

KIMBLE® LABORATORY GLASSWARE CATALOG



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Excellence in your hands

Pear-Shaped Centrifuge Tubes with Red Scale

Graduated tube is used for the determination of water and sediment in petroleum products.

- Top is tooled for a size 5 rubber stopper
- Calibrated to contain
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	Stem Volume (mL)	Case Qty
412510-0000	100	3	1

8" Oil and Weathering (End Point Index) Centrifuge Tubes

Oil and weather index 8-inch centrifuge tubes can be used in the determination of residues in Liquefied Petroleum (LP) gases, ASTM Method D2158.

- KIMAX® tube used extensively in California
- *Calibrated to contain*
- Different graduations than 45240
- Scale and legend are durable white ceramic enamel
- Top is tooled to accept snap cap 28150R-6
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	OD x Length (mm)	Case Qty
45241-100	100	37 x 203	12

Pear-Shaped Centrifuge Tubes with White Scale

KIMAX® tube used in the determination of bottom sediment and water in petroleum products.

- Calibrated to contain
- Stem holds 1.5 mL
- Scale and legend are durable white ceramic enamel
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	OD x Length (mm)	Case Qty
45244-100	100	58 x 158	12
45244-200	100 (200%)	58 x 158	6

6" Short Cone Oil Centrifuge Tubes

KIMAX® tube designed for field use in testing petroleum.

- *Calibrated to contain*
- Scale and legend are durable white ceramic enamel
- 45243-200 is graduated in %. 100 mL equals 200%
- Top is tooled to accept snap cap 28150R-6
- Referenced in API MPMS Chapter 10.4
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	OD x Length (mm)	Case Qty
45243-100	100	45 x 165	12
45243-200	100	45 x 165	6

8" Oil Centrifuge Tubes

KIMAX® 8-inch oil centrifuge tubes used in the determination of water and sediment in crude mineral oils, fuel oils and other petroleum products (D1796 and MPMS 10.4 standards); in determination of volume of precipitate formed by centrifuging definite quantities of steam cylinder stocks and black oils and other lubricating oils (ASTM D91 and D128); and in testing for acidity of distillation residues or hydrocarbon liquids of gasoline or petroleum solvents (ASTM D1093).

- *Calibrated to contain*
- Scale and legend are durable white ceramic enamel
- Top is tooled to accept snap cap 28150R-6
- Referenced in ASTM D4007
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	OD x Length (mm)	Case Qty
45240-100	100	37 x 203	12

California Centrifuge Tube with Red Stripe

KIMAX® conical bottom centrifuge tube is used for testing of petroleum products according to ASTM D91, D893 and D1796.

- Tube has a permanent red stripe under the white enamel graduations for easy reading of results
- Scale and legend are durable white ceramic enamel
- Top is tooled to accept snap cap 28150R-6
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	OD x Length (mm)	Case Qty
45239-100	100	38 x 200	12

6" Short Cone Oil Centrifuge Tubes

KIMAX® tube designed for field use in testing petroleum.

- Calibrated to contain
- Scale and legend are durable white ceramic enamel
- 45243-200 is graduated in %. 100 mL equals 200%
- 45243LF-100 & 45243LF-200 features our proprietary Lazer-Fused™ technology for durable and precise marking and outstanding volumetric accuracy
- Top is tooled to accept snap cap 28150R-6
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	Graduation Intervals (mL)	Case Qty
45243-100	100	0-0.5 in 0.05, 0.5-2 in 0.1, 2-3 in 0.2, 3-5 in 0.5, 5-10 in 1, 10-25 in 5, and at 50, 100	12
45243LF-100	100	same as 45243-100	12
45243-200	200	0-0.1% in 0.10%, 1-4 in 0.20, 4-6 in 0.40, 6-10 in 1, 10-20 in 2, 20-50 in 10, and at 100, 200	6
45243LF-200	200	same as 45243-200	6

8" Oil Centrifuge Tubes

KIMAX® tube used in the determination of water and sediment in crude mineral oils, fuel oils and other petroleum products (D1796 and MPMS 10.4 standards); in determination of volume of precipitate formed by centrifuging definite quantities of steam cylinder stocks and black oils and other lubricating oils (ASTM D91 and D128); and in testing for acidity of distillation residues or hydrocarbon liquids of gasoline or petroleum solvents (ASTM D1093).

