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AND
RECOMMENDED PRACTICES
OF THE
AOCS**

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AOCS Mission Statement

To be forum for the exchange of ideas, information and experience among those with a professional interest in the science and technology of fats, oils and related substances in ways that promote personal excellence and provide for a high standard of quality.

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by NIR	Cd 1e	-01 (01)
Calculated from GLC	Cd 1c	-85 (97)
Cyclohexane Method	Cd 1b	-87 (97)
Cyclohexane-Acetic Acid Method	Cd 1d	-92 (97)
of Drying Oils	Tg 1	-64 (03)
of Fats and Oils	Cd 1	-25 (93) *
of Fatty Acids	Tg 1a	-64 (97)
of Fatty Amines, Diamines and Amidoamines	Tg 2a	-64 (97)
of Fatty Quaternary Ammonium Chlorides	Tg 3a	-64 (97)
of Lecithin	Ja 14	-91 (97)
of Soap and Soap Products	Da 15	-48 (97)
Iron, Trace Amounts in Oils		
by AAS	Ca 15	-75 (03)
by AAS with Graphite Furnace	Ca 18	-79 (03)
Isopropyl Alcohol, Specifications	H 18	-58 (97)
Jojoba Oil		
Acid Value	Ci 4	-91 (03)
Detection of Triglyceride Adulteration	Ci 2	-91 (97)
Methods for Determination of Quality and Purity	Ci 1	-91 (97)
Kernel Content of Tung Fruit	Ad 4	-52 (97)
Kirschner Value for Butyric Acid in Butterfat and Coconut Oils	Cd 5	-40 (97)
Lard, Foreign Fat Content	Cb 5	-40 (93) *
Lead in Oils by Graphite Furnace	Ca 18c	-91 (03)
Lecithin Co-Products Analyses	Ja 12	-89 (97)
Lint Residue in Cottonseed	Aa 7	-55 (97)
Liquid Fatty Acids in Fats and Oils	Cd 6	-38 (89) *
Manganese in Oils by Graphite Furnace	Ca 18	-79 (03)
Mass per Unit Volume ("Liter Weight") in Air of Oils and Fats	Cc 10c	-95 (02)
Melting Point		
Capillary Tube Method	Cc 1	-25 (97)
Mettler Dropping Point	Cc 18	-80 (01)
Slip Melting Point, AOCS Standard	Cc 3	-25 (97)

