Supplementary Materials

Solvent replacement strategies for processing pharmaceuticals and bio-related compounds - A Review

Jia Lin Lee[1], Gun Hean Chong*[1], Masaki Ota[2,3], Haixin Guo[4], Richard Lee Smith, Jr. *[2]

[1] Faculty of Food Science and Technology, Universiti Putra Malaysia, 43400, Serdang, Selangor, Malaysia

[2] Graduate School of Environmental Studies, Tohoku University, Aramaki Aza Aoba, 468-1, Aoba-ku, Sendai, 980-8572, Japan

[3] Graduate School of Engineering, Tohoku University, Aramaki Aza Aoba, 6-6-11-403, Aoba-ku, Sendai, 980-8579, Japan

[4]Agro-Environmental Protection Institute, Ministry of Agriculture and Rural Affairs, No. 31 Fukang Road, Nankai District, Tianjin 300191, China

* Corresponding authors
E-mail: gunhean@upm.edu.my, Tel: +6039679 8414;
richard.smith.c6@tohoku.ac.jp, Tel: +81-22-752-2278

Table S1. Water-soluble APIs solvated by monosolvents and their solvent polarity (E_T^N), Kamlet-Taft acidity (α), basicity (β) window, dipolarity/polarizability (π*) and corresponding literature. Solvents listed as hazardous in GSK solvent guide are highlighted in red.

