

Viscosity Standards

General Purpose

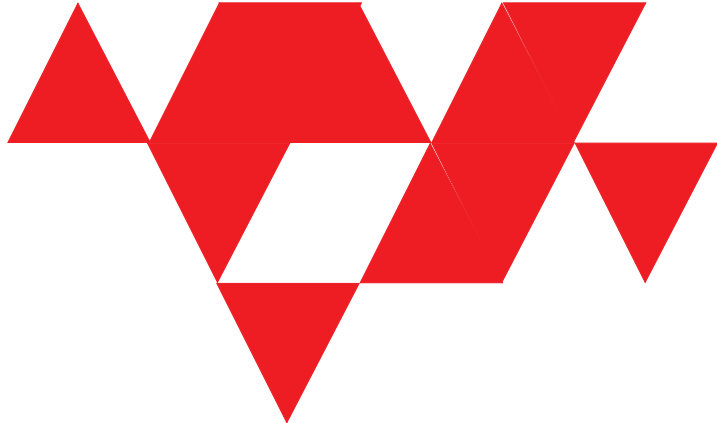
The same product reliability and stability that our customers trust in metallo-organic standards are available in General Purpose Viscosity standards. These certified, mineral oil based, viscosity standards were developed for calibration and verification of many types of viscometers, including glass capillary viscometers.

All standards are traceable to National Standards in accordance to ASTM & IP methods.

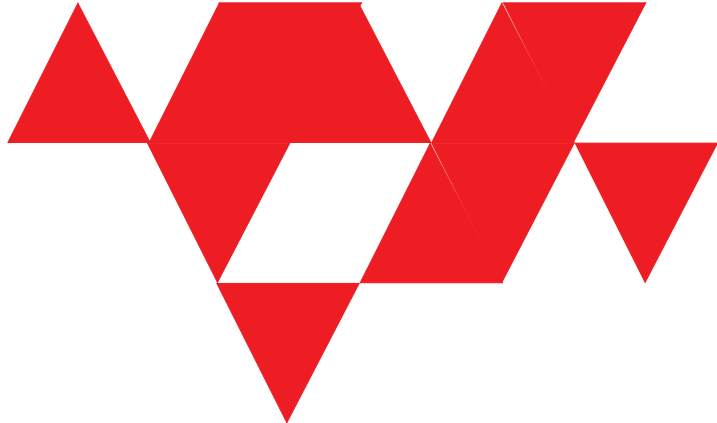
The determination of kinematic and dynamic viscosity are made in accordance with ASTM D 445/446 and ISO 3104/3105, ISO 17034 and are traceable to the NIST (National Institute of Standards and Technology).

All calibrations are based on a master viscometer procedure located in ASTM D 2162 and the National Institute of Standards and Technology (NIST) value of 1.0016 mPa.s (centipoise) for water at 20 °C (68 °F). Custom standards are available. Please contact us for more information.



