16:1	METHYL PALMITOLEATE		3.125	3.03
C17:0	METHYL HEPTADECANOATE		3.125	3.03
C17:1	METHYL 10-HEPTADECENOATE		3.125	3.03
C18:0	METHYL STEARATE		3.125	3.03
C18:1	METHYL OLEATE		3.125	3.03
C18:2	METHYL LINOLEATE		3.125	3.03
C18:3	METHYL ALPHA LINOLENATE		3.125	3.03
C18:3	METHYL 6-9-12- GAMMA LINOLENATE	GLC-461	3.125	3.03
C20:0	METHYL ARACHIDATE		3.125	3.03
C20:1	METHYL 11-EICOSENOATE		3.125	3.03
C20:2	METHYL 11-14-EICOSADIENOATE		3.125	3.03
C20:3	METHYL 11-14-17-EICOSATRIENOATE		3.125	3.03
C20:3	METHYL 8-11-14-HOMOGAMMA LINOLENATE		3.125	3.03
C20:4	METHYL ARACHIDONATE		3.125	3.03
C20:5	METHYL EICOSAPENTAENOATE		3.125	3.03
C22:0	METHYL BEHENATE		3.125	3.03
C22:1	METHYL ERUCATE		3.125	3.03
C22:2	METHYL DOCOSADIENOATE		3.125	3.03
C22:4	METHYL DOCOSATETRAENOATE		3.125	3.03
C22:5N3	METHYL DOCOSAPENTAENOATE		3.125	3.03
C22:6	METHYL DOCOSAHEXAENOATE		3.125	3.03
C24:0	METHYL LIGNOCERATE		3.125	3.03
C24:1	METHYL NERVONATE		3.125	3.03

