KIMBLE®
HYDROMETERS

KRACKELER Scientific

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Excellence in your hands

Certificate of Conformance

The Certificate of Conformance indicates the ASTM specifications from which the hydrometers were designed, and states that the reference standards used to calibrate the devices are traceable to NIST.

Types of Kimble Hydrometers

Specific Gravity – With over half of the Kimble hydrometer products falling into this category, this is the most common hydrometer classification. Specific gravity hydrometers are available in a variety of graduation ranges and overall lengths.

Precision Specific Gravity Hydrometer

Catalog Number	Graduation Range	Graduation Intervals	Body OD (mm)	Length (mm)	Sample Volume (mL)	Recommended KIMAX® Cylinder
6-52110-0708	SG 0.700-0.810	0.001 SG	16	310	300	6-20058-38375
6-52110-0809	SG 0.800-0.910	0.001 SG	18	300	500	6-20058-50375
6-52110-0910	SG 0.900-1.000	0.001 SG	18	310	500	6-20058-50375
6-52110-1012	SG 1.000-1.220	0.002 SG	16	300	300	6-20058-38375
6-52110-1214	SG 1.200-1.420	0.002 SG	16	300	300	6-20058-38375
6-52110-1416	SG 1.400-1.620	0.002 SG	18	300	500	6-20058-50375
6-52110-1618	SG 1.600-1.820	0.002 SG	18	300	500	6-20058-50375
6-52110-1820	SG 1.800-2.000	0.002 SG	18	300	500	6-20058-50375
6-52110-2000	Set of Eight Precision SG Hydrometers (see above specifications)					

Tall Form High Precision Specific Gravity Hydrometer

Catalog Number	Graduation Range	Graduation Intervals	Body OD (mm)	Length (mm)	Sample Volume (mL)	Recommended KIMAX® Cylinder
6-52111-0708	SG 0.760-0.830	0.0005 SG	21	330	600	6-20058-50375
6-52111-0809	SG 0.820-0.890	0.0005 SG	21	330	600	6-20058-50375
6-52111-0810	SG 0.880-0.950	0.0005 SG	18	330	600	6-20058-50375
6-52111-0910	SG 0.940-1.010	0.0005 SG	18	330	600	6-20058-50375
6-52111-1011	SG 1.000-1.070	0.0005 SG	21	330	600	6-20058-50375
6-52111-1111	SG 1.060-1.130	0.0005 SG	21	330	600	6-20058-50375
6-52111-1112	SG 1.120-1.190	0.0005 SG	21	330	600	6-20058-50375
6-52111-1212	SG 1.180-1.250	0.0005 SG	21	330	600	6-20058-50375
6-52111-1213	SG 1.240-1.310	0.0005 SG	21	330	600	6-20058-50375
6-52111-1314	SG 1.300-1.370	0.0005 SG	21	330	600	6-20058-50375
6-52111-1414	SG 1.360-1.430	0.0005 SG	21	330	600	6-20058-50375
6-52111-1415	SG 1.420-1.490	0.0005 SG	21	330	600	6-20058-50375

Short Form High Precision Specific Gravity Hydrometer

Catalog Number	Graduation Range	Graduation Intervals	Body OD (mm)	Length (mm)	Sample Volume (mL)
6-52112-0809	SG 0.820-0.890	0.001 SG	18	165	140
6-52112-0909	SG 0.880-0.950	0.001 SG	18	165	140
6-52112-0910	SG 0.940-1.010	0.001 SG	18	165	140
6-52112-1011	SG 1.000-1.070	0.001 SG	21	165	140
6-52112-1111	SG 1.060-1.130	0.001 SG	21	165	140
6-52112-1112	SG 1.120-1.190	0.001 SG	18	165	140
6-52112-1113	SG 1.180-1.250	0.001 SG	18	165	140
6-52112-1213	SG 1.240-1.310	0.001 SG	18	165	140

Broad Range Specific Gravity Hydrometer for Liquids Lighter than Water

Catalog Number	Graduation Range	Graduation Intervals	Body OD (mm)	Length (mm)	Sample Volume (mL)	Recommended KIMAX® Cylinder
6-52113-0610	SG 0.650-1.000	0.001 SG	18	300	300	6-20058-50375

Baume – The Baume scale originally was used in industrial chemistry and pharmacology, but today it is used in brewing, winemaking, sugar beet processing, ophthalmics, and the starch industry. Although specific gravity is a dimensionless number, the Baume scale is graduated in degrees Baume. According to Perry's Chemical Engineers' Handbook (8th Edition), °Be' = 145 – 145/sp gr (heavier than water), and °Be' = 140/sp gr - 130 (lighter than water).

Narrow Range Baume Hydrometer

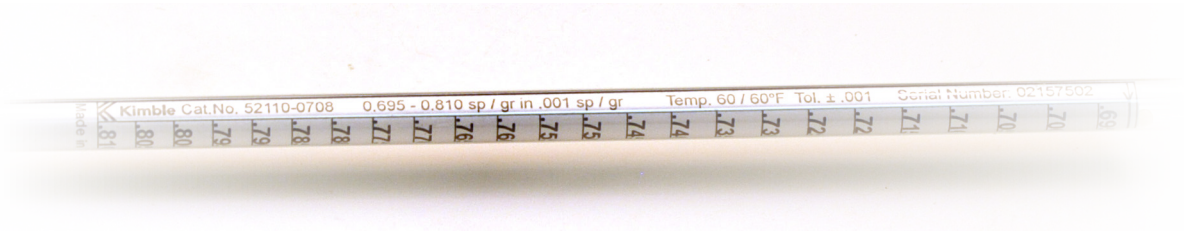
Catalog Number	Graduation Range	Graduation Intervals	Body OD (mm)	Length (mm)	Sample Volume (mL)	Recommended KIMAX® Cylinder
6-52120-0012	0°-12° Baume	0.10° Baume	18	300	500	6-20058-50375
6-52120-0921	9°-21° Baume	0.10° Baume	18	300	500	6-20058-50375
6-52120-1931	19°-31° Baume	0.10° Baume	18	300	500	6-20058-50375
6-52120-3951	39°-51° Baume	0.10° Baume	16	300	300	6-20058-38375

