

**KDS004 Kinematic Viscosity Conversion Tables**

Centistokes (cSt) (1 x 10 <sup>-2</sup> mm <sup>2</sup> /s)	Saybolt Seconds Universal (SSU)	Redwood 1	Engler (°E)
1	31	29	51
2	33	31	57
3	36	33	63
4	39	35	67
5	42	38	71
6	45	40	76
8	52	46	85
9	55	49	89
10	59	52	94
50	231	203	340
80	370	324	559
100	460	405	677
400	1850	1620	2700
800	3700	3240	5400
1000	4600	4100	6800
3000	13900	12200	20300
6000	27700	24300	40600
8000	37000	32400	53800
10000	46200	40500	67700

**Notes:**

- Viscosity changes with temperature therefore these values are approximate only.
- For values over 350 SSU, Centistokes = SSU x 0.21576
- Kinematic Viscosity (Centistokes) =  $\frac{\text{Absolute Viscosity (Centipoise)}}{\text{Relative Density}}$
- 1 cP = 1 x 10<sup>-2</sup> P = 1 x 10<sup>-3</sup> Pa s (where P stands for Poise)
- 1 cSt = 1 x 10<sup>-2</sup> St = 1 x 10<sup>-2</sup> mm<sup>2</sup>/s = 1 x 10<sup>-6</sup> m<sup>2</sup>/s
- Water has a kinematic viscosity of 1cSt (31 SSU) at normal ambient temperatures.