**\$150.00 EACH**

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C10:0	METHYL CAPRATE		3.45	
C12:0	METHYL LAURATE		3.45	
C12:1	METHYL 11-DODECENOATE		3.45	
C14:0	METHYL MYRISTATE		3.45	
C14:1	METHYL MYRISTOLEATE		3.45	
C16:0	METHYL PALMITATE		3.45	
C16:1	METHYL PALMITOLEATE		3.45	
C18:0	METHYL STEARATE		3.45	
C18:1	METHYL OLEATE		3.45	
C18:1	METHYL VACCENATE		3.45	
C18:2	METHYL LINOLEATE		3.45	
C18:3	METHYL GAMMA LINOLENATE		3.45	\$150.00
C18:3	METHYL ALPHA LINOLENATE	GLC-462	3.45	
C20:0	METHYL EICOSANOATE		3.45	
C20:1	METHYL 11-EICOSENOATE		3.45	
C20:2	METHYL 11-14-EICOSADIENOATE		3.45	
C20:3	METHYL HOMOGAMMA LINOLENATE		3.45	
C20:4	METHYL ARACHIDONATE		3.45	
C20:3	METHYL 11-14-17-EICOSATRIENOATE		3.45	
C20:5	METHYL EICOSAPENTAENOATE		3.45	
C22:0	METHYL BEHENATE		3.45	
C22:1	METHYL ERUCATE		3.45	
C22:2	METHYL 13-16-DOCOSADIENOATE		3.45	
C22:4	METHYL DOCOSATETRAENOATE		3.45	
C22:5N3	METHYL DOCOSAPENTAENOATE		3.45	
C24:0	METHYL LIGNOCERATE		3.45	
C22:6	METHYL DOCOSAHEXAENOATE		3.45	
C24:1	METHYL NERVONATE		3.45	
	CHOLESTEROL		3.45	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C4:0	METHYL BUTYRATE		1.0	
C5:0	METHYL PENTANOATE		1.0	
C6:0	METHYL CAPROATE		1.0	
C7:0	METHYL HEPTANOATE		1.0	
C8:0	METHYL CAPRYLATE		2.0	
C9:0	METHYL NONANOATE		1.0	
C10:0	METHYL CAPRATE		2.0	
C11:0	METHYL UNDECANOATE		1.0	
C11:1	METHYL UNDECENOATE		1.0	
C12:0	METHYL LAURATE		4.0	
C12:1	METHYL DODECENOATE		2.0	
C13:0	METHYL TRIDEcanoate		1.0	
C13:1	METHYL TRIDEcenoate		1.0	
C14:0	METHYL MYRISTATE		4.0	
C14:1	METHYL MYRISTOLEATE		2.0	
C15:0	METHYL PENTADECANOATE		1.0	
C15:1	METHYL PENTADECENOATE		1.0	
C16:0	METHYL PALMITATE		4.0	
C16:1	METHYL PALMITOLEATE		4.0	
C16:1T	METHYL PALMITELAIDATE		1.0	
C17:0	METHYL HEPTADECANOATE		2.0	
C17:1	METHYL 10-HEPTADECENOATE		2.0	
C18:0	METHYL STEARATE		4.0	
C18:1	METHYL OLEATE		4.0	
C18:1T	METHYL ELAIDATE		1.0	
C18:1	METHYL PETROSELINATE	GLC-463	1.0	
C18:1	METHYL VACCENATE		1.0	\$275.00
C18:1T	METHYL TRANSVACCENATE		1.0	
C18:2	METHYL LINOLEATE		4.0	
C18:2TT	METHYL LINOELAIDATE		2.0	
C18:3	METHYL GAMMA LINOLENATE		1.0	
C19:0	METHYL NONADECANOATE		1.0	
C19:1	METHYL 7-NONADECENOATE		1.0	
C18:3	METHYL ALPHA LINOLENATE		4.0	
C20:0	METHYL ARACHIDATE		4.0	
C20:1	METHYL 5-EICOSENOATE		2.0	
C20:1	METHYL 8-EICOSENOATE		2.0	
C20:1	METHYL 11-EICOSENOATE		2.0	
C20:2	METHYL 11-14-EICOSADIENOATE		2.0	
C20:3	METHYL HOMOGAMMA LINOLENATE		1.0	
C20:4	METHYL ARACHIDONATE		1.0	
C20:3	METHYL 11-14-17 EICOSATRIENOATE		2.0	
C22:0	METHYL BEHENATE		2.0	
C22:1	METHYL ERUCATE		4.0	
C20:5	METHYL EICOSAPENTAENOATE		2.0	
C22:2	METHYL DOCOSADIENOATE		1.0	
C22:3	METHYL DOCOSATRIENOATE		2.0	
C22:4	METHYL DOCOSATETRAENOATE		1.0	
C24:0	METHYL LIGNOCERATE		2.0	
C22:5 N3	METHYL DOCOSAPENTAENOATE		2.0	
C22:6	METHYL DOCOSAHEXAENOATE		2.0	
C24:1	METHYL NERVONATE		1.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	% BY WT. AS INDICATED		PRICE/100MG
		469-A	469-B	
C13:0	METHYL TRIDECANOATE	4.0	--	
C14:0	METHYL MYRISTATE	4.0	15.0	
C14:1	METHYL MYRISTOLEATE	4.0	3.0	
C16:0	METHYL PALMITATE	4.0	0.5	
C16:1T	METHYL PALMITELAIDATE	4.0	0.5	
C16:1	METHYL PALMITOLEATE	4.0	1.0	
C17:0	METHYL HEPTADECANOATE	4.0	1.0	
C18:0	METHYL STEARATE	4.0	0.5	
C18:1T	METHYL ELAIDATE	4.0	20.0	
C18:1	METHYL OLEATE	4.0	2.0	
C18:1T	METHYL PETROSELAINATE	4.0	5.0	
C18:1T	METHYL TRANSVACCENATE	4.0	0.2	\$100.00 EACH
C18:2TT	METHYL LINOLELAIDATE	4.0	3.0	
C18:2	METHYL LINOLEATE	4.0	6.0	
C18:2	METHYL CONJUGATED LINOLEATE	4.0	2.0	
C18:3	METHYL GAMMA LINOLENATE	4.0	1.0	
C18:3	METHYL LINOLENATE	4.0	0.5	
C20:0	METHYL ARACHIDATE	4.0	0.1	
C20:1	METHYL 11-EICOSENOATE	4.0	14.7	
C20:3	METHYL HOMOGAMMA LINOLENATE	4.0	9.0	
C20:4	METHYL ARACHIDONATE	4.0	2.0	
C20:3	METHYL 11-14-17 EICOSATRIENOATE	4.0	5.0	
C22:0	METHYL BEHENATE	4.0	5.0	
C22:1	METHYL ERUCATE	4.0	1.0	
C18:1T	METHYL RICINELAIDATE	4.0	2.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C16:1	METHYL PALMITOLEATE		10.0	
C18:3	METHYL ALPHA LINOLENATE		15.0	
C18:3	METHYL GAMMA LINOLENATE		10.0	
C20:0	METHYL ARACHIDATE	GLC-480	15.0	\$85.00
C22:0	METHYL BEHENATE		10.0	
C22:3	METHYL DOCOSATRIENOATE		15.0	
C22:4	METHYL DOCOSATETRAENOATE		10.0	
C22:6	METHYL DOCOSAHEXAENOATE		15.0	
C14:1T	METHYL MYRISTELAIDATE		6.0	
C15:1T	METHYL 10-TRANSPENTADECENOATE		6.0	
C16:1T	METHYL PALMITELAIDATE		6.0	
C17:1T	METHYL 10-TRANSHEPTADECENOATE		6.0	
C18:1T	METHYL ELAIDATE		16.0	
C18:1T	METHYL PETROSELAINATE		4.0	
C18:1T	METHYL TRANSVACCENATE		12.0	
C18:1T	METHYL RICINELAIDATE	GLC-481-B	8.0	\$175.00
C18:2TT	METHYL LINOLELAIDATE		6.0	
C19:1T	METHYL 7-TRANSNONADECENOATE		6.0	
C19:1T	METHYL 10-TRANSNONADECENOATE		12.0	
C20:1T	METHYL 11-TRANSEICOSENOATE		6.0	
C22:1T	METHYL BRASSIDATE		6.0	
C14:0	METHYL MYRISTATE		6.66	
C16:0	METHYL PALMITATE		6.66	
C16:1	METHYL PALMITOLEATE		6.66	
C18:0	METHYL STEARATE		6.66	
C18:1	METHYL OLEATE		6.66	
C18:1T	METHYL ELAIDATE		6.66	
C18:2	METHYL LINOLEATE		6.66	
C18:3	METHYL ALPHA LINOLENATE	GLC-484	6.66	\$80.00
C18:3	METHYL GAMMA LINOLENATE		6.66	
C20:4	METHYL ARACHIDONATE		6.66	
C20:5	METHYL EICOSAPENTAENOATE		6.66	
C22:5N3	METHYL DOCOSAPENTAENOATE		6.66	
C22:6	METHYL DOCOSAHEXAENOATE		6.66	
C24:0	METHYL LIGNOCERATE		6.66	
C24:1	METHYL NERVONATE		6.66	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C14:0	METHYL MYRISTATE		3.85	
C16:0	METHYL PALMITATE		3.85	
C16:1	METHYL PALMITOLEATE		3.85	