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	Method number	Latest issue
Slip Melting Point, ISO Standard	Cc 3b	-92 (02)
Wiley Method	Cc 2	-38 (91) *
Melting Properties of Fats and Oils by DSC	Cj 1	-94 (00)
Metals, Trace		
by AAS for Cr, Cu, Fe, Ni in Oils	Ca 15	-75 (03)
by AAS with Graphite Furnace for Cr, Cu, Fe, Ni, Mn in Oils	Ca 18	-79 (03)
by Spectrophotometry for Copper	Da 31	-58 (97)
Methyl Alcohol, Specifications	H 17	-58 (97)
Methyl Esters Preparation	Ce 2	-66 (97)
Mineral Oil in Triglycerides	Ca 6c	-65 (97)
Miscibility of Oils, Crismer Test	Cb 4	-35 (97)
Moisture and Volatile Matter, by Air Oven		
in Castor Beans	Ae 2	-52 (97)
in Castor Pomace	Bd 2	-52 (97)
in Cottonseed	Aa 3	-38 (97)
in Fats and Oils (except coconut and drying oils)	Ca 2c	-25 (97)
in Flaxseed	Af 2	-54 (97) *
in Oilseed Meats, Meal, Cake and Pellets	Ba 2a	-38 (03)
in Oilseed Protein Concentrates	Ba 2b	-82 (97)
in Peanuts (groundnuts)	Ab 2	-49 (97)
in Soap and Soap Products	Da 2a	-48 (97)
in Soap and Soap Products Containing Synthetic Detergents	Db 1	-48 (97)
in Soya Flours	Bc 2	-49 (97)
in Soybeans	Ac 2	-41 (97)
in Sunflower Seed	Ai 2	-75 (97)
in Tung Fruit (hulls and fruit plus hulls)	Ad 2	-52 (97)
Moisture and Volatile Matter, by Forced Draft Oven		
in Oilseed Cake, Meal, Meats, Pellets	Ba 2a	-38 (03)
Moisture and Volatile Matter, by Hot Plate Method		
Butter, Fats, Margarine, Oils	Ca 2b	-38 (97)
Fatty Acids	Tb 1a	-64 (97)
Modified Moisture and Volatiles	Ca 2f	-93 (97)
Moisture and Volatile Matter, by Vacuum Oven		
in Fats and Oils (except coconut)	Ca 2d	-25 (97)
in Oilseed Cake, Meal, Meats, Pellets	Ba 2b	-82 (97)
Moisture, by Distillation Method		
in Alkylbenzene Sulfonate Products	Dd 2a	-59 (97)
in Fats and Oils	Ca 2a	-45 (97)
in Fatty Alkyl Sulfate Products	Dc 2	-59 (03)
in Lecithin	Ja 2a	-46 (03)
in Soap and Soap Products	Da 2b	-42 (03)
in Sulfonated and Sulfated Oils	F 1a	-44 (97)
Moisture, by Karl Fischer Method		
in Alkylbenzene Sulfonate Products	Dd 2b	-59 (89) *
in Fats and Oils	Ca 2e	-84 (97)
in Fatty Nitrogen Compounds	Tb 2a	-64 (89) *
in Glycerin	Ea 8	-58 (97)
in Industrial Oils and Derivatives	Tb 2	-64 (97) *
in Lecithin	Ja 2b	-87 (03)
Molecular Weight (average) of Fatty Quaternary Ammonium Chlorides	Tv 1a	-64 (97)
Mono- and Diglycerides by Capillary GLC	Cd 11b	-91 (03)
Mono- and Diglycerides by HPLC-ELSD	Cd 11d	-96 (99)
Mono-, Di- and Triglycerides by Silica Gel Chromatography	Cd 11c	-93 (03)
α -Monoglycerides	Cd 11	-57 (03)
Near Infrared Reflectance	Am 1	-92 (99)
Neutral Oil		
in Alkylbenzene Sulfonates (unsulfonated material)	Dd 4	-60 (97)
in Neutral Oil and Loss for Fats and Oils	Ca 9f	-57 (99)
in Soap Stock (unsaponifiable material)	G 5	-40 (97)