No	APIs	Monosolvents	E_T^N	α	β	π*	Refs
1	2-AA	DMF DMSO ACN H2O	0.39-1	0-1.17	0.4-0.76	0.66-1.09	[1]
2	5-ASA	CCl4 THF EtOH MeOH H2O	0.06-1	0-1.17	0.1-0.75	0.21-1.09	[2-6]
3	AA	CHX DI Ace NMP DMAC DMF Sulfolane DMSO 2-BuOH IPA 1-BuOH 1-PrOH EtOH AcOH MeOH H2O	0.02-1	0-1.17	0-0.9	0-1.09	[7-9]
4	ABT	THF Ace ACN IPA 1-PrOH EtOH MeOH H2O	0.21-1	0-1.17	0.4-0.9	0.48-1.09	[11]
5	ABTA	DI Ace ACN IPA 1-PrOH EtOH MeOH H2O	0.21-1	0-1.17	0.4-0.9	0.48-1.09	[11]
6	AG	DI EF Ace ACN 2-BuOH sec-BuOH IPA 1-BuOH 1-PeOH 1-PrOH EtOH MeOH H2O	0.17-1	0-1.17	0.36-0.9	0.4-1.09	[16]
7	AS	IPA EtOH PPG MeOH H2O	0.55-1	0.62-1.17	0.47-0.84	0.48-1.09	[20]
8	BC	EtAc 2-BuOH IPA 1-BuOH 1-PrOH EtOH PPG MeOH H2O	0.23-1	0-1.17	0.45-0.9	0.4-1.09	[22-25]
9	BnA	Hep Oc Pen CHX Decalin m o p-Xyl Tol TCM CHN DCM Ace DMAC DeOH EtAc DEG PAC EG H2O	0.02-1	0-1.17	-0.05-0.82	-0.4-1.09	[34-36]
10	BSC	Tol DI THF EtAc DEGEE Ace NMP DMAC DMF ACN IPA 1-BuOH 1-PrOH EtOH MeOH PEG H2O	0.1-1	0-1.17	0.11-0.9	0.4-1.09	[38-39]
11	BT	DMSO IPA 1-BuOH 1-PeOH EtOH AcOH MeOH EG H2O	0.45-1	0-1.17	0-0.9	0.08-1.09	[42-43]
12	BZA	m-Xyl EtAc BuAc MeAc Ace ACN 2-BuOH IPA 1-BuOH 1-PrOH EtOH MeOH H2O 2-EH	0.13-1	0-1.17	0.12-0.9	0.4-1.09	[44]
13	CETI	Ace ACN IPA H2O	0.36-1	0-1.17	0.4-0.84	0.48-1.09	[53]
14	DG	Dc Oc CCl4 PrAc EtAc Ace NMP DMF ACN 2-BuOH NonOH 1-OcOH IPA MEA EtOH MeOH H2O	0.01-1	0-1.17	0-0.84	-0.06-1.09	[61-63]
15	EPC	Ace EtOH MeOH H2O	0.36-1	0-1.17	0.47-0.77	0.54-1.09	[67]
16	ES	Dc Oc p-Xyl DI THF EtAc TCM MTBE Ace DMF ACN 2-BuOH NonOH 1-OcOH IPA 1-BuOH 1-PeOH 1-PrOH MEA EtOH MeOH H2O	0.01-1	0-1.17	0-0.9	-0.06-1.09	[63, 68]
17	FCZ	Hex DI THF TCM 1-OcOH IPA EtOH MeOH H2O	0.01-1	0-1.17	0-0.84	-0.11-1.09	[77]
18	FRR	DI THF EtAC Ace ACN IPA 1-BuOH 1-PrOH EtOH MeOH H2O	0.17-1	0-1.17	0.37-0.9	0.4-1.09	[85]
19	HA	MeTHF EtAC DMK IPA 1-PrOH H2O CPME	0.18-1	0-1.17	0.45-0.9	0.45-1.09	[88-89]
20	HCA	MeTHF EtAC H2O CPME LIM	0.18-1	0-1.17	0.45-0.47	0.45-1.09	[88-89]
21	HCT	Dc DI MeAc NMP DMF ACN 2-BuOH NonOH 1-OcOH 1-PeOH EtOH H2O LIM	0.01-1	0-1.17	0-0.86	0.03-1.09	[90-91]
22	Hyap	THF EtAc Ace DMF ACN 1-BuOH EtOH MeOH H2O	0.21-1	0-1.17	0.4-0.84	0.4-1.09	[95]
23	Hyp	DI MeAC DCM MEK Ace ACN 2-BuOH sec-BuOH IPA 1-BuOH 1-PeOH 1-PrOH EtOH MeOH H2O	0.17-1	0-1.17	0.1-0.9	0.4-1.09	[96-97]
24	IBP	Hex EtAc Ace DMF DMSO ACN 2-BuOH MeBuOH 1-OcOH IPA 1-BuOH MePrOH 1-PeOH 1-PrOH EtOH PPG MeOH EG H2O	0.01-1	0-1.17	0-0.9	-0.11-1.09	[99-102]
25	ITR	EtAc DEGEE DMSO IPA 1-BuOH EtOH PPG EG PEG H2O	0.23-1	0-1.17	0.45-0.84	0.4-1.09	[110]
26	KTCZ	IPA EtOH PPG PEG H2O	0.55-1	0.62-1.17	0.47-0.84	0.48-1.09	[112-115]
27	L-Glu	DI Ace DMAC DMSO ACN NMA AM H2O	0.17-1	0-1.17	0.37-0.8	0.49-1.09	[120-122]
28	LMHCl	DMSO 2-BuOH MeBuOH IPA 1-BuOH HeOH 1-PeOH 1-PrOH EtOH MeOH H2O	0.45-1	0-1.17	0.47-0.9	0.4-1.09	[123-124]
29	MLN	IPA EtOH EG H2O	0.55-1	0.76-1.17	0.47-0.84	0.48-1.09	[129]
30	NCD	DMF IPA EtOH MeOH H2O	0.39-1	0-1.17	0.47-0.84	0.48-1.09	[136]
31	OSM	EtAC DEGEE DCM EtOH PPG PEG H2O	0.23-1	0-1.17	0.1-0.8	0.45-1.09	[139]
32	P	Hex CHX Ben DI THF PrAc EtAc TCM EF DMAC DMF NFM DMSO ACN 2-BuOH 1-OcOH IPA 1-BuOH 1-PeOH 1-PrOH EtOH MeOH H2O	0.01-1	0-1.17	0-0.9	-0.11-1.09	[140]

