



Fuel Dilution Chart Visgag – Viscosity Comparator

Fuel Dilution Chart Centistokes - CST

TABLE FOR DETERMINING APPROXIMATE FUEL DILUTION OF DIESEL LUBRICATING OIL
KINEMATIC CENTISTOKES AT 40° C

FUEL OIL DILUTION - PER CENT	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	FUEL OIL DILUTION - PER CENT
0	60	80	100	120	140	160	180	200	220	240	260	280	300	320	340	0
1	58	77	96	114	133	152	170	189	207	226	244	263	281	300	318	1
2	56	74	91	109	126	144	161	179	196	213	230	247	264	281	298	2
3	54	71	87	104	120	137	153	169	185	201	216	232	248	264	279	3
4	52	68	83	99	114	130	145	160	174	189	204	218	233	247	262	4
5	50	65	80	94	109	123	137	151	165	178	192	205	219	232	245	5
6	48	62	76	90	104	117	130	143	156	168	181	193	206	218	230	6
7	46	60	73	86	99	111	123	135	147	159	171	182	194	205	216	7
8	45	58	70	82	94	106	117	128	139	150	161	172	182	193	203	8
9	43	55	67	78	90	100	111	121	132	142	152	162	172	181	191	9
10	42	53	64	75	85	95	105	115	125	134	143	153	162	170	179	10
11	40	51	61	72	81	91	100	109	118	127	135	144	152	161	169	11
12	39	49	59	68	78	86	95	104	112	120	128	136	144	151	159	12
13	37	47	56	65	74	82	90	98	106	114	121	128	135	142	149	13
14	36	45	54	63	71	78	86	93	101	108	114	121	128	134	141	14
15	35	44	52	60	67	75	82	89	95	102	108	115	121	127	133	15

NOTE: TABLE IS BASED ON A FUEL OIL VISCOSITY OF 3.0 AT 40°C

This tabulation may be used to determine the approximate percentage of fuel oil contained in a sample of used diesel engine lubricating oil if the kinematic centistoke viscosity at 40° C of the used oil and of the oil when new is known.

To use this chart, pick the column headed by the viscosity nearest that of the new oil. In that column, find the viscosity nearest that of the used oil sample, and in the same horizontal line, in the outside columns (headed "fuel oil dilution") is given the percentage of fuel dilution.

Viscosity of the used oil sample may be determined in the laboratory by a standard kinematic viscosimeter, or it may be obtained with sufficient accuracy by the use of a portable viscosity meter such as the Visgag. The viscosity of the oil when new may be obtained in the same way, or taken from the supplier's specification.

Example: a sample of used oil is found to have viscosity of 137 CST. at 40°C. The oil when new had a viscosity of 160 CST. at 40° C. in the column headed by 160 CST., a viscosity of 137 CST. Lies in the horizontal line corresponding to a fuel dilution of three percent.



Fuel Dilution Chart - SUS

TABLE FOR DETERMINING APPROXIMATE FUEL DILUTION OF DIESEL LUBRICATING OIL
SAYBOLT UNIVERSAL VISCOSITY AT 100° FAHRENHEIT

		SAYBOLT UNIVERSAL VISCOSITY AT 100° FAHRENHEIT																					
		300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1100	1200	1300	1400	1500		
FUEL OIL DILUTION - PERCENT	0	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1100	1200	1300	1400	1500	0	
	1	285	335	385	430	475	525	570	615	660	710	760	805	850	895	940	1025	1125	1225	1310	1400	1	
	2	270	320	365	405	450	495	540	580	625	670	715	755	800	840	880	965	1050	1135	1225	1300	2	
	3	260	305	350	390	430	470	510	550	590	640	670	710	750	790	830	900	980	1050	1140	1220	3	
	4	250	295	335	375	410	445	485	520	555	595	635	670	705	740	780	850	910	990	1060	1125	4	
	5	245	280	320	355	390	425	460	495	520	560	600	630	660	690	725	800	850	925	985	1025	5	
	6	235	270	305	335	370	400	435	465	490	525	560	590	625	655	685	745	800	865	920	980	6	
	7	225	260	295	320	350	380	410	435	465	495	530	560	590	615	640	700	750	810	860	900	7	
	8	215	250	280	305	330	360	390	415	440	470	500	525	555	575	600	660	700	760	805	845	8	
	9	210	240	265	290	315	340	370	390	415	440	470	495	520	540	565	620	655	705	750	790	9	
	10	200	230	255	275	300	325	350	370	395	415	440	465	490	510	525	575	610	650	700	725	10	
	11	195	220	245	265	285	305	330	350	375	395	420	440	460	475	495	540	570	615	655	680	11	
	12	185	210	235	250	270	290	315	335	355	375	395	415	435	450	460	510	535	575	610	630	12	
	13	180	205	225	240	260	280	300	320	340	360	375	390	410	420	430	470	500	530	565	595	13	
	14	170	195	215	230	245	265	285	305	320	340	355	370	390	395	405	440	470	495	525	555	14	
	15	165	185	205	220	230	250	270	290	305	320	335	350	365	370	380	410	440	465	490	510	15	

NOTE: TABLE IS BASED ON A FUEL OIL VISCOSITY OF 37 SEC. SAYBOLT UNIVERSAL AT 100°F.

This tabulation may be used to determine the approximate percentage of fuel oil contained in a sample of used diesel engine lubricating oil if the Saybolt second viscosity at 100 degrees F of the used oil and of the oil when new is known.

To use this chart, pick the column headed by the viscosity nearest that of the new oil. In that column, find the viscosity nearest that of the used oil sample, and in the same horizontal line, in the outside columns (headed "fuel oil dilution") is given the percentage of fuel dilution. Viscosity of the used oil sample may be determined in the laboratory by a standard kinematic viscosity meter, or it may be obtained with sufficient accuracy by the use of a portable viscosity meter such as the VISGAGE. The viscosity of the oil when new may be obtained in the same way, or taken from the supplier's specification.

Example: A sample of used oil is found to have viscosity of 755 sec. at 100°F. The oil when new had a viscosity of 850 sec. at 100°F. In the column headed by 850 sec., a viscosity of 755 sec. lies in the horizontal line corresponding to a fuel dilution of two percent.