Broad Range Baume Hydrometer

Catalog Number	Graduation Range	Graduation Intervals	Body OD (mm)	Length (mm)	Sample Volume (mL)	Recommended KIMAX® Cylinder
6-52121-0035	0°-35° Baume	0.50° Baume	16	300	300	6-20058-38375
6-52121-0050	0°-50° Baume	0.50° Baume	18	300	500	6-20058-50375
6-52121-0070	0°-70° Baume	1.0° Baume		305	300	6-20058-38375

Dual Scale Baume/SG Hydrometer

Catalog Number	Graduation Range	Graduation Intervals	Body OD (mm)	Length (mm)	Sample Volume (mL)	Recommended KIMAX® Cylinder
6-52122-0026	0° - 26° Baume, SG 1.000-1.220	0.002 SG, 0.2°Baume	16	300	300	6-20058-38375
6-52122-2443	24° - 43° Baume, SG 1.200-1.420	0.002 SG, 0.2°Baume	16	300	300	6-20058-38375
6-52122-4255	42° - 55° Baume, SG 1.400-1.620	0.002 SG, 0.2°Baume	18	300	500	6-20058-50375
6-52122-5465	54° - 65° Baume, SG 1.600-1.820	0.002 SG, 0.2°Baume	18	300	500	6-20058-50375
6-52122-0072	0° - 72° Baume, SG 1.000-2.000	0.01 SG, 1.0°Baume	16	305	300	6-20058-38375



API ASTM – The American Petroleum Institute scale is used to measure the specific gravity of a liquid relative to water. A sample with an API gravity value greater than 10 is lighter than water, and an API gravity value less than 10 is heavier than water. Although specific gravity does not have units, the API scale is graduated in degrees, and was designed such that most values would fall between ten and seventy API gravity degrees. According to Perry's Chemical Engineers' Handbook (8th Edition), °API = 141.5/sp gr -131.5.

Plain form API ASTM Hydrometer

Catalog Number	Graduation Range	Graduation Intervals	Body OD (mm)	Length (mm)	Sample Volume (mL)	Recommended KIMAX® Cylinder
6-52130-0111	API -1°- +11° ASTM 1H	0.10° API	25	330	600	6-20058-63460
6-52130-0921	API 9°-21° ASTM 2H	0.10° API	25	330	600	6-20058-63460
6-52130-1931	API 19°-31° ASTM 3H	0.10° API	25	330	600	6-20058-63460
6-52130-2941	API 29°-41° ASTM 4H	0.10° API	25	330	600	6-20058-63460
6-52130-3951	API 39°-51° ASTM 5H	0.10° API	25	330	600	6-20058-63460
6-52130-4961	API 49°-61° ASTM 6H	0.10° API	25	330	600	6-20058-63460
6-52130-5971	API 59°-71° ASTM 7H	0.10° API	25	330	600	6-20058-63460
6-52130-6981	API 69°-81° ASTM 8H	0.10° API	25	330	600	6-20058-63460
6-52130-7991	API 79°-91° ASTM 9H	0.10° API	25	335	600	6-20058-63460
6-52130-8910	API 89°-101° ASTM 10H	0.10° API	21	330	600	6-20058-63460

Ethanol – The ethanol hydrometer has dual graduations in 0-100 % and 0-200 proof scales.

Ethanol Hydrometer

Catalog Number	Graduation Range	Graduation Intervals	Body OD (mm)	Length (mm)	Sample Volume (mL)	Recommended KIMAX® Cylinder
6-52150-0200	0-100% Ethanol , 0-200 Proof	1%, 2 Proof	16	300	300	6-20058-38375

Salt and Brine – The sodium chloride hydrometer is graduated from 0-26.4% sodium chloride, and is used to measure the percentage of a saturated salt solution. The salimeter is graduated from 0-100% saturated sodium chloride. It is used in the measurement of meat packing and pickling brines.

Salt and Brine Hydrometers

Catalog Number	Graduation Range	Graduation Intervals	Body OD (mm)	Length (mm)	Sample Volume (mL)	Recommended KIMAX® Cylinder
6-52140-0100	0-100% Saturated Sodium Chloride	1% of saturation	16	300	300	6-20058-38375
6-52140-0264	0-26.4% Sodium Chloride	0.5% by weight	16	300	300	6-20058-38375

Hydrometer Cylinders – Kimble hydrometer cylinders are available from a 340 mL to a 1200mL capacity and from 375 mm to 460 mm tall. The cylinders are manufactured from 33 expansion, low extractable borosilicate glass conforming to USP Type I and ASTM E438, Type I, Class A requirements. The plain, ungraduated cylinders have a pourout spout and a hexagonal base. The internal diameter of the cylinder should be approximately 25 mm larger than the outer diameter of the hydrometer body. Additionally, the hydrometer should float at least 25 mm above the base of the cylinder.

Hydrometer Cylinders

Catalog Number	Capacity (mL)	Approximate Height (mm)	Cylinder OD (mm)
6-20058-38375	340	375	41
6-20058-50375	600	375	51
6-20058-63460	1200	460	64