C17:0	METHYL HEPTADECANOATE		3.85	
C18:0	METHYL STEARATE		3.85	
C18:1	METHYL OLEATE		3.85	
C18:1	METHYL VACCENATE		3.85	
C18:2	METHYL LINOLEATE		3.85	
C18:3	METHYL ALPHA LINOLENATE		3.85	
C18:3	METHYL GAMMA LINOLENATE		3.85	
C20:0	METHYL ARACHIDATE		3.85	
C20:1	METHYL 11 EICOSENOATE		3.85	
C20:2	METHYL 11-14 EICOSADIENOATE	GLC-490	3.85	\$200.00
C20:3	METHYL 11-14-17 EICOSATRIENOATE		3.85	
C20:3	METHYL HOMOGAMMA LINOLENATE		3.85	
C22:0	METHYL BEHENATE		3.85	
C22:1	METHYL ERUCATE		3.85	
C20:4	METHYL ARACHIDONATE		3.85	
C20:5	METHYL EICOSAPENTAENOATE		3.85	
C22:2	METHYL 13-16 DOCOSADIENOATE		3.85	
C22:3	METHYL 13-16-19 DOCOSATRIENOATE		3.85	
C22:4	METHYL DOCOSATETRAENOATE		3.85	
C22:5N3	METHYL DOCOSAPENTAENOATE		3.85	
C22:6	METHYL DOCOSAHEXAENOATE		3.85	
C24:0	METHYL LIGNOCERATE		3.85	
C24:1	METHYL NERVONATE		3.85	
C14:0	METHYL MYRISTATE		2.5	
C14:1	METHYL MYRISTOLEATE		2.5	
C16:0	METHYL PALMITATE		2.5	
C16:1	METHYL PALMITOLEATE		2.5	
C18:0	METHYL STEARATE		5.0	
C18:1	METHYL OLEATE		5.0	
C18:2	METHYL LINOLEATE		5.0	
C18:3	METHYL ALPHA LINOLENATE		5.0	
C20:0	METHYL ARACHIDATE		5.0	
C20:1	METHYL 11 EICOSENOATE	GLC-502	5.0	\$95.00
C20:2	METHYL 11-14 EICOSADIENOATE		5.0	
C20:3	METHYL 11-14-17 EICOSATRIENOATE		5.0	
C20:4	METHYL ARACHIDONATE		5.0	
C20:5	METHYL EICOSAPENTAENOATE		7.5	
C22:0	METHYL BEHENATE		5.0	
C22:1	METHYL ERUCATE		5.0	
C24:0	METHYL LIGNOCERATE		5.0	
C24:1	METHYL NERVONATE		5.0	
C22:5N3	METHYL DOCOSAPENTAENOATE		7.5	
C22:6	METHYL DOCOSAHEXAENOATE		10.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C23:0	METHYL TRICOSANOATE		33.0	
C20:5	METHYL EICOSAPENTAENOATE	GLC-529	27.0	\$150.00
C22:6	METHYL DOCOSAHEXAENOATE		40.0	
C4:0	METHYL BUTYRATE		4.76	
C5:0	METHYL VALERATE		4.76	
C6:0	METHYL HEXANOATE		4.76	
C7:0	METHYL HEPTANOATE		4.76	
C8:0	METHYL OCTANOATE		4.76	
C9:0	METHYL NONANOATE		4.76	
C10:0	METHYL DECANOATE		4.76	
C11:0	METHYL UNDECANOATE		4.76	
C12:0	METHYL LAURATE		4.76	
C13:0	METHYL TRIDEcanoate		4.76	
C14:0	METHYL MYRISTATE	GLC-532	4.76	\$55.00
C15:0	METHYL PENTADECANOATE		4.76	
C16:0	METHYL PALMITATE		4.76	
C17:0	METHYL HEPTADECANOATE		4.76	
C18:0	METHYL STEARATE		4.76	
C19:0	METHYL NONADECANOATE		4.76	
C20:0	METHYL ARACHIDATE		4.76	
C21:0	METHYL HENEICOSANOATE		4.76	
C22:0	METHYL BEHENATE		4.76	
C23:0	METHYL TRICOSANOATE		4.76	
C24:0	METHYL LIGNOCERATE		4.76	
C14:0	METHYL MYRISTATE		6.0	
C14:1	METHYL MYRISTOLEATE		1.0	
C16:0	METHYL PALMITATE		16.0	
C16:1	METHYL PALMITOLEATE		5.0	
C18:0	METHYL STEARATE		8.0	
C18:1	METHYL OLEATE		13.0	
C18:1	METHYL VACCENATE		4.0	
C18:2	METHYL LINOLEATE		2.0	
C18:3	METHYL ALPHA LINOLENATE		2.0	
C20:0	METHYL ARACHIDATE		1.0	
C20:1	METHYL 11-EICOSENOATE	GLC-538	1.0	\$70.00
C20:2	METHYL 11-14 EICOSADIENOATE		1.0	
C20:3	METHYL 11-14-17 EICOSATRIENOATE		1.0	
C20:4	METHYL ARACHIDONATE		3.0	
C20:5	METHYL EICOSAPENTAENOATE		10.0	
C22:0	METHYL BEHENATE		1.0	
C22:1	METHYL ERUCATE		3.0	
C22:6	METHYL DOCOSAHEXAENOATE		12.0	
C23:0	METHYL TRICOSANOATE		8.0	
C24:0	METHYL LIGNOCERATE		1.0	
C24:1	METHYL NERVONATE		1.0	
C6:0	METHYL HEXANOATE		10.0	Representative of SAW PALMETTO
C8:0	METHYL OCTANOATE		10.0	
C10:0	METHYL DECANOATE		10.0	
C12:0	METHYL LAURATE		10.0	
C14:0	METHYL MYRISTATE	GLC-539	10.0	\$50.00
C16:0	METHYL PALMITATE		10.0	
C18:0	METHYL STEARATE		10.0	
C18:1	METHYL OLEATE		10.0	
C18:2	METHYL LINOLEATE		10.0	
C18:3	METHYL LINOLENATE		10.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
			<b>B</b>	
C14:1T	METHYL MYRISTELAIDATE		—	12.50
C16:1T	METHYL PALMITELAIDATE		16.67	12.50
C18:1T	METHYL TRANSVACCENATE		—	12.50
C18:1T	METHYL PETROSELAIDATE		16.67	12.50
C18:1T	METHYL ELAIDATE		16.67	12.50
C18:2TT	METHYL LINOLELAIDATE	GLC-546	16.67	12.50
C20:1T	METHYL 11-TRANS EICOSENOATE		16.67	12.50
C22:1T	METHYL BRASSIDATE		16.67	12.50
			<b>B</b>	<b>C</b>
C8:0	METHYL OCTANOATE		4.0	3.88
C9:0	METHYL NONANOATE		1.0	0.97
C10:0	METHYL DECANOATE		2.0	1.94
C11:0	METHYL UNDECANOATE		3.0	2.91
C11:1	METHYL UNDECENOATE		1.0	0.97
C12:0	METHYL LAURATE		5.0	4.85
C12:1	METHYL DODECENOATE		3.0	2.91
C13:0	METHYL TRIDEcanoate		1.0	0.97
C13:1	METHYL TRIDEcenoate		2.0	1.94
C14:0	METHYL MYRISTATE		5.0	4.85
C14:1	METHYL MYRISTOLEATE		1.0	0.97
C15:0	METHYL PENTADECANOATE		3.0	2.91
C16:0	METHYL PALMITATE		5.0	4.85
C16:1	METHYL PALMITOLEATE		1.0	0.97
C17:0	METHYL HEPTADECANOATE		2.0	1.94
C17:1	METHYL HEPTADECENOATE		—	1.0
C18:0	METHYL STEARATE		1.0	0.97
C18:1	METHYL OLEATE		5.0	4.85
C18:1	METHYL VACCENATE		2.0	1.94
C18:2	METHYL LINOLEATE		4.0	3.88
C18:3	METHYL GAMMA LINOLENATE	GLC-566	3.0	2.91
C19:0	METHYL NONADECANOATE		—	2.0
C18:3	METHYL ALPHA LINOLENATE		1.0	0.97
C20:0	METHYL ARACHIDATE		4.0	3.88
C20:1	METHYL 11-EICOSENOATE		1.0	0.97
C20:2	METHYL 11-14 EICOSADIENOATE		3.0	2.91
C20:3	METHYL HOMOGAMMA LINOLENATE		2.0	1.94
C20:4	METHYL ARACHIDONATE		5.0	4.85
C20:3	METHYL 11-14-17 EICOSATRIENOATE		1.0	0.97
C22:0	METHYL BEHENATE		1.0	0.97
C22:1	METHYL ERUCATE		4.0	3.88
C20:5	METHYL EICOSAPENTAENOATE		3.0	2.91
C22:2	METHYL DOCOSADIENOATE		2.0	1.94
C22:3	METHYL DOCOSATRIENOATE		1.0	0.97
C22:4	METHYL DOCOSATETRAENOATE		4.0	3.88
C22:5 N3	METHYL DOCOSAPENTAENOATE		1.0	0.97
C22:5 N6	METHYL DOCOSAPENTAENOATE		—	2.91
C22:6	METHYL DOCOSAHEXAENOATE		5.0	4.85
C23:0	METHYL TRICOSANOATE		4.0	3.88
C24:0	METHYL LIGNOCERATE		1.0	0.97
C24:1	METHYL NERVONATE		3.0	2.91
				<b>\$250.00</b>