- Calibrated to contain
- Scale and legend are durable white ceramic enamel
- 45240LF-100 features our proprietary Lazer-Fused™ technology for durable and precise marking and outstanding volumetric accuracy
- Top is tooled to accept snap cap 28150R-6
- Referenced in ASTM D4007, D91, D1796, D1093
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	Graduation Intervals (mL)	Case Qty
45240-100	100	0-0.5 in 0.05, 0.5-2 in 0.1, 2-3 in 0.2, 3-5 in 0.5, 5-10 in 1, 10-25 in 5, 25-100 in 25	12
45240LF-100	100	same as 45240-100	12

California Centrifuge Tube with Red Stripe

KIMAX® conical bottom centrifuge tube is used for testing of petroleum products according to ASTM D91, D893 and D1796.

- Tube has a permanent red stripe under the white enamel graduations for easy reading of results
- Scale and legend are durable white ceramic enamel
- Top is tooled to accept snap cap 28150R-6
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	Graduation Intervals (mL)	Case Qty
45239-100	100	0-0.5 in 0.05, 0.5-2 in 0.1, 2-3 in 0.2, 3-5 in 0.5, 5-10 in 1, 10-25 in 5, and at 50, 75, 100	12

8" Oil and Weathering (End Point Index) Centrifuge Tubes

Can be used in the determination of residues in Liquefied Petroleum (LP) gases, ASTM Method D2158.

- KIMAX® tube used extensively in California
- Calibrated to contain
- Different graduations than 45240
- 45241LF-100 features our proprietary Lazer-Fused™ technology for durable and precise marking and outstanding volumetric accuracy
- Scale and legend are durable white ceramic enamel
- Top is tooled to accept snap cap 28150R-6
- Ref: ASTM Method D2158
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	Graduation Intervals (mL)	Case Qty
45241-100	100	0-1 in 0.05, 1-3 in 0.1, 3-6 in 0.2, 6-10 in 0.5, 10-100 in 1	12
45241LF-100	100	same as 45241-100	12

Soil Analysis Tube

These tubes are designed for use with Teledyne Tekmar 2016/2032 Autosamplers and 4100/4200 Automatic Samplers that are equipped with 3/4" diameter mounts.

- The larger opening of these disposable tubes permits easier sample loading and facilitates the weighing of solid and soil samples
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	OD (mm)	Length (mm)	Case Qty
591175-0715	19	150	24

Cannon-Fenske Uncalibrated Serialized Viscometer Tubes

Cannon-Fenske uncalibrated viscometer tube for use in obtaining kinematic viscosities of transparent liquids (ASTM Method of Test D445).

- KIMAX® tube designed from ASTM Specification D446
- Permanently marked with an individual serial number
- Viscosity ranges shown below are for an efflux time greater than 200 seconds
- Lines and legend are printed black
- Ref: ASTM Method D445
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

Calibration against a standard liquid of known viscosity or against a second viscometer with a known constant must be made before use.

Part Number	Approximate Constant	Kinematic Centistokes	Size	Case Qty
46460-50	0.004	0.8 to 4	50	1
46460-100	0.015	3 to 15	100	1
46460-150	0.035	7 to 35	150	1
46460-200	0.1	20 to 100	200	1
46460-300	0.25	50 to 250	300	1
46460-350	0.5	100 to 500	350	1
46460-400	1.2	240 to 1200	400	1