*Surplus method

	Method number	Latest issue
Nitrogen–Ammonia–Protein		
Conversion Table	Aa 5	-91 (97)
Copper Sulfate Catalyst	Ba 4b	-87 (90) *
Copper Sulfate Plus Titanium Dioxide Catalyst	Ba 4d	-90 (03)
in Cottonseed	Aa 5	-38 (89) *
in Cottonseed	Aa 5	-91 (97)
in Oilseeds, Meats, Meal, Cake and Pellets	Ba 4a	-38 (89) *
in Peanuts (groundnuts)	Ab 4	-50 (89) *
in Peanuts (groundnuts)	Ab 4	-91 (97)
in Soya Flours	Bc 4	-49 (89) *
in Soya Flours	Bc 4	-91 (97)
in Soybeans	Ac 4	-41 (89) *
in Soybeans	Ac 4	-91 (97)
in Sunflower Seeds	Ai 4	-75 (89) *
in Sunflower Seeds	Ai 4	-91 (97)
Kjel–Foss Automatic	Ba 4c	-87 (89) *
Nitrogen Solubility Index (soybean products)	Ba 11	-65 (97)
Nonamines in Fatty Amines and Diamines	Tw 1a	-64 (97)
Non-Cocoa-Butter Fats	Ce 10	-02 (02)
Nonvolatiles (solids), by Hot Plate Method		
for Drying Oils (solutions)	Tc 1a	-64 (97)
for Quaternary Ammonium Chlorides	Tc 2a	-64 (97)
Oil Content		
in Castor Beans	Ae 3	-52 (97)
in Castor Pomace	Bd 3	-52 (97)
in Corn Germ	Aj 4	-89 (97)
in Cottonseed	Aa 4	-38 (01)
in Flaxseed	Af 3	-54 (95) *
in Linters (cottonseed hulls)	Bb 2	-38 (97)
in Oilseed Meats, Cake and Meal	Ba 3	-38 (97)
in Oilseed Residues by NMR	Ak 5	-01 (01)
in Oilseeds (FOSFA Method)	Am 2	-93 (00)
in Oilseeds: Supercritical Fluid Extraction Method	Am 3	-96 (00)
in Peanuts (groundnuts), Raw or Roasted	Ab 3	-49 (01)
in Rapeseed and other Oilseeds by NMR	Ak 3	-94 (00)
in Safflower Seed	Ag 1	-65 (97)
in Soya Flours	Bc 3	-49 (97)
in Soybeans	Ac 3	-44 (97)
in Sunflower Seed or Dehulled Kernels	Ai 3	-75 (99) *
in Tung Fruit, Hulled	Ad 6	-52 (97)
in Tung Fruit, Kernels	Ad 5	-52 (97)
in Tung Fruit, Whole	Ad 3	-52 (97)
Olive Oil		
Chlorophyll Pigments	Ch 4	-91 (02)
Fatty Acids by Capillary GLC	Ch 2	-91 (02)
<i>trans</i> Unsaturated Fatty Acids by Capillary Column GC	Ch 2a	-94 (02)
Fatty Acids in 2-Position	Ch 3	-91 (02)
Preparation of Methyl Esters	Ch 1	-91 (02)
Specific Extinction	Ch 5	-91 (01)
Sterol Fraction by TLC and Capillary GLC	Ch 6	-91 (97)
International Trade Standards	Ch 7	-94 (97)
Wax Content	Ch 8	-02 (02)
Organic Residue in Glycerin	Ea 3	-58 (73) *
Ovens		
Air, Specifications	H 3	-45 (97)
Forced Draft, Specifications	H 1	-39 (97)
Vacuum, Specifications	H 4	-45 (97)
Oxidized Fatty Acids in Soap Stocks	G 3	-53 (97)
Oxirane Oxygen in Epoxidized Materials	Cd 9	-57 (97)