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.				PRICE/100MG
			B	C	D	E	
C4:0	METHYL BUTYRATE	2.326	2.273	2.273	2.428	2.381	
C6:0	METHYL HEXANOATE	2.326	2.273	2.273	2.428	2.381	
C8:0	METHYL OCTANOATE	2.326	2.273	2.273	2.428	2.381	
C10:0	METHYL DECANOATE	2.326	2.273	2.273	2.428	2.381	
C11:0	METHYL UNDECANOATE	2.326	2.273	2.273	2.428	2.381	
C12:0	METHYL LAURATE	2.326	2.273	2.273	2.428	2.381	
C13:0	METHYL TRIDEcanoate	2.326	2.273	2.273	2.428	2.381	
C14:0	METHYL MYRISTATE	2.326	2.273	2.273	2.428	2.381	
C14:1T	METHYL MYRISTELAIDATE	2.326	2.273	2.273	2.428	2.381	
C14:1	METHYL MYRISTOLEATE	2.326	2.273	2.273	2.428	2.381	
C15:0	METHYL PENTADECANOATE	2.326	2.273	2.273	2.428	2.381	
C15:1	METHYL PENTADECENOATE	2.326	2.273	2.273	2.428	2.381	
C16:0	METHYL PALMITATE	4.652	4.546	4.546	4.856	2.381	
C16:1T	METHYL PALMITELAIDATE	2.326	2.273	2.273	2.428	2.381	
C16:1	METHYL PALMITOLEATE	2.326	2.273	2.273	2.428	2.381	
C17:0	METHYL HEPTADECANOATE	2.326	2.273	2.273	2.428	2.381	
C17:1	METHYL 10-HEPTADECENOATE	2.326	2.273	2.273	2.428	2.381	
C18:0	METHYL STEARATE	2.326	2.273	2.273	2.428	2.381	
C18:1T	METHYL ELAIDATE	2.326	2.273	2.273	2.428	2.381	
C18:1	METHYL OLEATE	2.326	2.273	2.273	2.428	2.381	
C18:2TT	METHYL LINOLELAIDATE	GLC-569	2.326	2.273	2.273	2.428	2.381
C18:2	METHYL LINOLEATE		2.326	2.273	2.273	2.428	2.381
C18:2	METHYL CONJUGATED LINOLEATE			2.273			\$200.00 EA.
C18:3	METHYL ALPHA LINOLENATE	2.326	2.273	2.273	2.428	2.381	
C18:3	METHYL GAMMA LINOLENATE	2.326	2.273	2.273	2.428	2.381	
C20:0	METHYL ARACHIDATE	2.326	2.273	2.273	2.428	2.381	
C20:1	METHYL 11-EICOSENOATE	2.326	2.273	2.273	2.428	2.381	
C20:2	METHYL 11-14 EICOSADIENOATE	2.326	2.273	2.273	2.428	2.381	
C21:0	METHYL HENEICOSANOATE	2.326	2.273	2.273	2.428	2.381	
C22:0	METHYL BEHENATE	2.326	2.273	2.273	2.428	2.381	
C20:3	METHYL 8-11-14 EICOSATRIENOATE	2.326	2.273	2.273	2.428	2.381	
C20:4	METHYL ARACHIDONATE	2.326	2.273	2.273	0.2326	2.381	
C20:3	METHYL 11-14-17 EICOSATRIENOATE	2.326	2.273	2.273	2.428	2.381	
C20:5	METHYL EICOSAPENTAENOATE	2.326	2.273	2.273	2.428	2.381	
C22:1	METHYL ERUCATE	2.326	2.273	2.273	2.428	2.381	
C23:0	METHYL TRICOSANOATE	2.326	2.273	2.273	0.2326	2.381	
C22:2	METHYL DOCOSADIENOATE	2.326	2.273	2.273	2.428	2.381	
C22:3	METHYL DOCOSATRIENOATE	2.326	2.273	2.273	2.428	2.381	
C22:4	METHYL DOCOSATETRAENOATE	2.326	2.273	2.273	2.428	2.381	
C22:5N6	METHYL DOCOSAPENTAENOATE		2.273				
C22:5N3	METHYL DOCOSAPENTAENOATE	2.326	2.273	2.273	2.428	2.381	
C24:0	METHYL LIGNOCERATE	2.326	2.273	2.273	2.428	2.381	
C24:1	METHYL NERVONATE	2.326	2.273	2.273	2.428	2.381	
C22:6	METHYL DOCOSAHEXAENOATE	2.326	2.273	2.273	2.428	2.381	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
			B	
C4:0	METHYL BUTYRATE		2.0	2.04
C6:0	METHYL CAPRONATE		1.5	2.04
C8:0	METHYL CAPRYLATE		1.0	2.04
C10:0	METHYL CAPRATE		2.0	2.04
C12:0	METHYL LAURATE		3.0	2.04
C14:0	METHYL MYRISTATE		7.0	2.04
C14:1T	METHYL TRANSMYRISTELAIDATE		0.5	2.04
C14:1	METHYL MYRISTOLEATE		2.0	2.04
C15:0	METHYL PENTADECANOATE		1.0	2.04
C15:1T	METHYL 10-TRANSPENTADECENOATE		0.5	2.04
C15:1	METHYL 10-PENTADECENOATE		1.0	2.04
C16:0	METHYL PALMITATE		19.0	2.04
C16:1T	METHYL PALMITELAIDATE		1.0	2.04
C16:1	METHYL PALMITOLEATE		4.0	2.04
C17:0	METHYL HEPTADECANOATE		1.0	2.04
C17:1T	METHYL 10--TRANSHEPTADECENOATE		1.0	2.04
C17:1	METHYL 10-HEPTADECENOATE		1.0	2.04
C18:0	METHYL STEARATE		8.0	2.04
C18:1T	METHYL PETROELAIDATE		1.0	2.04
C18:1T	METHYL ELAIDATE		1.0	2.04
C18:1T	METHYL TRANSVACCENATE		1.0	2.04
C18:1	METHYL PETROSELINATE		0.5	2.04
C18:1	METHYL OLEATE		20.0	2.04
C18:1	METHYL VACCENATE	GLC-603	1.0	2.04
C19:0	METHYL NONADECANOATE		2.0	2.04
C18:2TT	METHYL LINELAIDATE		0.5	2.04
C19:1T	METHYL 7-TRANSNONADECENOATE		0.5	2.04
C19:1T	METHYL 10-TRANSNONADECENOATE		0.5	2.04
C18:2	METHYL LINOLEATE		3.0	2.04
C20:0	METHYL ARACHIDATE		2.0	2.04
C18:3	METHYL GAMMA LINOLENATE		0.5	2.04
C20:1T	METHYL 11-TRANSEICOSENOATE		0.5	2.04
C18:3	METHYL ALPHA LINOLENATE		2.0	2.04
C20:1	METHYL 8-EICOSENOATE		0.5	2.04
C18:2	METHYL CONJUGATED LINOLEATE 99%		1.0	2.04
C20:2	METHYL 11-14 EICOSADIENOATE		0.5	2.04
C22:0	METHYL BEHENATE		0.5	2.04
C22:1T	METHYL BRASSIDATE		0.5	2.04
C20:3	METHYL 11-14-17 EICOSATRIENOATE		0.5	2.04
C22:1	METHYL ERUCATE		0.5	2.04
C20:4	METHYL ARACHIDONATE		0.5	2.04
C23:0	METHYL TRICOSANOATE		0.5	2.04
C22:2	METHYL DOCOSADIENOATE		0.5	2.04
C20:5	METHYL EICOSAPENTAENOATE		0.5	2.04
C24:0	METHYL LIGNOCERATE		0.5	2.04
C24:1	METHYL NERVONOATE		0.5	2.04
C22:6	METHYL DOCOSAHEXAENOATE		0.5	2.04