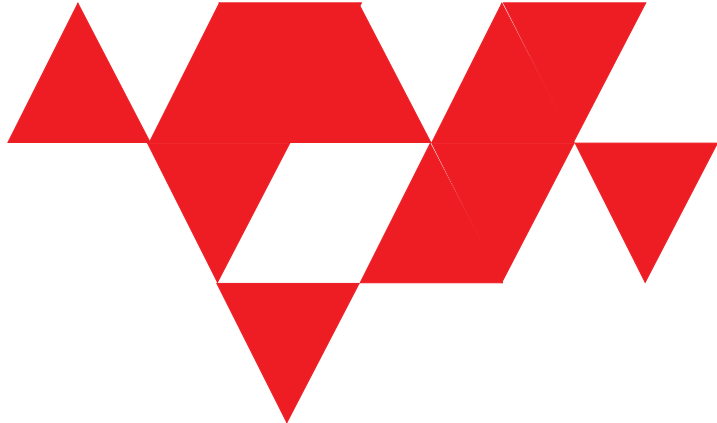


Volume					
Viscosity Standards	125 mL	500 mL	1 Litre	4 Litre	20 Litre
S3	150-600-351	150-600-352	150-600-353	150-600-354	150-600-355
S6	150-600-141	150-600-142	150-600-143	150-600-144	150-600-145
N4	150-600-441	150-600-442	150-600-443	150-600-444	150-600-445
N10	150-600-181	150-600-182	150-600-183	150-600-184	150-600-185
N14	150-600-211	150-600-212	150-600-213	150-600-214	
S20	150-600-221	150-600-222	150-600-223	150-600-224	150-600-225
N35	150-600-261	150-600-262	150-600-263	150-600-264	150-600-265
N44	150-600-461	150-600-462	150-600-463	150-600-464	150-600-465
S60	150-600-301	150-600-302	150-600-303	150-600-304	150-600-305
N100	150-600-341	150-600-342	150-600-343	150-600-344	150-600-345
N140	150-600-431	150-600-432	150-600-433	150-600-434	150-600-435
S200	150-600-231	150-600-232	150-600-233	150-600-234	150-600-235
N350	150-600-361	150-600-362	150-600-363	150-600-364	150-600-365
N415	150-600-471	150-600-472	150-600-473	150-600-474	150-600-475
S600	150-600-241	150-600-242	150-600-243	150-600-244	150-600-245
N1000	150-600-371	150-600-372	150-600-373	150-600-374	150-600-375
S2000	150-600-381	150-600-382	150-600-383	150-600-384	150-600-385
N4000	150-600-391	150-600-392	150-600-393	150-600-394	150-600-395
N5100	150-600-481	150-600-482	150-600-483	150-600-484	
S8000	150-600-401	150-600-402	150-600-403	150-600-404	150-600-405
N15000	150-600-411	150-600-412	150-600-413	150-600-414	150-600-415
S30000	150-600-421	150-600-422	150-600-423	150-600-424	150-600-425



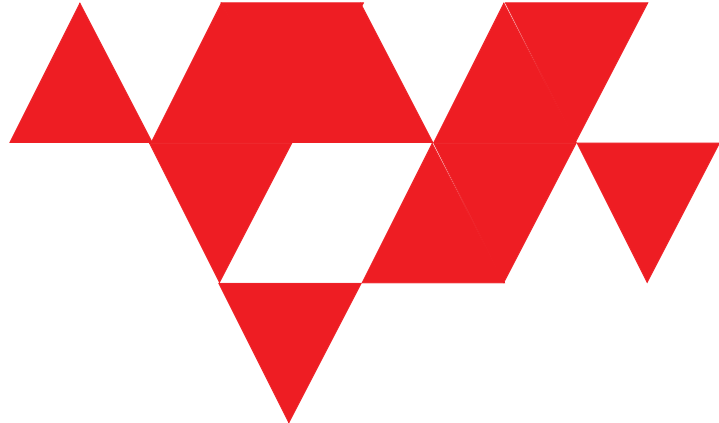
Typical Specifications for Viscosity Standards

Kinematic Viscosity in mm ² /s (Centistokes)										Saybolt Viscosity
	20 °C/ 68 °F	25 °C/ 77 °F	37.78 °C/ 100 °F	40 °C/ 104 °F	50 °C/ 122 °F	60 °C/ 140 °F	80 °C/ 176 °F	98.89 °C/ 210 °F	100 °C/ 212 °F	37 °C/ 100 °F
S3	4.5	4.0	3.0	2.8	2.4	2.0	1.5	1.2	1.2	
S6	10	8.8	6.0	5.7	4.5	3.6	2.5	1.9	1.9	
N4	6.7	5.8	4.2	4.0	3.2	2.6	1.9	1.5	1.4	
N10	21	17	11	10	7.5	5.8	3.7	2.7	2.6	
N14	33	26	15	14	10	7.5	4.6	3.2	3.0	79
S20	46	35	20	18	13	9.0	5.6	3.6	3.5	87
N35	90	67	36	32	21	15	8.4	5.4	5.3	167
N44	110	86	48	44	30	21	12	7.6	7.4	220
S60	160	119	60	54	35	26	12	7.7	7.5	281
N100	318	228	110	97	60	39	20	11	11	509
N140	530	360	160	140	82	51	24	14	14	730
S200	715	487	206	180	103	64	30	17	16	954
N350	1,400	940	370	330	180	110	46	24	23	1,730
N415	1,900	1,200	480	410	220	130	55	29	28	2,200
S600	2,400	1,600	600	520	280	160	66	34	32	
N1000	5,100	3,300	1,200	1,000	520	290	110	52	50	
S2000	8,200	5,200	1,900	1,600	780	400	150	70	68	
N4000	18,000	11,000	3,900	3,300	1,600	840	280	123	117	
N5100	27,000	17,000	6,000	5,100	2,500	1,300	430	180	170	
S8000	37,000	23,000	7,900	6,700	3,200	1,600	520	210	200	
N15000	64,000	40,000	13,000	11,000	5,300	2,700	850	340	320	
S30000		80,000	28,000	23,000	11,000	5,800	1,700	670	640	