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	Method number	Latest issue
Peroxide Value		
of Lecithin.....	Ja 8	-87 (97)
Using Chloroform.....	Cd 8	-53 (03) *
Using Isooctane	Cd 8b	-90 (03)
Pesticides in Oils and Fats	Cd 23	-93 (03)
Petroleum Ether, Specifications	H 2	-41 (97)
pH		
of Acidulated Soapstocks	G 7	-56 (97)
of Fatty Quaternary Ammonium Chlorides	Tu 1a	-64 (97)
Phosphates in Soap and Soap Products (gravimetric method)	Da 20a	-48 (03)
Phosphates in Soap and Soap Products (titrimetric method)	Da 20b	-57 (97)
Phospholipids		
in Lecithin Concentrates by HPLC.....	Ja 7b	-91 (97)
in Lecithin Concentrates by TLC	Ja 7	-86 (03)
in Vegetable Oil	Ca 19	-86 (97)
Phosphorus, Atomic Absorption Spectroscopy	Ca 12b	-92 (02)
Phosphorus		
in Lecithin (total)	Ja 5	-55 (89) *
in Oils.....	Ca 12	-55 (97)
in Oils (ISO Method)	Ca 12a	-02 (02)
in Oil by ICP-OES	Ca 20	-99 (01)
Photometric Index (color) of Commercial Fatty Acids	Td 2a	-64 (97)
Physical Analysis		
Polenske Value.....	Cd 5	-40 (97)
Tung Fruit (kernel content).....	Ad 4	-52 (97)
Polar Compounds in Frying Fats	Cd 20	-91 (01)
Polyethylene in Fats and Oils	Ca 16	-75 (02)
Polymerized Triglycerides by Gel-Permeation HPLC.....	Cd 22	-91 (00)
Polyunsaturated Acids		
<i>cis, cis</i> Essential Fatty Acids (enzymatic)	Cd 15	-78 (97)
Commercial Fatty Acids, Spectrophotometric Method	Tj 1a	-64 (93) *
in Fats and Oils	Cd 7	-58 (97)
Potassium Carbonate in Potash Soaps	Da 5	-44 (97)
Potassium Oxide in Soap and Soap Products	Da 27	-48 (03)
Precision of Analytical Methods.....	M 1	-92 (97)
Protein Content		
by Combustion.....	Ba 4e	-93 (03)
by Combustion (soybean meal analysis)	Ba 4f	-00 (00)
Conversion Table	Aa 5	-91 (97)
in Cottonseed	Aa 5	-91 (97)
in Oilseed Meats, Meal, Cake and Pellets	Ba 4a	-38 (89) *
in Peanuts (groundnuts)	Ab 4	-91 (97)
in Soya Flours/Canola Flours	Bc 4	-91 (02)
in Soybeans	Ac 4	-91 (97)
Protein Dispersibility Index (PDI) (soybean products)	Ba 10	-65 (99)
in Sunflower Seeds	Ai 4	-91 (97)
Kjel-Foss Automatic Method.....	Ba 4c	-87 (89) *
with Copper Sulfate Catalyst.....	Ba 4b	-87 (90) *
with Copper Sulfate Plus Titanium Dioxide Catalyst.....	Ba 4d	-90 (03)
Recommended Practices for Testing		
of Commercial Fatty Acids.....	S 1	-64 (03)
of Drying Oils	S 2	-64 (03)
of Epoxidized Oils	S 3	-64 (97)
of Fatty Amidoamines	S 4b	-64 (97)
of Fatty Amines	S 4a	-64 (97)
of Fatty Diamines	S 4d	-64 (97)
of Fatty Quaternary Ammonium Chlorides	S 4c	-64 (97)
of Feed-Grade Fat Products	Cf 1	-68 (03)