33	PCM	Hex CHX DI DEGEE TCM Ace NMP DMF NFM DMSO ACN 1-OcOH IPA 1-BuOH 1-PeOH 1-PrOH EtOH PPG MeOH PEG H2O	0.01-1	0-1.17	0-0.9	-0.11-1.09	[140]
34	PDM	THF EtAc Ace DMF DMSO IPA EtOH MeOH H2O	0.21-1	0-1.17	0.45-0.84	0.45-1.09	[148]
35	PSL	Dc DI THF PrAc EtAc Ace NMP DMF ACN 2-BuOH NonOH 1-OcOH IPA 1-BuOH 1-PeOH 1-PrOH EtOH MeOH H2O	0.01-1	0-1.17	0-0.9	0.03-1.09	[90-91]
36	PXM	Dc Hep CHX CCl4 DI TCM Ace DMF DMSO ACN 2-BuOH NonOH MeBuOH 1-OcOH IPA 1-BuOH MePrOH 1-PrOH EtOH PPG MeOH EG PEG H2O	0.01-1	0-1.17	0-0.9	-0.15-1.09	[151]
37	RA	EtAc MeAc EtOH MeOH H2O	0.23-1	0-1.17	0.42-0.75	0.45-1.09	[156-157]
38	RBM	EtAc Ace ACN IPA 1-BuOH 1-PrOH EtOH PPG MeOH PEG Gly H2O	0.23-1	0-1.21	0.4-0.9	0.4-1.09	[123, 159]
39	SAM	DBE DI THF PrAc EtAc BuAc MeAc Ace ACN 2-BuOH DeOH NonOH MeBuOH 1-OcOH IPA HepOH 1-BuOH HeOH 1-PeOH 1-PrOH EtOH AcOH MeOH H2O	0.12-1	0-1.17	0.37-0.9	0.24-1.09	[44]
40	SCA	DI EtAc EtOH MeOH PEG H2O	0.17-1	0-1.17	0.37-0.75	0.45-1.09	[164]
41	SMX	Hep CHX DI DMF DMSO ACN 1-OcOH IPA 1-BuOH 1-PrOH EtOH MeOH H2O	0.02-1	0-1.17	0-0.9	-0.15-1.09	[177]
42	TFB	IPA EtOH EG H2O	0.55-1	0.76-1.17	0.47-0.84	0.48-1.09	[186]
43	TMG	H2O	1-1	1.17-1.17	0.47-0.47	1.09-1.09	[187]
44	VE	Dc Hep EtAc Ace EtOH H2O	0.01-1	0-1.17	0-0.77	-0.15-1.09	[190-192]
45	WS·IPA	Ace IPA EtOH H2O	0.36-1	0-1.17	0.47-0.84	0.48-1.09	[193]

APIs abbreviation: **2-AA**: 2-aminobenzoic acid; **5-ASA**: 5-Aminosalicylic acid/Mesalazine; **AA**: Adipic acid; **ABT**: Abiraterone; **ABTA**: Abiraterone Acetate; **AG**: N-Acetylglycine; **AS**: Artesunate; **BC**: Baicalin; **BnA**: Benzoic acid; **BSC**: Bisacodyl; **BT**: betaine; **BZA**: Benzamide; **CETI**: Cetilistat; **DG**: Diosgenin; **EPC**: Epicatechin; **ES**: Estriol; **FCZ**: Fluconazole; **FRR**: 5-Fluorouracil; **HA**: p-hydroxybenzoic acid; **HCA**: Hydroxycinnamic acids; **HCT**: Hydrocortisone; **Hyap**: Hydroxyapatite; **Hyp**: L-Hydroxyproline; **IBP**: Ibuprofen; **ITR**: Itraconazole; **KTCZ**: Ketoconazole; L-**Glu**: L-glutamate; **LMHCl**: levamisole hydrochloride; **MLN**: Milrinone; **NCD**: Nicorandil; **OSM**: Osimertinib; **P**: Phenacetin; **PCM**: Paracetamol; **PDM**: Pomalidomide; **PSL**: Prednisolone; **PXM**: Piroxicam; **RA**: Rosmarinic acid; **RBM**: rebamipide; **SAM**: Salicylamide; **SCA**: Salicylic acid; **SMX**: sulfamethoxazole; **TFB**: Tirofiban; **TMG**: N-tetramethyl glycoluril; **VE**: Vitamin E; **WS·IPA**: warfarin sodium isopropanol.