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C4:0	METHYL BUTYRATE		3.0	
C6:0	METHYL CAPRONATE		1.5	
C8:0	METHYL CAPRYLATE		1.0	
C10:0	METHYL CAPRATE		2.0	
C12:0	METHYL LAURATE		3.0	
C12:1	METHYL DODECENOATE		0.2	
C14:0	METHYL MYRISTATE		10.0	
C14:1	METHYL MYRISTOLEATE		1.0	
C15:0	METHYL PENTADECANOATE		1.0	
C16:0	METHYL PALMITATE		28.0	
C16:1	METHYL PALMITOLEATE		2.0	
C17:0	METHYL HEPTADECANOATE		0.7	
C17:1	METHYL 10-HEPTADECENOATE		0.3	
C18:0	METHYL STEARATE		14.0	
C18:1T	METHYL ELAIDATE		20.0	
C19:0	METHYL NONADECANOATE		0.5	
C18:2	METHYL LINOLEATE		3.5	
C20:0	METHYL ARACHIDATE		0.2	
C18:3	METHYL ALPHA LINOLENATE	GLC-606	0.2	\$150.00
C20:1	METHYL 11-EICOSENOATE		0.3	
C18:3	METHYL GAMMA LINOLENATE		0.8	
C18:2	METHYL CONJUGATED LINOLEATE 99%		3.5	
C20:2	METHYL 11-14 EICOSADIENOATE		0.2	
C22:0	METHYL BEHENATE		0.2	
C20:3	METHYL 11-14-17 EICOSATRIENOATE		0.3	
C20:3	METHYL HOMOGAMMA LINOLENATE		0.2	
C22:1	METHYL ERUCATE		0.1	
C20:4	METHYL ARACHIDONATE		0.2	
C22:2	METHYL DOCOSADIENOATE		0.3	
C22:3	METHYL DOCOSATRIENOATE		0.2	
C24:0	METHYL LIGNOCERATE		0.2	
C20:5	METHYL EICOSAPENTAENOATE		0.3	
C24:1	METHYL NERVONATE		0.2	
C22:4	METHYL DOCOSATETRAENOATE		0.1	
C22:5n6	METHYL DOCOSAPENTAENOATE		0.3	
C22:5n3	METHYL DOCOSAPENTAENOATE		0.3	
C22:6	METHYL DOCOSAHEXAENOATE		0.2	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C4:0	METHYL BUTYRATE		2.5	
C6:0	METHYL HEXANOATE		2.5	
C8:0	METHYL OCTANOATE		2.5	
C10:0	METHYL DECANOATE		2.5	
C11:0	METHYL UNDECANOATE		2.5	
C12:0	METHYL LAURATE		2.5	
C13:0	METHYL TRIDEcanoate		2.5	
C14:0	METHYL MYRISTATE		2.5	
C14:1	METHYL MYRISTOLEATE		2.5	
C14:1T	METHYL MYRISTELAIDATE		2.5	
C15:0	METHYL PENTADECANOATE		2.5	
C15:1	METHYL 10-PENTADECENOATE		2.5	
C16:0	METHYL PALMITATE		5.0	
C16:1T	METHYL PALMITELAIDATE		2.5	
C16:1	METHYL PALMITOLEATE		2.5	
C17:0	METHYL HEPTADECANOATE		2.5	
C17:1	METHYL 10-HEPTADECENOATE		2.5	
C18:0	METHYL STEARATE		2.5	
C18:1T	METHYL PETROELAIDATE		2.5	
C18:1T	METHYL ELAIDATE	GLC-607	2.5	\$150.00
C18:1T	METHYL TRANSVACCENATE		2.5	
C18:1	METHYL PETROSELINATE		2.5	
C18:1	METHYL VACCENATE		2.5	
C18:1	METHYL OLEATE		2.5	
C18:2TT	METHYL LINOLELAIDATE		2.5	
C18:2	METHYL LINOLEATE		2.5	
C18:3	METHYL ALPHA LINOLENATE		2.5	
C18:3	METHYL GAMMA LINOLENATE		2.5	
C20:0	METHYL ARACHIDATE		2.5	
C20:1	METHYL 11-EICOSENOATE		2.5	
C20:2	METHYL 11-14 EICOSADIENOATE		2.5	
C22:0	METHYL BEHENATE		2.5	
C22:1	METHYL ERUCATE		2.5	
C20:3	METHYL 11-14-17 EICOSATRIENOATE		2.5	
C20:3	METHYL HOMOGAMMA LINOLENATE		2.5	
C20:4	METHYL ARACHIDONATE		2.5	
C24:1	METHYL NERVONATE		2.5	
C22:2	METHYL DOCOSADIENOATE		2.5	
C22:6	METHYL DOCOSAHEXAENOATE		2.5	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C4:0	METHYL BUTYRATE		2.0	
C6:0	METHYL HEXANOATE		2.0	
C8:0	METHYL OCTANOATE		2.0	
C10:0	METHYL DECANOATE		4.0	
C11:0	METHYL UNDECANOATE		2.0	
C12:0	METHYL LAURATE		4.0	
C13:0	METHYL TRIDEcanoate		2.0	
C14:0	METHYL MYRISTATE		2.0	
C14:1	METHYL MYRISTOLEATE		2.0	
C15:0	METHYL PENTADECANOATE		2.0	
C15:1	METHYL 10-PENTADECENOATE		2.0	
C16:0	METHYL PALMITATE		4.0	
C16:1	METHYL PALMITOLEATE		2.0	
C17:0	METHYL HEPTADECANOATE		4.0	
C17:1	METHYL 10-HEPTADECENOATE		2.0	
C18:0	METHYL STEARATE		4.0	
C18:1T	METHYL ELAIDATE		2.0	
C18:1	METHYL OLEATE		4.0	
C18:2TT	METHYL LINOLEAIDATE		2.0	
C18:2	METHYL LINOLEATE		2.0	
C20:0	METHYL ARACHIDATE	GLC-617	4.0	\$200.00
C18:3	METHYL GAMMA LINOLENATE		4.0	
C20:1	METHYL 11-EICOSENOATE		2.0	
C18:3	METHYL ALPHA LINOLENATE		2.0	
C21:0	METHYL HENEICOSANOATE		2.0	
C20:2	METHYL 11-14 EICOSADIENOATE		2.0	
C22:0	METHYL BEHENATE		4.0	
C20:3	METHYL HOMOGAMMA LINOLENATE		2.0	
C22:1	METHYL ERUCATE		2.0	
C20:3	METHYL 11-14-17 EICOSATRIENOATE		2.0	
C20:4	METHYL ARACHIDONATE		2.0	
C23:0	METHYL TRICOSANOATE		2.0	
C22:2	METHYL DOCOSADIENOATE		2.0	
C20:5	METHYL EICOSAPENTAENOATE		2.0	
C22:4	METHYL DOCOSATETRAENOATE		2.0	
C22:5n-6	METHYL DOCOSAPENTAENOATE		2.0	
C22:5n-3	METHYL DOCOSAPENTAENOATE		2.0	
C24:0	METHYL LIGNOCERATE		4.0	
C24:1	METHYL NERVONOATE		2.0	
C22:6	METHYL DOCOSAHEXAENOATE		2.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C18:3	METHYL ALPHA LINOLENATE		16.67	
C20:3	METHYL 11-14-17 EICOSATRIENOATE		16.67	
C22:3	METHYL DOCOSATRIENOATE	GLC-642	16.67	
C20:5	METHYL EICOSAPENTAENOATE	(OMEGA 3 STANDARD)	16.67	\$200.00
C22:5	METHYL DOCOSAPENTAENOATE		16.67	
