Supporting Information

Critical assessment of the Hildebrand and Hansen solubility parameters for polymers

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Table S1. Dataset for the assessment of the Hildebrand solubility model across different polymer classes[1–5]

Generic organic groups	Specific solvents
Hydrocarbons	Benzene, Toluene, p-Xylene
Saturated hydrocarbons	Hexane, Heptane, Pentane
Halogenated hydrocarbons	
a) Aliphatic	Ethyl chloride, 1,1-Dichloroethane, 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, Chloroform
b) Aromatic	Chlorobenzene, o-Dichlorobenzene, 1,2,4-Trichlorobenzene
Alcohols	
a) Lower alcohols	Methanol, Ethanol, t-Butanol
b) Higher alcohols	2-Methyl-1-pentanol, Diethylene glycol, 2-Ethyl-hexanol
Esters	
a) Lower esters	Ethyl acetate, Propyl acetate, t-butyl acetate
b) Higher esters	Hexyl acetate, Isoamyl acetate, Ethyl aceto acetate
Ketones	Acetone, Methyl isobutyl ketone, Methyl ethyl ketone
Nitro aliphatic compounds	Nitroethane, Nitromethane, 1-Nitropropane
Phenols	Phenol, m-cresol
Ethers	Tetrahydrofuran, 1,4-dioxane, Diethyl ether
Glycol ether solvents	Ethylene glycol monoethyl ether, Ethylene glycol monomethyl ether, Ethylene glycol monophenyl ether
Higher aliphatic ethers	Dipropylene glycol methyl ether, Ethylene glycol dimethyl ether
Diols	1,3-Butanediol, 1,3-Propanediol (Trimethyleneglycol), 1,9-Nonanediol
Acids	Acetic acid, Formic acid, Phosphoric acid
Glycols	Diethylene glycol, Dipropylene glycol, Ethylene glycol

References

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