ASTM Method	Part Number	Description	Page #
D86	26015-125	Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure	280
D86	26015C-125	Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure	280
D86	20022-100	Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure	278
D91	45240-100	Standard Test Method for Precipitation Number of Lubricating Oils	287
D94	26510-250	Standard Test Methods for Saponification Number of Petroleum Products	282
D94	457000-0225	Standard Test Methods for Saponification Number of Petroleum Products	277
D94	14020-300	Standard Test Methods for Saponification Number of Petroleum Products	272
D95	22012-10	Standard Test Method for Water in Petroleum Products and Bituminous Materials by Distillation	279
D95	601000-0724	Standard Test Method for Water in Petroleum Products and Bituminous Materials by Distillation	284
D95	457000-0225	Standard Test Method for Water in Petroleum Products and Bituminous Materials by Distillation	277
D97	32501-99	Standard Test Method for Pour Point of Petroleum Products	274
D128	45240-100	Standard Test Methods for Analysis of Lubricating Grease	287
D233	26015-125	Standard Test Methods of Sampling and Testing Turpentine	280
D244	20039-500	Standard Test Methods and Practices for Emulsified Asphalts	279
D287	20058 (all)	Standard Test Method for API Gravity of Crude Petroleum and Petroleum Products (Hydrometer Method)	279
D322	25285-1000	Standard Test Method for Gasoline Diluent in Used Gasoline Engine Oils by Distillation	283
D322	447000-2440	Standard Test Method for Gasoline Diluent in Used Gasoline Engine Oils by Distillation	277
D445	46460 (all)	Standard Test Method for Kinematic Viscosity of Transparent and Opaque Liquids (and Calculation of Dynamic Viscosity)	287
D473	26650-500	Standard Test Method for Sediment in Crude Oils and Fuel Oils by the Extraction Method	283
D524	896650-0000	Standard Test Method for Ramsbottom Carbon Residue of Petroleum Products	285
D892	20022-1000	Standard Test Method for Foaming Characteristics of Lubricating Oils	278
D974	17026F-50	Standard Test Method for Acid and Base Number by Color-Indicator Titration	275
D974	17026F-10	Standard Test Method for Acid and Base Number by Color-Indicator Titration	275
D974	17110F-5	Standard Test Method for Acid and Base Number by Color-Indicator Titration	276
D1093	45240-100	Standard Test Method for Acidity of Hydrocarbon Liquids and Their Distillation Residues	287
D1094	20039-100	Standard Test Method for Water Reaction of Aviation Fuels	279
D1298	20058 (all)	Standard Test Method for Density, Relative Density, or API Gravity of Crude Petroleum and Liquid Petroleum Products by Hydrometer Method	279
D1401	20011-100	Standard Test Method for Water Separability of Petroleum Oils and Synthetic Fluids	279
D1744	17051F-10	Standard Test Method for Determination of Water in Liquid Petroleum Products by Karl Fischer Reagent	275
D1744	606000-1024	Standard Test Method for Determination of Water in Liquid Petroleum Products by Karl Fischer Reagent	283
D1744	179700-0824	Standard Test Method for Determination of Water in Liquid Petroleum Products by Karl Fischer Reagent	272
D1744	14607-500	Standard Test Method for Determination of Water in Liquid Petroleum Products by Karl Fischer Reagent	273
D1796	45240-100	Standard Test Method for Water and Sediment in Fuel Oils by the Centrifuge Method (Laboratory Procedure)	287
D2070	14000-250	Standard Test Method for Thermal Stability of Hydraulic Oils	272
D2158	45241-100	Standard Test Method for Residues in Liquefied Petroleum (LP) Gases	287
D2500	32501-99	Standard Test Method for Cloud Point of Petroleum Products	274
D2709	45220-100	Standard Test Method for Water and Sediment in Middle Distillate Fuels by Centrifuge	286
D4007	45240-100	Standard Test Method for Water and Sediment in Crude Oil by the Centrifuge Method (Laboratory Procedure)	287

API MPMS Chapter	Part Number	Description	Page #
10.4	45240-100	Determination of Water and/or Sediment in Crude Oil by the Centrifuge Method (Field Procedure)	287
10.4	45243-100	Determination of Water and/or Sediment in Crude Oil by the Centrifuge Method (Field Procedure)	287
10.4	45170-125	Determination of Water and/or Sediment in Crude Oil by the Centrifuge Method (Field Procedure)	286

Goetz Graduated Centrifuge Tubes

KIMAX® tube used for the determination of small quantities of solids in large volumes of liquids. Recommended for the determination of free water and sediment in diesel and other distillate fuels, as a pass-fail indication of product quality (ASTM D2709).

- Calibrated to contain.
- Durable black ceramic enamel scale
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements

Do not centrifuge with stopper in tube.

Stem graduations in 0.01 mL to 0.2 mL with a tolerance of ± 0.01 mL
Body graduation at 25 mL with a tolerance of ± 1.0 mL
Body graduations at 50 and 100 mL with a tolerance of ± 2.0 mL



Part Number	Capacity (mL)	Approx. OD x Length (mm)	Case Qty
45220-100	100	58 x 160	6

Pear-Shaped Centrifuge Tubes with Red Scale

Graduated tube is used for the determination of water and sediment in petroleum products.