C22:6	METHYL DOCOSAHEXAENOATE		16.67	
C18:2	METHYL LINOLEATE		11.11	
C18:3	METHYL GAMMA LINOLENATE		11.11	
C19:2	METHYL NONADECADIENOATE		11.11	
C20:2	METHYL 11-14 EICOSADIENOATE		11.11	
C20:3	METHYL HOMOGAMMA LINOLENATE	GLC-643	11.11	\$200.00
C20:4	METHYL ARACHIDONATE	(OMEGA 6 STANDARD)	11.11	
C22:2	METHYL DOCOSADIENOATE		11.11	
C22:4	METHYL DOCOSATETRAENOATE		11.11	
C22:5	METHYL DOCOSAPENTAENOATE		11.11	
C18:1	METHYL OLEATE		9.09	
C18:1T	METHYL ELAIDATE		9.09	
C19:1	METHYL 10-NONADECENOATE		9.09	
C19:1T	METHYL 10-TRANSNONADECENOATE		9.09	
C20:1	METHYL 11-EICOSENOATE	GLC-813	9.09	
C20:1T	METHYL TRANS 11-EICOSENOATE	(OMEGA 9 STANDARD)	9.09	\$200.00
C22:1	METHYL ERUCATE		9.09	
C22:1T	METHYL BRASSIDATE		9.09	
C21:1	METHYL 12-HENEICOSENOATE		9.09	
C23:1	METHYL 14-TRICOSENOATE		9.09	
C24:1	METHYL NERVONATE		9.09	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C4:0	METHYL BUTYRATE		2.0	
C6:0	METHYL CAPROATE		2.0	
C8:0	METHYL CAPRYLATE		2.0	
C10:0	METHYL CAPRATE		1.0	
C11:0	METHYL UNDECANOATE		2.0	
C12:0	METHYL LAURATE		1.0	
C13:0	METHYL TRIDECANOATE		2.0	
C14:0	METHYL MYRISTATE		2.0	
C14:1	METHYL MYRISTOLEATE		2.0	
C14:1T	METHYL MYRISTELAIDATE		1.0	
C15:0	METHYL PENTADECANOATE		2.0	
C15:1	METHYL 10-PENTADECENOATE		2.0	
C15:1T	METHYL 10-TRANSPENTADECENOATE		1.0	
C16:0	METHYL PALMITATE		3.0	
C16:1	METHYL PALMITOLEATE		2.0	
C16:1T	METHYL PALMITELAIDATE		1.0	
C17:0	METHYL HEPTADECANOATE		3.0	
C17:1	METHYL 10-HEPTADECENOATE		2.0	
C17:1T	METHYL 10-TRANSHEPTADECENOATE		2.0	
C18:0	METHYL STEARATE		2.0	
C18:1	METHYL OLEATE		2.0	
C18:1	METHYL PETROSELINATE		2.0	
C18:1T	METHYL PETROSELAIDATE		2.0	
C18:1	METHYL VACCENATE		2.0	
C18:1T	METHYL TRANSVACCENATE		1.0	
C18:1T	METHYL ELAIDATE	GLC-674	3.0	\$250.00
C18:2	METHYL LINOLEATE		3.0	
C18:2TT	METHYL LINOELAIDATE		2.0	
C19:1T	METHYL 10-TRANSNONADECENOATE		2.0	
C19:1T	METHYL 7-TRANSNONADECENOATE		1.0	
C20:0	METHYL ARACHIDATE		2.0	
C18:3	METHYL GAMMA LINOLENATE		3.0	
C20:1	METHYL 11-EICOSENOATE		2.0	
C20:1T	METHYL TRANS 11-EICOSENOATE		1.0	
C18:3	METHYL ALPHA LINOLENATE		3.0	
C21:0	METHYL HENEICOSANOATE		2.0	
C20:2	METHYL 11-14 EICOSADIENOATE		3.0	
C22:0	METHYL BEHENATE		1.0	
C20:3	METHYL HOMOGAMMA LINOLENATE		2.0	
C22:1	METHYL ERUCATE		2.0	
C22:1T	METHYL BRASSIDATE		1.0	
C20:3	METHYL 11-14-17 EICOSATRIENOATE		2.0	
C20:4	METHYL ARACHIDONATE		3.0	
C23:0	METHYL TRICOSANOATE		2.0	
C22:2	METHYL DOCOSADIENOATE		2.0	
C20:5	METHYL EICOSAPENTAENOATE		2.0	
C22:4	METHYL DOCOSATETRAENOATE		2.0	
C22:5n-6	METHYL DOCOSAPENTAENOATE		2.0	
C22:5n-3	METHYL DOCOSAPENTAENOATE		2.0	
C24:0	METHYL LIGNOCERATE		1.0	
C24:1	METHYL NERVONOATE		1.0	
C22:6	METHYL DOCOSAHEXAENOATE		2.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C13:0	METHYL TRIDECANOATE		3.7	
C14:0	METHYL MYRISTATE		3.7	
C15:0	METHYL PENTADECANOATE		3.7	
C16:0	METHYL PALMITATE		3.7	
C16:1	METHYL PALMITOLEATE		3.7	
C17:0	METHYL HEPTADECANOATE		3.7	
C18:0	METHYL STEARATE		3.7	
C18:1	METHYL OLEATE		3.7	
C18:2	METHYL LINOLEATE		3.7	
C18:3	METHYL GAMMA LINOLENATE		3.7	
C18:3	METHYL ALPHA LINOLENATE		3.7	
C20:0	METHYL ARACHIDATE		3.7	
C20:1	METHYL 11-EICOSENOATE	GLC-682	3.7	\$250.00
C20:2	METHYL 11-14 EICOSADIENOATE		3.7	
C20:3	METHYL HOMOGAMMA LINOLENATE		3.7	
C20:4	METHYL ARACHIDONATE		3.7	
C20:3	METHYL 11-14-17 EICOSATRIENOATE		3.7	
C22:0	METHYL BEHENATE		3.7	
C22:1	METHYL ERUCATE		3.7	
C22:2	METHYL DOCOSADIENOATE		3.7	
C22:3	METHYL DOCOSATRIENOATE		3.7	
C22:4	METHYL DOCOSATETRAENOATE		3.7	
C22:5n-6	METHYL DOCOSAPENTAENOATE		3.7	
C22:5n-3	METHYL DOCOSAPENTAENOATE		3.7	
C24:0	METHYL LIGNOCERATE		3.7	
C24:1	METHYL NERVONATE		3.7	
C22:6	METHYL DOCOSAHEXAENOATE		3.7	
C14:0	METHYL MYRISTATE		5.0	POLYSORBATE 80
C16:0	METHYL PALMITATE		10.0	
C18:0	METHYL STEARATE		15.0	
C20:0	METHYL ARACHIDATE	GLC-708	20.0	\$50.00
C18:1	METHYL OLEATE		20.0	
C20:1	METHYL 11-EICOSENOATE		10.0	
C22:0	METHYL BEHENATE		10.0	
C24:0	METHYL LIGNOCERATE		10.0	
C14:0	METHYL MYRISTATE		5.0	POLYSORBATE 80
C16:0	METHYL PALMITATE		16.0	
C16:1	METHYL PALMITOLEATE		8.0	
C18:0	METHYL STEARATE	GLC-710	6.0	\$50.00
C18:1	METHYL OLEATE		42.0	
C18:2	METHYL LINOLEATE		18.0	
C18:3	METHYL LINOLENATE		5.0	
C18:3	METHYL GAMMA LINOLENATE		20.0	
C23:0	METHYL TRICOSANOATE		20.0	
C20:5n3	METHYL EICOSAPENTAENOATE	GLC-719	20.0	\$80.00
C22:5n3	METHYL DOCOSAPENTAENOATE		20.0	
C22:6	METHYL DOCOSAHEXAENOATE		20.0	