Solvents abbreviation: **1-BuOH**: 1-butanol; **1-OcOH**: 1-octanol; **1-PeOH**: 1-pentanol; **1-PrOH**: 1-propanol; **2-BuOH**: 2-Butanol; **2-EH**: 2-Ethyl-1-hexanol; **Ace**: Acetone; **ACN**: Acetonitrile; **AcOH**: Acetic acid; **AM**: Acetamide; **Ben**: Benzene; **BuAc**: Buthyl acetate; **CCl_4**: carbon tetrachloride; **CHN**: Cyclohexanone; **CHX**: Cyclohexane; **CPME**: Cyclopentyl methyl ether; **CPSC**: Capsaicin; **DBE**: Dibutyl ether; **Dc**: Dodecane; **DCM**: Dichloromethane; **Decalin**: Decahydronaphthalene; **DEG**: Diethylene glycol; **DEGEE**: diethylene glycol monoethyl ether /transcutol; **DeOH**: Decanol; **DI**: 1,4-dioxane; **DMAC**: N,N-Dimethylacetamide; **DMF**: Dimethylformamide; **DMK**: Dimethyl ketone/2-propanone; **DMSO**: Dimethyl sulfoxide; **EF**: Ethylene formate; **EG**: Ethylene glycol; **EtAc**: Ethyl acetate; **EtOH**: Ethanol; **Gly**: Glycerin; **H2O**: Water; **HeOH**: Hexanol; **Hep**: Heptane; **HepOH**: Heptanol; **Hex**: Hexane; **IPA**: 2-propanol/Isopropanol; **LIM**: Limonene; **MEA**: 2-Aminoethanol; **MeAc**: Methyl acetate; **MeBuOH**: 1-Methyl Butanol; **MEK**: 2-butanone; **MeOH**: methanol; **MePrOH**: 2-Methyl propanol/isobutanol; **MPC**: Morpholine-4-carbaldehyde; **MeTHF**: 2-Methyltetrahydrofuran; **MTBE**: Methyl tert-butyl ether; **m-Xyl**: m-xylene; **NFM**: N-Formylmorpholine; **NMA**: N-methylacetamide; **NMP**: N-methyl-2-pyrrolidone; **NonOH**: Nonanol; **Oc**: Octane; **o-Xyl**: o-xylene; **PAC**: Propanoic acid; **PEG**: Polyethylene glycol; **Pen**: Pentane; **PPG**: Propylene glycol; **PrAc**: Propyl acetate; **p-Xyl**: p-xylene; **sec-BuOH**: Sec-Butanol; **sulfolane**: sulfolane; **TCM**: Trichloromethane/chloroform; **THF**: Tetrahydrofuran; **Tol**: Toluene.

Table S2. Water-insoluble APIs solvated by monosolvents and their solvent polarity (E_T^N), Kamlet-Taft acidity (α), basicity (β) window, dipolarity/polarizability (π*) and corresponding literature. Solvents listed as hazardous in GSK solvent guide are highlighted in red.