	Method number	Latest issue
of Polymerized Fatty Acids	S 5	-64 (97)
Refined and Bleached Color (tallow and greases for soaps)	Cc 8d	-55 (97)
Refining Loss		
Degummed, Expeller Soybean Oil	Ca 9a	-52 (97)
Degummed, Hydraulic and Extracted Soybean Oil	Ca 9a	-52 (97)
Extracted and Reconstituted Prepressed Cottonseed Oils	Ca 9a	-52 (97)
Extracted Soybean Oil	Ca 9a	-52 (97)
Vegetable Oils, Crude	Ca 9a	-52 (97)
Refractive Index		
Drying Oils	Tp 1a	-64 (03)
Fats and Oils	Cc 7	-25 (02)
Fatty Acids, Commercial	Tp 1a	-64 (03)
Reichert–Meissl Value	Cd 5	-40 (97)
Residual Lint in Cottonseeds	Aa 7	-55 (97)
Residue, Total and Organic, in Glycerin	Ea 3	-58 (73) *
Rheological Instrument Calibration	Cj 3	-99 (01)
Rosin		
in Soap and Soap Products	Da 12	-48 (99)
in Soap Containing Synthetic Detergents	Db 11	-48 (97)
Rosin Acids in Fatty Acids	Ts 1a	-64 (97)
Sampling		
of Alkylbenzene Sulfonates	Dd 1	-59 (97)
of Cottonseed	Aa 1	-38 (97)
of Cottonseed Linters and Hull Fiber	Bb 1	-38 (97)
of Dibasic Acids	Ta 1e	-70 (97)
of Epoxidized Oils	Ta 1b	-64 (97)
of Fats and Oils	C 1	-47 (00)
of Fatty Acids, Commercial	Ta 1a	-64 (97)
of Fatty Alkyl Sulfates	Dc 1	-59 (97)
of Fatty Nitrogen Products	Ta 1c	-64 (97)
of Flaxseed	Af 1	-54 (97) *
of Glycerin	Ea 1	-38 (97)
of Industrial Oils, General	Ta 1	-64 (97)
of Oilseed Slab, Cake, Pellets, Meals	Ba 1	-38 (97)
of Peanuts (groundnuts), Whole, Shelled	Ab 1	-49 (97)
of Polymerized Fatty Acids	Ta 1d	-64 (97)
of Soap and Soap Products	Da 1	-45 (97)
of Soap Stock	G 1	-40 (97)
of Soya Flours	Bc 1	-50 (97)
of Soybeans	Ac 1	-45 (97)
of Sunflower Seed	Ai 1	-80 (93) *
of Tung Fruit	Ad 1	-48 (97)
Saponification Color		
Refined and Bleached	Cc 13f	-94 (97)
High Quality Tallow, Coconut Oils	Cc 13g	-94 (97)
Tallow, Coconut Oils	Cc 13h	-94 (97)
Saponification Value		
of Deodorizer Distillates and Sludges	Cd 3b	-76 (01)
of Drying Oils	Tl 1a	-64 (97)
of Fats and Oils	Cd 3	-25 (03)
of Fats and Oils (Calculated)	Cd 3a	-94 (97)
of Fats and Oils, Modified Using Methanol	Cd 3c	-91 (97)
of Fatty Acids, Commercial	Tl 1a	-64 (97)
of Soap and Soap Products	Da 16	-48 (97)
of Soap Containing Synthetic Detergents	Db 8	-48 (97)
Screen Test		
Soap Powders	Da 28	-39 (97)
Soya Flours	Bc 7	-51 (97)