## GLC REFERENCE STANDARDS (Continued)

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C4:0	METHYL BUTYRATE		2.0	
C6:0	METHYL HEXANOATE		2.0	
C8:0	METHYL OCTANOATE		2.0	
C10:0	METHYL DECANOATE		2.0	
C12:0	METHYL LAURATE		4.0	
C13:0	METHYL TRIDEcanoate		2.0	
C14:0	METHYL MYRISTATE		2.0	
C14:1	METHYL MYRISTOLEATE		2.0	
C14:1T	METHYL MYRISTELAIDATE		2.0	
C15:0	METHYL PENTADECANOATE		2.0	
C15:1	METHYL 10-PENTADECENOATE		2.0	
C16:0	METHYL PALMITATE		4.0	
C16:1	METHYL PALMITOLEATE		2.0	
C16:1T	METHYL PALMITELAIDATE		2.0	
C17:0	METHYL HEPTADECENOATE		2.0	
C17:1	METHYL 10-HEPTADECENOATE		2.0	
C18:0	METHYL STEARATE		4.0	
C18:1T	METHYL ELAIDATE		2.0	
C18:1	METHYL OLEATE		4.0	
C18:1T	METHYL PETROELAIDATE		2.0	
C18:1T	METHYL TRANSVACCENATE		2.0	
C18:1	METHYL VACCENATE		2.0	
C18:2TT	METHYL LINOLELAIDATE	GLC-744	2.0	\$275.00
C18:2	METHYL LINOLEATE		2.0	
C18:3	METHYL GAMMA LINOLENATE		2.0	
C18:3	METHYL LINOLENATE		2.0	
C20:0	METHYL ARACHIDATE		2.0	
C20:1	METHYL 11-EICOSENOATE		2.0	
C21:0	METHYL EHNEICOSANOATE		2.0	
C20:2	METHYL 11-14 EICOSADIENOATE		2.0	
C20:3	METHYL HOMOGAMMA LINOLENATE		2.0	
C20:4	METHYL ARACHIDONATE		2.0	
C20:3	METHYL 11-14-17 EICOSATRIENOATE		2.0	
C22:0	METHYL BEHENATE		4.0	
C22:1	METHYL ERUCATE		2.0	
C20:5	METHYL EICOSAPENTAENOATE		2.0	
C22:2	METHYL DOCOSADIENOATE		2.0	
C23:0	METHYL TRIOSANOATE		2.0	
C22:4	METHYL DOCOSATETRAENOATE		2.0	
C22:5n-6	METHYL DOCOSAPENTAENOATE		2.0	
C22:5n-3	METHYL DOCOSAPENTAENOATE		2.0	
C24:0	METHYL LIGNOCERATE		4.0	
C24:1	METHYL NERVONATE		2.0	
C22:6	METHYL DOCOSAHEXAENOATE		2.0	