- Top is tooled for a size 5 rubber stopper
- Calibrated to contain
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	Stem Volume (mL)	Case Qty
412510-0000	100	3	1

Pear-Shaped Centrifuge Tubes with White Scale

KIMAX® tube used in the determination of bottom sediment and water in petroleum products.

- Calibrated to contain
- Stem holds 1.5 mL
- Scale and legend are durable white ceramic enamel
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	OD x Length (mm)	Case Qty
45244-100	100	58 x 158	12
45244-200	100 (200%)	58 x 158	6

6" Short Cone Oil Centrifuge Tubes

KIMAX® tube designed for field use in testing petroleum. Centrifuge tubes with 6-inch short cone.

- Calibrated to contain
- Scale and legend are durable white ceramic enamel
- 45243-200 is graduated in %. 100 mL equals 200%
- 45243LF-100 & 45243LF-200 features our proprietary Lazer-Fused™ technology for durable and precise marking and outstanding volumetric accuracy
- Top is tooled to accept snap cap 28150R-6
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	OD x Length (mm)	Case Qty
45243-100	100	45 x 165	12
45243LF-100	100	45 x 165	12
45243-200	100, 200%	45 x 165	6
45243LF-200	100, 200%	45 x 165	6

8" Oil and Weathering (End Point Index) Centrifuge Tubes

Can be used in the determination of residues in Liquefied Petroleum (LP) gases, ASTM Method D2158.

- KIMAX® tube used extensively in California
- Calibrated to contain
- Different graduations than 45240
- 45241LF-100 features our proprietary Lazer-Fused™ technology for durable and precise marking and outstanding volumetric accuracy
- Scale and legend are durable white ceramic enamel
- Top is tooled to accept snap cap 28150R-6
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	OD x Length (mm)	Case Qty
45241-100	100	37 x 203	12
45241LF-100	100	37 x 203	12

California Centrifuge Tube with Red Stripe

KIMAX® conical bottom centrifuge tube is used for testing of petroleum products according to ASTM D91, D893 and D1796.

- Tube has a permanent red stripe under the white enamel graduations for easy reading of results
- Scale and legend are durable white ceramic enamel
- Top is tooled to accept snap cap 28150R-6
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	OD x Length (mm)	Case Qty
45239-100	100	38 x 200	12

Chromatography Sample Tube with Screw Caps

- Design allows access to the sample via a microliter syringe needle through the hole in the PTFE-lined screw cap
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	Capacity (mL)	Graduations x Subdivisions (mL)	Case Qty
422570-0000	2	0-0.3 x 0.01	1

Replacement Parts



Part Number	Description	Case Qty
410116-1325	PTFE-Lined 13-425 Open Top Phenolic Cap	1
774161-0013	PTFE-Faced Silicone Rubber Septa	48

Nessler Color Comparison Tubes

These Nessler tubes are ideal for color comparison.

- Shadowless bottom of each tube transmits undistorted light
- Rings and legend are durable white ceramic enamel
- 45310 series is unmatched
- 45310A series is supplied in matched sets of 6. Graduated ring scale of any of the six tubes will not vary by more than 3 mm from that of any other tube within the set
- Manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements



Part Number	OD x Length (mm)	Graduation (mL)	Case Qty
45310-50	25 x 175	50	6
45310-100	32 x 200	100	6
45310-50100	32 x 200	50 & 100	6
45310A-50	25 x 175	50	6
45310A-100	32 x 200	100	6

ASTM Method	Part Number	Description	Page #
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D95	601000-0724	Standard Test Method for Water in Petroleum Products and Bituminous Materials by Distillation	284
D95	457000-0225	Standard Test Method for Water in Petroleum Products and Bituminous Materials by Distillation	277
D97	32501-99	Standard Test Method for Pour Point of Petroleum Products	274
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D2158	45241-100	Standard Test Method for Residues in Liquefied Petroleum (LP) Gases	287
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D4007	45240-100	Standard Test Method for Water and Sediment in Crude Oil by the Centrifuge Method (Laboratory Procedure)	287

API MPMS Chapter	Part Number	Description	Page #
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10.4	45243-100	Determination of Water and/or Sediment in Crude Oil by the Centrifuge Method (Field Procedure)	287
10.4	45170-125	Determination of Water and/or Sediment in Crude Oil by the Centrifuge Method (Field Procedure)	286