No	APIs	Monosolvents	E_T^N	α	β	π*	Refs
1	ACF	Tol EtAc DMK IPA EtOH MeOH	0.1-0.77	0-0.98	0.11-0.84	0.45-0.62	[12]
2	AE	IPA 1-BuOH EtOH MeOH	0.55-0.77	0.76-0.98	0.66-0.84	0.4-0.6	[13]
3	AETH	Hex 1-OcOH EtOH	0.01-0.66	0-0.86	0-0.81	-0.11-0.54	[15]
4	AZ	EtAc 2-BuOH IPA 1-BuOH 1-PrOH EtOH MeOH	0.23-0.77	0-0.98	0.45-0.9	0.4-0.6	[21]
5	BENO	Tol DI PrAc EtAc BuAc MeAc EF MEK Ace NMP DMAC DMF DMSO ACN 2-BuOH IPA 1-BuOH 1-PrOH EtOH MeOH IPAc C5Ac	0.1-0.77	0-0.98	0.1-0.9	0.4-1	[26-28]
6	BFL	C5Ac PrAc EtAc BuAc MeAc 1-OcOH IPA HepOH 1-BuOH HexOH 1-PeOH EtOH MeOH	0.21-0.77	0-0.98	0.4-0.86	0.4-0.6	[29]
7	BFNZ	1-OcOH EtOH	0.54-0.66	0.77-0.86	0.75-0.81	0.4-0.54	[31]
8	BP	EtAc Ace ACN 1-PrOH EtOH MeOH	0.23-0.77	0-0.98	0.4-0.9	0.45-0.92	[37]
9	C16:1	Dc Hex Hep TClE EtAc MEK Ace IPA EtOH MeOH	0.01-0.77	0-0.98	0-0.84	-0.15-0.92	[45-49]
10	CBZ	EtAc MeAc TCM EG CHA	0.23-0.8	0-0.9	0.1-0.52	0.45-0.92	[50]
11	CCM	Hex Hep p- yl THF EtAc Ace DMSO ACN IPA 1-BuOH EtOH MeOH	0.01-0.77	0-0.98	0-0.84	-0.15-1	[51]
12	CTZ	sulfolane ACN EtOH AcOH	0.42-0.76	0-1.12	0.39-0.75	0.54-0.9	[54]
13	DA	EtAc DEK Ace EtOH AcOH DEK	0.23-0.76	0-1.12	0.45-0.77	0.45-0.92	[55]
14	DFP	NMP IPA EtOH PPG PEG	0.36-0.8	0.08-0.9	0.48-0.84	0.48-0.92	[57-60]
15	DPD	CHX Tol DI EtAc CHN Ace NMP ACN 1-OcOH IPA 1-BuOH 1-PrOH EtOH MeOH	0.02-0.77	0-0.98	0-0.9	0-0.92	[64-65]
16	DPTS	2-BuOH IPA 1-BuOH 1-PrOH EtOH MeOH	0.51-0.77	0.69-0.98	0.66-0.9	0.4-0.6	[66]
17	ETD	Tol C5Ac BuAc MeAc DCM Ace 2-BuOH IPA 1-BuOH 1-PrOH IamAc IBuAc	0.1-0.62	0-0.84	0-0.9	0.08-0.92	[69-70]
18	EZA	DI PrAc EtAc BuAc MeAc EF MEK Ace DMF ACN IPA 1-BuOH 1-PeOH 1-PrOH EtOH MeOH	0.17-0.77	0-0.98	0.1-0.9	0.4-0.92	[44]
19	FBDZ	DI EtAc Ace ACN IPA 1-BuOH 1-PrOH EtOH MeOH	0.17-0.77	0-0.98	0.37-0.9	0.4-0.92	[73-74]
20	FC	Tol EtAc IPA EtOH MeOH	0.1-0.77	0-0.98	0.11-0.84	0.45-0.6	[75]
21	FF	Tol EtAc ACN IPA 1-PrOH EtOH MeOH	0.1-0.77	0-0.98	0.11-0.9	0.45-0.66	[79]
22	FFC	THF MeBuOH IPA 1-BuOH MePrOH 1-PrOH EtOH PAC 2-EH	0.21-0.75	0-1.12	0.45-0.9	0.4-0.58	[81-82]
23	GA	NMP DMAC DMF sulfolane DMSO	0.36-0.45	0-0.08	0.39-0.76	0.62-1	[7, 9, 10]
24	GCV	Tol EtAc Ace ACN IPA 1-BuOH 1-PrOH EtOH MeOH	0.1-0.77	0-0.98	0.11-0.9	0.4-0.92	[86]
25	GSS	Ace ACN MeOH	0.36-0.77	0-0.98	0.4-0.77	0.6-0.92	[87]
26	IBA	THF MeAc TCM CHN CPN EF MEK Ace ACN 2-BuOH IPA 1-BuOH 1-PrOH EtOH MeOH	0.21-0.77	0-0.98	0.1-0.9	0.4-0.92	[98]
27	Ibr	EtAc MTBE MEK Ace ACN IPA 1-BuOH	0.23-0.56	0-0.79	0.1-0.84	0.4-0.92	[103-104]
28	IMA	Tol THF EtAc MeAc Ace ACN 2-BuOH IPA 1-BuOH 1-PrOH EtOH MeOH	0.1-0.77	0-0.98	0.11-0.9	0.4-0.92	[105-106]
29	IMC	EtAc DCM Ace ACN EtOH MeOH	0.23-0.77	0-0.98	0.1-0.77	0.45-0.92	[107-109]

