

# VISCOSITY AND SPECIFIC

LIQUID	SPECIFIC GRAVITY	VISCOSITY S.S.U.						
		40° F.	60° F.	80° F.	100° F.	120° F.	140° F.	160° F.
<b>Miscellaneous Liquids</b>								
Water .....	1.0	31.5	31.5	31.5	31.5	31.5	31.5	31.5
Gasoline .....	.68 -.74	30	30	30	30	30	30	30
Jet Fuel .....	.74 -.85	35	35	35	35	35	35	35
Kerosene .....	.78 -.82	42	38	34	33	31	30	30
Turpentine .....	.86 -.87	34	33	32.8	32.6	32.4	32	32
Varnish Spar .....	.9	3500	1600	1000	650	530	250	230
<b>Fuel Oil and Diesel Oil</b>								
No. 1 Fuel Oil .....	.82 -.95	40	38	35	33	31	30	30
No. 2 Fuel Oil .....	.82 -.95	70	50	45	40	—	—	—
No. 3 Fuel Oil .....	.82 -.95	90	68	53	45	40	—	—
No. 5A Fuel Oil .....	.82 -.95	1000	400	200	100	75	60	40
No. 5B Fuel Oil .....	.82 -.95	1300	600	490	400	330	290	240
No. 6 Fuel Oil .....	.82 -.95	—	70000	20000	90000	1900	900	500
No. 2D Diesel Fuel Oil .....	.82 -.95	100	68	53	45	40	36	35
No. 3D Diesel Fuel Oil .....	.82 -.95	200	120	80	60	50	44	40
No. 4D Diesel Fuel Oil .....	.82 -.95	1600	600	280	140	90	68	54
No. 5D Diesel Fuel Oil .....	.82 -.95	15000	5000	2000	900	400	260	160
<b>Crankcase Oils — Automobile Lubricating Oils</b>								
SAE 10 .....	.88 -.935	1500-2400	600-900	300-400	170-220	110-130	75-90	60-65
SAE 20 .....	.88 -.935	2400-9000	900-3000	400-1100	220-550	130-280	90-170	65-110
SAE 30 .....	.88 -.935	9000-14000	3000-4400	1100-1800	550-800	280-400	170-240	110-150
SAE 40 .....	.88 -.935	14000-19000	4400-6000	1800-2400	800-1100	400-550	240-320	150-200
SAE 50 .....	.88 -.935	19000-45000	6000-10000	2400-4000	1100-1800	550-850	320-480	200-280
SAE 60 .....	.88 -.935	45000-60000	10000-17000	4000-6000	1800-2500	850-1200	480-580	280-380
SAE 70 .....	.88 -.935	60000-120000	17000-45000	6000-10000	2500-4000	1200-1800	580-900	380-500