## TRIGLYCERIDE STANDARDS

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C16:0	METHYL PALMITATE		14.8	Representative of
C16:1	METHYL PALMITOLEATE		0.5	CORN OIL
C18:0	METHYL STEARATE		2.0	
C18:1	METHYL OLEATE		30.0	
C18:2	METHYL LINOLEATE		50.0	
C18:3	METHYL LINOLENATE	GLC-804	1.0	\$50.00
C20:0	METHYL ARACHIDATE		0.5	
C20:1	METHYL 11-EICOSENOATE		0.5	
C22:0	METHYL BEHENATE		0.3	
C24:0	METHYL LIGNOCERATE		0.4	
C14:0	METHYL MYRISTATE		0.2	Representative of
C16:0	METHYL PALMITATE		12.0	SOYBEAN OIL
C16:1	METHYL PALMITOLEATE		0.3	
C18:0	METHYL STEARATE		3.7	
C18:1	METHYL OLEATE		25.0	
C18:2	METHYL LINOLEATE	GLC-805	50.0	\$50.00
C18:3	METHYL LINOLENATE		5.0	
C20:0	METHYL ARACHIDATE		1.0	
C20:1	METHYL 11-EICOSENOATE		1.0	
C22:0	METHYL BEHENATE		1.0	
C22:1	METHYL ERUCATER		0.3	
C24:0	METHYL LIGNOCERATE		0.5	

## TRIGLYCERIDE STANDARDS

CHAIN	ITEM	CODE NO.	% BY WT.	PRICE/100MG
C16:0	TRIPALMITIN	GLC-406	4.0	
C18:0	TRISTEARIN		2.0	
C18:1	TRIOLEIN		61.0	
C18:2	TRILINOLEIN		21.0	
C18:3	TRI ALPHA LINOLEIN		9.0	\$60.00
C20:0	TRIARACHIDIN		1.0	
C20:1	TRIEICOSENOIN		1.0	
C22:1	TRIERUCIN		1.0	
C16:0	TRIPALMITIN	GLC-21A	10.0	
C18:0	TRISTEARIN		3.0	
C18:1	TRIOLEIN		51.0	
C18:2	TRILINOLEIN		30.0	\$55.00
C20:0	TRIARACHIDIN		1.5	
C20:1	TRIEICOSENOIN		1.5	
C22:0	TRIBEHENIN		3.0	
C16:0	TRIPALMITIN	GLC-437	16.67	
C18:0	TRISTEARIN		16.67	
C18:1	TRIOLEIN		16.67	
C18:2	TRILINOLEIN		16.67	\$70.00
C18:3	TRI ALPHA LINOLEIN		16.67	
C20:0	TRIARACHIDIN		16.67	
C8:0	TRICAPRYLIN		16.67	
C10:0	TRICAPRIN		16.67	
C12:0	TRILAUTRIN	GLC-570	16.67	\$55.00
C14:0	TRIMYRISTIN		16.67	
C16:0	TRIPALMITIN		16.67	
C18:0	TRISTEARIN		16.67	
C8:0	TRIOCTANOID		6.66	
C9:0	TRINONANOIN		6.66	
C10:0	TRIDECANOIN		6.66	
C11:0	TRIUNDECANOIN		6.66	
C12:0	TRILAUTRIN		6.66	
C13:0	TRITRIDECANOIN		6.66	
C14:0	TRIMYRISTIN	GLC-768	6.66	
C15:0	TRIPENTADECANOID		6.66	\$65.00
C16:0	TRIPALMITIN		6.66	
C17:0	TRIHEPTADECANOID		6.66	
C18:0	TRISTEARIN		6.66	
C19:0	TRINONADECANOID		6.66	
C20:0	TRIARACHIDIN		6.66	
C21:0	TRIHENEICOSANOIN		6.66	
C22:0	TRIBEHENIN		6.66	

## TLC-REFERENCE STANDARDS\*

Upon request, our glass-blowing department will seal your 100 mg ampule (at no extra charge) into 2 by 50 mg or 4 by 25 mg quantities. This special service is designed to assist TLC analysts in avoiding oxidation, especially when working with unsaturated standards.

**PRICE/100 MG \$45.00 EACH OR ALL THREE \$80.00**

CHAIN	ITEM	CODE NO.	% BY WT. AS INDICATED		
			TLC	A	C
	MONOCAPRYLIN	8-0 A		25	
	DICAPRYLIN			25	
	TRICAPRYLIN			25	
	CAPRYLIC ACID (OCTANOIC)			25	
	MONOCAPRIN	10-0 A		25	
	DICAPRIN			25	
	TRICAPRIN			25	
	CAPRIC ACID (DECANOIC)			25	
	MONOLAURIN	12-0		25	15
	DILAURIN			25	25
	TRILAURIN			25	25
	METHYL LAURATE			25	40
	MONOMYRISTIN	14-0		25	15
	DIMYRISTIN			25	25
	TRIMYRISTIN			25	20
	METHYL MYRISTIN			25	15
	MONOPALMITIN	16-0		25	15
	DIPALMITIN			25	25
	TRIPALMITIN			25	20
	METHYL PALMITATE			25	40
	MONOPALMITIN	16-1 A		14.2	
	DIPALMITIN			14.2	
	TRIPALMITIN			14.2	
	PALMITIC ACID			14.2	
	CHOLESTEROL			14.2	
	CHOLESTERYL PALMITATE			14.2	
	LECITHIN (L-A-DISTEAROYL)			14.2	
	MONOSTEARIN	18-0		25	15
	DISTEARIN			25	25
	TRISTEARIN			25	20
	METHYL STEARATE			25	40
	MONOOLEIN	18-1		25	15
	DIOLEIN			25	25
	TRIOLEIN			25	20
	METHYL OLEATE			25	15
	MONO ALPHA LINOLEIN	18-2		25	15
	DILINOLEIN			25	25
	TRILINOLEIN			25	20
	METHYL LINOLEATE			25	15
	MONOLINOLEIN	18-3 ALPHA		25	15
	DILINOLEIN			25	25
	TRILINOLEIN			25	20
	METHYL LINOLENATE			25	15
	CHOLESTEROL	18-4		20	5
	OLEIC ACID			20	25
	TRIOLEIN			20	20
	METHYL OLEATE			20	35
	CHOLESTERYL OLEATE			20	5
	20			15	25
	LECITHIN (1, 2 DISTEAROYL)	18-5		20	5
	CHOLESTEROL			20	35
	OLEIC ACID			20	15
	TRIOLEIN			20	20
	CHOLESTERYL OLEATE			20	25
	OLEIC ACID	18-6		25	15
	MONOOLEIN			25	25
	DIOLEIN			25	20
	TRIOLEIN			25	40
					15

\*MONO AND DIGLYCERIDES MAY CONTAIN BOTH ISOMERS

## **ORDER FORM**

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P.O. BOX 295 • ELYSIAN, MINNESOTA 56028 U.S.A. • (507) 267-4689

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**CONTACT INFO:** EMAIL \_\_\_\_\_ PHONE \_\_\_\_\_

**PHONE** \_\_\_\_\_

**Date** \_\_\_\_\_ **P.O. #** \_\_\_\_\_

## THANK YOU

# NOTES