

Solvent Comparison – EkaSol 1™

	Unit	EkaSol 1	DMC	MEK	Acetone
Initial BP	°C	64.2	90	79.6	55
Vapour Pressure	<i>torr @ 20°C</i>	133	42	70.2	185
Evaporation rate	<i>n-BuAc = 1</i>	3.6	3.2	3.8	6.4
Viscosity	<i>cP</i>	0.86	0.63	0.43	0.36
Specific Gravity	<i>@ 20°C</i>	0.97	1.07	0.80	0.79
Flash Point	°C	5.0	17	-8.89	-20
KB value		79.1	-	-	-
MIR	(g O ₃ / organics)	0.47	0.06	1.49	0.43
VOC	<i>g/L @ 20°C</i>	2.66	0*	800	exempt
Global Warming Potential	<i>100 yr GWP</i>	0			
Surface Tension	<i>dynes/cm</i>	26.1	28.5	24.6	22.3
Heat of Combustion	<i>btu/lb</i>	9205.2	6820.5	13480.0	13218.9
	<i>kcal/kg</i>	5116.8	3791.5	7493.5	7348.4
	<i>kJ/mol</i>	1745.2	1429.0	2260.9	1785.7
δ (Hansen Solubility)	<i>(MPa)^{1/2}</i>	19.1	18.7	19.1	19.9
δH (Hydrogen-Bond)	<i>(MPa)^{1/2}</i>	8.5	9.7	5.1	7.0
δP (Polar)	<i>(MPa)^{1/2}</i>	6.4	3.9	9.0	10.4
δ (Dispersion)	<i>(MPa)^{1/2}</i>	15.7	15.5	16.0	15.5
Hildebrand	<i>(MPa)^{1/2}</i>	19.9	20.3	19.3	19.7
δ (Hansen Solubility)	<i>(cal/cm³)^{1/2}</i>	9.3	9.1	9.3	9.7
δH (Hydrogen-Bond)	<i>(cal/cm³)^{1/2}</i>	4.2	4.7	2.5	3.4
δP (Polar)	<i>(cal/cm³)^{1/2}</i>	3.1	1.9	4.4	5.1
δ (Dispersion)	<i>(cal/cm³)^{1/2}</i>	7.7	7.6	7.8	7.6
Hildebrand	<i>(cal/cm³)^{1/2}</i>	9.7	9.9	9.3	9.8

*Currently classified as VOC-exempt according to EPA CFR Title 40 §51.100 (As of July 6, 2015). In some jurisdictions this solvent may be classified as a VOC emitter.