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	Method number	Latest issue
Sediment in Fats and Oils	Ca 3d	-02 (02)
Selectivity of Hydrogenation Catalysts	Tz 1b	-79 (97)
Sesame Oil Detection, Modified Villavecchia Test	Cb 2	-40 (97)
Simultaneous Determination of Oil and Moisture		
Contents of Oilseeds Using Pulsed Nuclear Magnetic Resonance Spectroscopy	Ak 4	-95 (99)
Slip Melting Point, ISO Standard	Cc 3b	-92 (02)
Slip Point		
Hard Fats (palm oil)	Cc 3	-25 (97)
Soft Fats	Cc 4	-25 (89) *
Smalley Statistical Results, 1985–1986	R 4	-89 (97)
Smoke, Flash and Fire Point; Cleveland Open Cup Method	Cc 9a	-48 (97)
Soap in Oil		
by Conductivity Method	Cc 15	-60 (89) *
by Titrimetric Method	Cc 17	-95 (97)
Sodium Alkylbenzene Sulfonate by Ultraviolet Absorption	Dd 3	-60 (97)
Sodium and Calcium by AAS	Ca 15b	-87 (97)
Sodium Chloride in Glycerin	Ea 2	-38 (73) *
Sodium Oxide in Soap and Soap Products	Da 27	-48 (03)
Sodium Sulfate in Fatty Alkyl Sulfates	Dc 7	-59 (03)
Softening Point (slip point of hard fats)	Cc 3	-25 (97)
Solid Fat Content (SFC) by Magnetic Resonance	Cd 16b	-93 (99)
Solid Fat Content (SFC) by Nuclear Magnetic Resonance	Cd 16	-81 (99)
Solid Fat Index (SFI) of Fats and Oils	Cd 10	-57 (97)
Solid Fatty Acids in Fats and Oils	Cd 6	-38 (89) *
Soluble Mineral Matter and Fatty Acids Combined as Mineral Soap	Ca 4	-25 (03)
Specifications	See Section H	
Specific Gravity		
Drying Oils	To 1b	-64 (97)
Fatty Acids, Commercial	To 1a	-64 (03)
Glycerin	Ea 7	-95 (97)
Liquid Oils and Fats	Cc 10a	-25 (95) *
Solid Fats and Waxes	Cc 10b	-25 (97)
Spreadability	Cj 4	-00 (00)
Stability and Quality of Fats and Oils (Recommended Practices)	Cg 3	-91 (03)
Light Exposure Test for Accelerated Aging of Oils	Cg 6	-01 (03)
Oven Storage Test for Accelerated Aging of Oils	Cg 5	-97 (97)
Stability of Fats and Oils, Active Oxygen Method (AOM)	Cd 12	-57 (93) *
Standard Solutions		
Alcoholic Potassium Hydroxide	H 15	-52 (97)
Hydrochloric Acid	H 14	-52 (97)
Sodium Hydroxide	H 12	-52 (97)
Sulfuric Acid	H 13	-52 (97)
Starch in Soap and Soap Products	Da 25	-48 (97)
Statistical Results, Smalley, 1985–1986	R 4	-89 (97)
Sterols in Soya Residues by GLC	Ce 3	-74 (03)
Stigmastadienes in Vegetable Oils	Cd 26	-96 (03)
Sugars in Soap and Soap Products	Da 24	-48 (03)
Sulfates in Soap and Soap Products	Da 22	-48 (03)
Sulfur in Olive Oil		
by Coin Test	Ca 8a	-35 (90) *
by Silver Benzoate Test	Ca 8b	-35 (90) *
Sulfuric Anhydride in Sulfonated and Sulfated Oils		
by Ash Gravimetric Method	F 2c	-44 (97)
by Extraction Titration Method	F 2b	-44 (97)
by Titration Method	F 2a	-44 (03)
Surplus Status of Methods	M 3	-82 (97)
Teaseed Oil Detection, Fitelson Test	Cb 3	-39 (97)
Tetrasodium Pyrophosphate	Da 21	-48 (03)