30	MBQ-167	EtAc ACN 2-BuOH IPA 1-BuOH 1-PrOH EtOH MeOH	0.23-0.77	0-0.98	0.4-0.9	0.4-0.66	[126]
31	MCHCl	EtAc ACN IPA 1-PrOH EtOH MeOH	0.23-0.77	0-0.98	0.4-0.9	0.45-0.66	[127]
32	MTT	EtAc IPA EtOH MeOH	0.23-0.77	0-0.98	0.45-0.84	0.45-0.6	[130]
33	NAP	TCM CHN 1-OcOH	0.26-0.54	0-0.77	0.1-0.81	0.4-0.68	[131]
34	NFA	Hex Hep CHX Ben DI EtAc TCM 1-OcOH EtOH	0.01-0.66	0-0.86	0-0.81	-0.15-0.58	[137-138]
35	PA	Hex Hep TClE Ace IPA 1-PrOH EtOH	0.01-0.66	0-0.86	0-0.9	-0.15-0.92	[141-143]
36	PHT	NMP EtOH BEG PPG MeOH Gly CD	0.36-0.82	0-1.21	0.45-0.8	0.49-0.9	[153-154]
37	PTBA	Hex Tol 1-OcOH IPA EtOH AcOH MeOH PTBT MTBB	0.01-0.77	0-1.12	0-0.84	-0.11-0.64	[149]
38	RP	Tol EtAc Ace IPA 1-BuOH 1-PrOH EtOH MeOH CUM	0.1-0.77	0-0.98	0.11-0.9	0.4-0.92	[76, 156]
39	SA	EtAc NMP DMAC DMF sulfolane DMSO ACN EtOH	0.23-0.66	0-0.86	0.39-0.76	0.45-1	[7]
40	SFD	TCM Ace IPA 1-PrOH EtOH MeOH	0.26-0.77	0-0.98	0.1-0.9	0.48-0.92	[167]
41	SFT	TCM EDC MEK Ace ACN IPA 1-BuOH 1-PrOH MeOH	0.26-0.77	0-0.98	0.1-0.9	0.4-0.92	[176]
42	SQ	Ace ACN	0.36-0.46	0-0.19	0.4-0.77	0.66-0.92	[180]
43	TAZ	Hex DI EtAc BuAc MeAc EF MEK DEF Ace NMP BL ACN 1-OcOH IPA 1-PrOH EtOH PPG MeOH	0.01-0.77	0-0.98	0-0.9	-0.11-0.92	[181-182]
44	TF	EtAc Ace IPA 1-PrOH EtOH MeOH	0.23-0.77	0-0.98	0.45-0.9	0.45-0.92	[185]
45	TMP	EtAc MeAc Ace ACN IPA 1-BuOH 1-PrOH EtOH MeOH	0.23-0.77	0-0.98	0.4-0.9	0.4-0.92	[188]
46	TZD	Hex 1-OcOH 1-PrOH EtOH MeOH	0.01-0.77	0-0.98	0-0.9	-0.11-0.6	[189]
47	Xarelto	TCM IPA 1-BuOH EtOH MeOH	0.26-0.77	0.2-0.98	0.1-0.84	0.4-0.6	[194]

