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APPENDIX

Table A1 Molar ratio and attraction constant for solubility calculation

Group	Molar Volume Constant V* (cm^3 $mole^{-1}$)	Molar attraction Constant F* ($(cal.cm^3)^{0.5}$ $mole^{-1}$)
$-CH_3$	31.8	218
$-CH_2-$	16.5	132
>CH-	1.9	23
>C<	-14.8	-97
C_6H_3	41.4	562
C_6H_4	58.5	652
C_6H_5	75.5	735
$CH_2=$	29.7	203
-CH=	13.7	113
>C=	-2.4	18
-OCO-	19.6	298
-CO-	10.7	262
-O-	5.1	95
-Cl	23.9	264
-CN	23.6	426
$-NH_2$	18.6	275
>NH	8.5	143
>N-	-5.0	-3

Solubility parameter = Molar attraction constant / Molar volume constant

Table A2 Solubility parameter

	Solubility parameter
H_2O	18.63
CH_3CH_2OH	8.33
Poly (BA-hda)	11.11
Poly (BA-eda)	12.65

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