	Method number	Latest issue
Thermometers, Specifications.....	H 5	-40 (97)
2-Thiobarbituric Acid (TBA) Value.....	Cd 19	-90 (01)
Thiocyanogen Value.....	Cd 2	-38 (89) *
Titer Test		
for Fats and Oils.....	Cc 12	-59 (97)
for Fatty Acids, Commercial.....	Tr 1a	-64 (97)
for Soap and Soap Products.....	Da 13	-48 (97)
for Soap Stocks.....	G 6	-40 (97)
Tocopherols		
in Deodorizer Distillates, Total.....	Ce 7	-87 (97)
in Lecithin Concentrates by HPLC.....	Ja 13	-91 (97)
in Soya Sludge and Residues by GLC.....	Ce 3	-74 (03)
in Vegetable Oils and Fats by HPLC.....	Ce 8	-89 (97)
Toluene, Industrial, Specifications.....	H 19	-58 (97)
Total Fatty Acids		
in Coconut Oil and Palm Oil Soap Stock.....	G 4	-40 (97)
in Fats or Hydrolyzed Fats.....	Ca 5b	-71 (02)
in Soap Stocks Other Than Coconut Oil and Palm Oil.....	G 3	-53 (97)
Trace Metals in Oils		
by AAS (Cr, Cu, Fe, Ni).....	Ca 15	-75 (03)
by Graphite Furnace AAS (Cr, Cu, Fe, Ni, Mn).....	Ca 18	-79 (03)
by Graphite Furnace AAS Direct (Cu, Fe, Ni).....	Ca 18b	-91 (03)
by Graphite Furnace AAS (lead only).....	Ca 18c	-91 (03)
by ICP-OES.....	Ca 17	-01 (01)
<i>trans</i> and <i>cis,cis</i> Isomers by GLC.....	Ce 1c	-89 (95) *
<i>trans</i> Composition of Partially Hydrogenated Oils by GLC-IR.....	Cd 14b	-93 (95) *
<i>trans</i> Isomers (Isolated) by FTIR.....	Cd 14	-95 (00)
<i>trans</i> Isomers by Capillary GLC.....	Cd 14c	-94 (94) *
<i>trans</i> Isomers by Capillary GLC.....	Ch 2a	-94 (02)
<i>trans</i> Isomers in Triglycerides by ATR/FTIR.....	Cd 14d	-99 (99)
Triglycerides by GLC.....	Ce 5	-86 (97)
Triglycerides by HPLC.....	Ce 5b	-89 (97)
Triglycerides (Individual) by HPLC.....	Ce 5c	-93 (97)
Trypsin Inhibitor Activity in Soybean and Cotton/Soybean Dry Products.....	Ba 12	-75 (97)
Tung Fruit, Physical Analysis (kernel content).....	Ad 4	-52 (97)
Unsaponifiable Matter		
in Drying Oils.....	Tk 1a	-64 (97)
in Fats and Oils, Except Marine Oils.....	Ca 6a	-40 (97)
in Fats and Oils, Including Marine Oils.....	Ca 6b	-53 (01)
in Fats or Hydrolyzed Fats.....	Ca 5b	-71 (02)
in Fatty Acids, Commercial.....	Tk 1a	-64 (97)
in Fatty Acids, Polymerized.....	Tk 1a	-64 (97)
in Soap and Soap Products.....	Da 11	-42 (03)
Unsaponifiable Nonvolatile Matter in Sulfated Oils.....	F 5	-44 (97)
Unsaponified Plus Unsaponifiable Matter in Soap and Soap Products.....	Da 10	-42 (03)
Unsulfated Material in Fatty Alkyl Sulfates.....	Dc 8	-59 (97)
Urease Activity (soybean meals, flours and mill feed).....	Ba 9	-58 (97)
Villavecchia Test for Sesame Oil, Modified.....	Cb 2	-40 (97)
Viscosity		
Drying Oils, Bubble Time Method.....	Tq 1a	-64 (97)
Lecithin, Brookfield.....	Ja 10	-87 (97)
Lecithin, Bubble Time Method.....	Ja 11	-87 (97)
Transparent Liquids, Bubble Time Method.....	Ja 11	-87 (97)
Volatile Hydrocarbons in Soap and Soap Products.....	Da 26	-42 (03)
Volatiles (VOC) in Fats and Oils by GLC.....	Cg 4	-94 (97)
Volatile Organic Contaminants by GC/MS.....	Ca 3c	-01 (01)
Water-Immiscible Organic Solvents in Sulfonated and Sulfated Oils.....	F 10	-44 (97)

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	Method number	Latest issue
Water-Insoluble Matter		
in Soap and Soap Products	Da 6	-48 (97)
in Soap Containing Synthetic Detergents	Db 4	-48 (97)
Wax Content	Ch 8	-02 (02)
Wiley Melting Point Method	Cc 2	-38 (91) *
Writing and Approval of Methods	M 2	-65 (97)
X-Ray Diffraction Analysis of Fats	Cj 2	-95 (97)
Zearalenone and α -Zearalenol in Corn	Aj 2	-86 (97)

Surplus Methods

The methods listed in this section have been declared surplus (i.e., obsolete) by the AOCS Uniform Methods Committee. The surplus methods have been or will be removed from *Official Methods* in the year stated; however, they are available upon request from AOCS headquarters at the prevailing photocopying rate.