APIs abbreviation: **ACF**: Aceclofenac; **AE**: Androstenedione; **AETH**: 6-(acetylamino)-N-(5-ethyl-1,3,4-thiadiazol-2-yl) hexanamide; **AZ**: Azoxystrobin; **BENO**: Benorilate; **BFL**: Benflumetol; **BFNZ**: Bifonazole; **BP**: Butyl Paraben; **C16:1**: Stearic acid; **CBZ**: Carbamazepine; **CCM**: Curcumin; **CTZ**: Cetirizine Hydrochloride; **DA**: Decanedioic acid; **DFP**: Deferiprone; **DPD**: Dipyridamole; **DPTS**: Dipyridamole p-toluene sulfonate; **ETD**: Etodolac; **EZA**: Ethenzamide; **FBDZ**: Fenbendazole; **FC**: Fenoxycarb; **FF**: Fenofibrate; **FFC**: Florfenicol; **GA**: Glutaric acid; **GCV**: Ganciclovir; **GSS**: Ginsenoside; **IBA**: Isobutyramide; **Ibr**: Ibrutinib; **IMA**: Imatinib mesylate; **IMC**: INDOMETHACIN; **MBQ-167**: 9-ethyl-3-(5-phenyl-1H-1,2,3-triazol-3-yl)-9H-carbazole ; **MCHCl**: Minocycline hydrochloride; **MTT**: Macitentan; **NAP**: Naproxen; **NFA**: Niflumic acid; **PA**: Palmitic acid; **PHT**: Phenytoin; **PTBA**: Para-tert-butylbenzoic acid; **RP**: Risperidone; **SA**: Succinic acid; **SFD**: Sulfadiazine; **SFT**: Sulfamethazine; **SQ**: Squalene; **TAZ**: 1,2,4-Triazole; **TF**: β-tegafur; **TMP**: Tetramethylpyrazine; **TZD**: Thiazolidine-2,4-dione ; **Xarelto**: Rivaroxaban.

Solvents abbreviation: **1-BuOH**: 1-butanol; **1-OcOH**: 1-octanol; **1-PeOH**: 1-pentanol; **1-PrOH**: 1-propanol; **2-BuOH**: 2-Butanol; **2-EH**: 2-Ethyl-1-hexanol; **Ace**: Acetone; **ACN**: Acetonitrile; **AcOH**: Acetic acid; **BEG**: 1,3-Butandiol/ butylene glycol; **Ben**: Benzene; **BL**: 1,4-Butyrolactone; **BuAc**: Buthyl acetae; **C5Ac**: Pentyl acetate; **CD**: β-Cyclodextrin; **CHA**: Cyclohexylamine; **CHeOH**: Cyclohexanol; **CHN**: Cyclohexanone; **CHX**: Cyclohexane; **CPN**: Cyclopentanone; **CUM**: Cumene; **Dc**: Dodecane; **DCM**: Dichloromethane; **Decalin**: Decahydronaphthalene; **DEF**: N,N-diethylformamide ; **DEK**: 3-Pentanone; **DI**: 1,4-dioxane; **DMAC**: N,N-Dimethylacetamide; **DMF**: Dimethylformamide; **DMK**: Dimethyl ketone/2-propanone; **DMSO**: Dimethyl sulfoxide; **EDC**: 1,2-Dichloroethane/ ethylene dichloride; **EF**: Ethylene formate; **EG**: Ethylene glycol; **EtAc**: Ethyl acetate; **EtOH**: Ethanol; **Gly**: Glycerin; **HeOH**: Hexanol; **Hep**: Heptane; **HepOH**: Heptanol; **Hex**: Hexane; **IAmAc**: Isoamyl acetate; **IBuAc**: Isobutyl acetate; **IPA**: 2-propanol/Isopropanol; **IPAc**: Isopropyl acetate; **MeAc**: Methyl acetate; **MeBuOH**: 1-Methyl Butanol; **MEK**: 2-butanone; **MeOH**: methanol; **MePrOH**: 2-Methyl propanol/isobutanol; **MTBB**: methyl-4-tert-butylbenzoate ; **MTBE**: Methyl tert-butyl ether; **NMP**: N-methyl-2-pyrrolidone; **PAC**: Propanoic acid; **PPG**: Propylene

glycol; **PrAc**: Propyl acetate; **PTBT**: Para-tert-butyltoluene; **p-Xyl**: p-xylene; **sulfolane**: sulfolane; **TClE**: Trichloroethylene; **TCM**: Trichloromethane/chloroform; **THF**: Tetrahydrofuran; **Tol**: Toluene.

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