Typical Specifications for Viscosity Standards

Dynamic Viscosity in mPa.S (Centipoise)										Saybolt Viscosity
	20 °C/ 68 °F	25 °C/ 77 °F	37.78 °C/ 100 °F	40 °C/ 104 °F	50 °C/ 122 °F	60 °C/ 140 °F	80 °C/ 176 °F	98.89 °C/ 210 °F	100 °C/ 212 °F	37 °C/ 100 °F
S3	3.7	3.3	2.4	2.3	1.9	1.6	1.2	0.9	0.9	
S6	8.7	7.3	5.0	4.7	3.6	2.9	2.0	1.5	1.4	
N4	5.6	4.8	3.4	3.2	2.6	2.1	1.5	1.1	1.1	
N10	18	14	9.0	8.4	6.2	4.7	3.0	2.1	2.1	
N14	29	22	13	12	8.6	6.3	3.8	3.2	2.5	79
S20	40	30	17	15	11	7.6	4.7	2.9	2.9	87
N35	78	59	31	28	18	13	7.0	4.4	4.3	167
N44	91	71	39	36	24	17	9.4	6.0	5.8	220
S60	138	102	52	46	30	22	9.9	6.3	6.1	281
N100	276	197	94	83	51	33	16	9.4	9.1	509
N140	450	310	130	120	69	43	20	11	11	730
S200	613	416	174	152	87	54	24	15	13	954
N350	1,200	810	320	280	150	92	38	20	19	1,730
N415	1,600	1,100	410	350	190	110	45	23	23	2,200
S600	2,100	1,400	510	440	240	140	55	28	26	
N1000	4,400	2,800	1,000	940	440	240	92	43	41	
S2000	7,200	4,500	1,600	1,400	670	340	130	58	56	
N4000	16,000	9,700	3,400	2,900	1,400	720	240	100	98	
N5100	24,000	15,000	5,300	4,400	2,100	1,100	370	160	150	
S8000	33,000	20,000	6,900	5,900	2,800	1,400	440	180	170	
N15000	57,000	36,000	11,000	9,700	4,700	2,400	730	290	270	
S30000		72,000	25,000	20,000	9,700	5,100	1,500	570	550	



Typical Specifications for Viscosity Standards

Density in g/mL in accordance with ASTM D7042									
	20 °C/ 68 °F	25 °C/ 77 °F	37.78 °C/ 100 °F	40 °C/ 104 °F	50 °C/ 122 °F	60 °C/ 140 °F	80 °C/ 176 °F	98.89 °C/ 210 °F	100 °C/ 212 °F
S3	0.833	0.830	0.821	0.820	0.813	0.806	0.792	0.779	0.778
S6	0.831	0.828	0.819	0.818	0.811	0.805	0.791	0.779	0.778
N4	0.834	0.831	0.822	0.820	0.814	0.807	0.793	0.780	0.780
N10	0.842	0.839	0.831	0.829	0.823	0.816	0.804	0.791	0.791
N14	0.868	0.865	0.857	0.853	0.847	0.843	0.830	0.818	0.814
S20	0.871	0.868	0.860	0.859	0.852	0.846	0.833	0.821	0.820
N35	0.872	0.869	0.861	0.860	0.853	0.847	0.834	0.823	0.822
N44	0.828	0.825	0.817	0.816	0.809	0.803	0.791	0.779	0.779
S60	0.863	0.860	0.852	0.851	0.845	0.839	0.826	0.815	0.814
N100	0.867	0.864	0.857	0.855	0.849	0.843	0.831	0.820	0.819
N140	0.858	0.855	0.848	0.846	0.840	0.834	0.822	0.811	0.810
S200	0.858	0.855	0.847	0.846	0.840	0.834	0.822	0.813	0.810
N350	0.863	0.860	0.852	0.851	0.845	0.839	0.827	0.816	0.815
N415	0.865	0.862	0.854	0.853	0.847	0.841	0.830	0.819	0.818
S600	0.866	0.864	0.856	0.855	0.849	0.843	0.832	0.820	0.820
N1000	0.872	0.869	0.862	0.860	0.855	0.849	0.837	0.826	0.826
S2000	0.876	0.873	0.865	0.864	0.858	0.853	0.841	0.831	0.830
N4000	0.882	0.879	0.872	0.871	0.865	0.860	0.849	0.838	0.838
N5100	0.887	0.884	0.877	0.876	0.871	0.865	0.854	0.844	0.843
S8000	0.888	0.885	0.878	0.877	0.872	0.866	0.855	0.845	0.845
N15000	0.893	0.891	0.884	0.883	0.877	0.872	0.861	0.851	0.851
S30000		0.896	0.889	0.888	0.883	0.877	0.867	0.857	0.857