Method number	Topic	Year removed from book
Aa 5-38 (89)	Modified Kjeldahl Method (cottonseed)	1991
Ab 4-50 (89)	Modified Kjeldahl Method (peanuts)	1991
Ac 4-41 (89)	Modified Kjeldahl Method (soybeans)	1991
Af 1-54 (93)	Sampling (flaxseed)	*
Af 2-54 (93)	Moisture and Volatile Matter (flaxseed)	*
Af 3-54 (95)	Oil Content (flaxseed)	*
Ai 1-80 (93)	Sampling (sunflower seed)	*
Ai 3-75 (99)	Oil Content (sunflower seed)	*
Ai 4-75 (89)	Modified Kjeldahl Method (sunflower)	1991
Ba 4a-38 (89)	Modified Kjeldahl Method (oilseed meals)	**
Ba 4b-87 (90)	Modified Kjeldahl Method (copper sulfate)	1991
Ba 4c-87 (89)	Kjel-Foss Automatic Method	1991
Bc 4-49 (89)	Nitrogen and Protein (soya flour)	1991
Ca 7-35 (90)	Beilstein Test	1991
Ca 8a-35 (90)	Coin Test	1991
Ca 8b-35 (90)	Silver Benzoate Test	1991
Ca 10-40 (89)	Break Test (soybean oil)	1991
Cb 5-40 (93)	Bömer Value	1994
Cc 2-38 (91)	Wiley Melting Point	1994
Cc 4-25 (89)	Slip Point (soft fats)	1992
Cc 5-25 (89)	Flow Test	1992
Cc 10a-25 (95)	Specific Gravity of Oils and Liquid Fats	1995
Cc 15-60 (89)	Soap in Oil (Conductivity)	1993
Cc 17-79 (93)	Soap in Oil by Titrimetric Method	1995
Cd 1-25 (93)	Wijs Method for Iodine Value	***
Cd 2-38 (89)	Thiocyanogen Value	1991
Cd 6-38 (89)	Liquid and Solid Fatty Acids	1991
Cd 8-53 (03)	Peroxide Value—Acetic Acid-Chloroform Method	2003
Cd 11-57 (91)	Monoglycerides (Section I)	1991
Cd 12-57 (93)	AOM for Oil Stability	**
Cd 14-61 (95)	<i>trans</i> Fatty Acids by FTIR	1995
Cd 17-85 (93)	<i>trans</i> Fatty Acids by GLC	1995
Cd 14b-93 (95)	<i>trans</i> Isomers in Partially Hydrogenated Oils by GLC-IR	1999
Cd 14c-94 (94)	<i>trans</i> Isomers by Capillary GLC	1999
Ce 1c-89 (95)	Fatty Acid Composition by GLC, <i>cis</i> , <i>cis</i> and <i>trans</i> Isomers	1999
Ce 1d-91 (93)	n-3 and n-6 Fatty Acids by Capillary GLC	1999
Ce 4-86 (95)	Erucic Acid by TLC	1995
Ce 4-95 (97)	Erucic Acid by GLC	2003
Dd 2b-59 (89)	Modified Karl Fischer (alkylbenzene sulfonates)	1989
Ea 2-38 (73)	Acidity (glycerol)	1991
Ea 2-38 (73)	Alkalinity (glycerol)	1991
Ea 2-38 (73)	Ash (glycerol)	1991
Ea 2-38 (73)	Sodium Chloride (glycerol)	1991
Ea 3-58 (73)	Total and Organic Residue	1991
Ea 6-51 (97)	Glycerol, Sodium Periodate Oxidation Method	1999
Ea 7-50 (93)	Specific Gravity: Glycerin	1995
Ja 5-55 (89)	Total Phosphorus in Lecithin	1993
M 1-59 (73)	Precision of Analytical Methods	1989
Tb 2-64 (95)	Modified Karl Fischer, General	1991
Tb 2a-64 (89)	Modified Karl Fischer, Fatty Nitrogen Products	1991
Tj 1a-64 (93)	Polyunsaturated Acids, Ultraviolet Spectrophotometric Method	1994

* This method will be removed when Section A is revised.

**This method was retained in the book for historical and reference purposes only.

*** This method, which uses mercuric oxide, was retained in the book for historical and reference purposes only.