# GRAVITY OF COMMON LIQUIDS

LIQUID	SPECIFIC GRAVITY	VISCOSITY S.S.U.						
		40° F.	60° F.	80° F.	100° F.	120° F.	140° F.	160° F.
<b>Transmission Oils — Automobile Transmission Gear Lubricants</b>								
SAE 90 .....	.88 -.935	14000	5500	2200	1100	650	380	240
SAE 140 .....	.88 -.935	35000	12000	5000	2200	1200	650	400
SAE 250 .....	.88 -.935	160000	50000	18000	7000	3300	1700	1000
<b>Other Oils</b>								
Castor Oil .....	.96	36000	9000	3000	1400	900	400	300
Chinawood .....	.943	4000	1800	1000	580	400	300	200
Cocanut .....	.925	1500	500	250	140	100	70	60
Cod .....	.928	1800	600	300	175	110	80	70
Corn .....	.924	1600	700	400	250	175	100	80
Cotton Seed .....	.88 -.925	1500	600	300	176	125	80	70
Cylinder .....	.82 -.95	60000	14000	6000	2700	1400	1000	400
Navy No. 1 Fuel Oil .....	.989	4000	1100	600	380	200	170	90
Navy No. 2 Fuel Oil .....	1.0	—	24000	8700	3500	1500	900	480
Gas .....	.887	180	90	60	50	45	—	—
Insulating .....		350	150	90	65	50	45	40
Lard .....	.912-.925	1100	600	380	287	180	140	90
Linseed .....	.925-.939	1500	500	250	143	110	85	70
Raw Menhadden .....	.933	1500	500	250	140	110	80	70
Neats Foot .....	.917	—	1000	430	230	160	100	80
Olive .....	.912-.918	1500	550	320	200	150	100	80
Palm .....	.924	1700	700	380	221	160	120	90
Peanut .....	.920	1200	500	300	195	150	100	80
Quenching .....	—	2400	900	450	250	180	130	90
Rape Seed .....	.919	2400	900	450	250	180	130	90
Rosin .....	.980	28000	7800	3200	1500	900	500	300
Rosin (Wood) .....	1.09	Extremely Viscose						
Sesame .....	.923	1100	500	290	184	130	90	60
Soya Bean .....	.927-.98	1200	475	270	165	120	80	70
Sperm .....	.883	360	250	170	110	90	70	60
Turbine (Light) .....	.91	500	350	230	150			
Turbine (Heavy) .....	.91	3000	1400	700	330	200	150	100
Whale .....	.925	900	450	275	170	140	100	80

LIQUID	SPECIFIC GRAVITY	VISCOSITY S.S.U.		
		70° F.	100° F.	130° F.
<b>Sugar, Syrups, Molasses, etc.</b>				
Corn Syrups .....	1.4 -1.47	—	5,000-500,000	1,500-60,000
Glucose .....	1.35-1.44	—	35,000-100,000	10,000-13,000
Honey (Raw) .....	—	—	340	—
Molasses .....	1.40-1.49	—	1,300-250,000	700-75,000
Sugar Syrups 60 Brix .....	1.29	230	92	—
Sugar Syrups 62 Brix .....	1.30	310	111	—
Sugar Syrups 64 Brix .....	1.31	440	148	—
Sugar Syrups 66 Brix .....	1.33	650	195	—
Sugar Syrups 68 Brix .....	1.34	1000	275	—
Sugar Syrups 70 Brix .....	1.35	1650	400	—
Sugar Syrups 72 Brix .....	1.36	2700	640	—
Sugar Syrups 74 Brix .....	1.38	5500	1100	—
Sugar Syrups 76 Brix .....	1.39	10000	2000	—
Corn Starch 22 Baume .....	1.18	150	130	—
Corn Starch 24 Baume .....	1.20	600	440	—
Corn Starch 25 Baume .....	1.21	1400	800	—
Ink—Printers .....	1.0 -1.38	—	2,500-10,000	1,100- 3,000
Ink—Newspaper .....	—	—	5,500- 8,000	2400
Tallow .....	.918	56 SSU at 212° F.		—
<b>Tars</b>				
Coke Oven—Tar .....	1.12+	3000- 8000	650- 1,400	—
Gas House—Tar .....	1.16-1.3	15,000-300,000	2,000-20,000	—
<b>Crude Oils</b>				
Texas, Oklahoma .....	.81-.916	100- 700	34-210	—
Wyoming, Montana .....	.86-.88	100-1100	46-320	—
California .....	.78-.92	100-4500	34-700	—
Pennsylvania .....	.8 -85	100- 200	38-86	—
<b>Glycol</b>				
Propylene .....	1.038	240.6	—	—
Triethylene .....	1.125	185.7	—	—
Diethylene .....	1.12	149.7	—	—
Ethylene .....	1.125	88.4	—	—
Glycerine (100%) .....	1.26	2900	813	—
Phenol (Carbolic Acid) .....	.95-1.00	60	—	—
Silicate of Soda .....	—	—	365-640	—
Sulfuric Acid (100%) .....	1.83	75	—	—