

A machine-learning framework for interpretable prediction of cellulose degree of polymerization retention in green solvents

Chunjie Wei^a, Yuhan Liu^a, Hongyou Cui^{a,*}, Yujiao Xie^a, Feng Song^a, Yuan Zhang^a,

Hongzi Tan^a

^aSchool of Chemistry and Chemical Engineering, Shandong University of Technology,

Zibo 255000, China

*Corresponding author Email: cuihy@sdut.edu.cn

Raw data collected from the literature

Raw material	DP_initial	DP_final	CrI ₀ , %	Solvent	Temp, °C	Time, min	Cellulose content, wt%	DPR, %	DOI
Radiata Pine	1345.00	437.00	32.90	BTMAC+FA	150	120	5	32.49	10.1016/j.carbpol.2021.118321
Radiata Pine	1345.00	602.00	32.90	BTMAC+FA	140	120	5	44.76	10.1016/j.carbpol.2021.118321
Radiata Pine	1345.00	743.00	32.90	BTMAC+FA	130	120	5	55.24	10.1016/j.carbpol.2021.118321
Radiata Pine	1345.00	867.00	32.90	BTMAC+FA	120	120	5	64.46	10.1016/j.carbpol.2021.118321
Radiata Pine	1345.00	913.00	32.90	BTMAC+FA	110	120	5	67.88	10.1016/j.carbpol.2021.118321
MCC	152.00	134.00	42.64	choline hydroxide+urea	65	55	12	88.16	10.1016/j.ijbiomac.2025.141075
pulp board	760.00	721.00	55.56	choline hydroxide+urea	65		7.5	94.87	10.1016/j.ijbiomac.2025.141075
Cotton linter pulp	926.00	770.00		choline hydroxide+urea	70		9.63	83.15	10.1039/D1GC04130D
BNC (ramie fiber)	2010.00	1868.00	63.68	choline hydroxide+urea	65		3	92.94	10.1016/j.ijbiomac.2025.141075
Bleached softwood kraft pulp	526.00	451.00	72.10	TMAH·5H ₂ O+urea	25	60	4	85.74	10.1016/j.carbpol.2024.122260
Bleached softwood kraft pulp	526.00	468.00	72.10	TMAH·5H ₂ O+urea	10	60	4	88.97	10.1016/j.carbpol.2024.122260
Bleached softwood kraft pulp	526.00	493.00	72.10	TMAH·5H ₂ O+urea	25	60	4	93.73	10.1016/j.carbpol.2024.122260
Bleached softwood kraft pulp	526.00	509.00	72.10	TMAH·5H ₂ O+urea	25	60	4	96.77	10.1016/j.carbpol.2024.122260
Bleached softwood kraft pulp	526.00	304.00	72.10	TMAH·5H ₂ O+urea	50	60	4	57.79	10.1016/j.carbpol.2024.122260
MCC	202.00	43.00	84.00	ZnCl ₂ ·xH ₂ O (x≤3)+FA	90	10		21.29	10.1016/j.cej.2024.155751
MCC	202.00	46.00	84.00	ZnCl ₂ ·xH ₂ O (x≤3)+FA	90	10		22.77	10.1016/j.cej.2024.155751
MCC	202.00	58.00	84.00	ZnCl ₂ ·xH ₂ O (x≤3)+FA	90	10		28.71	10.1016/j.cej.2024.155751
MCC	183.00	118.00	62.12	ZnCl ₂ ·xH ₂ O (x≤3)+FA	25	90	8	64.48	10.1039/d2gc03372k
MCC	183.00	120.00	62.12	ZnCl ₂ ·xH ₂ O (x≤3)+FA	25	390	8	65.57	10.1039/d2gc03372k
MCC	183.00	122.00	62.12	ZnCl ₂ ·xH ₂ O (x≤3)+FA	25	900	8	66.67	10.1039/d2gc03372k
Poplar wood cellulose	717.00	434.00	62.41	ZnCl ₂ ·xH ₂ O (x≤3)+FA	25	120	8	60.53	10.1039/d2gc03372k
bleached softwood pulp	1539.00	985.00	53.58	ZnCl ₂ ·xH ₂ O (x≤3)+FA	25	120	8	64.00	10.1039/d2gc03372k
Cotton linters	2243.00	1369.00	60.72	ZnCl ₂ ·xH ₂ O (x≤3)+FA	25	120	8	61.03	10.1039/d2gc03372k

MCC	183.00	30.20	62.12	ZnCl ₂ ·xH ₂ O (x≤3)+FA	25	180	15	16.50	10.1016/j.carbpol.2021.118473
MCC	183.00	25.00	62.12	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	120	15.6	13.66	10.1016/j.carbpol.2021.118473
MCC	183.00	22.70	62.12	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	90	16	12.40	10.1016/j.carbpol.2021.118473
MCC	183.00	20.50	62.12	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	51	16.6	11.20	10.1016/j.carbpol.2021.118473
MCC	183.00	14.90	62.12	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	28	16.7	8.14	10.1016/j.carbpol.2021.118473
MCC	183.00	80.60	62.12	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	420	13.1	44.04	10.1016/j.carbpol.2021.118473
Fir cellulose	906.00	79.00	57.26	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	120	10	8.72	10.1016/j.carbpol.2023.121665
Bleached softwood pulp	1539.00	105.00	53.58	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	120	7	6.82	10.1016/j.carbpol.2023.121665
Birch cellulose	779.00	106.00	55.22	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	120	11	13.61	10.1016/j.carbpol.2023.121665
Bleached softwood pulp	1539.00	110.00	53.58	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	120	9.3	7.15	10.1016/j.carbpol.2023.121665
Cotton linters	2243.00	189.00	63.45	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	120	8.5	8.43	10.1016/j.carbpol.2023.121665
MCC	183.00	69.50	62.12	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	240	13.8	37.98	10.1016/j.carbpol.2021.118473
Poplar wood cellulose	717.00	55.69	62.41	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	150	8	7.77	10.1016/j.carbpol.2021.118473
MCC	183.00	59.19	62.12	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	120	15	32.34	10.1016/j.carbpol.2021.118473
MCC	183.00	62.60	62.12	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	138	14.5	34.21	10.1016/j.carbpol.2021.118473
bleached softwood pulp	1539.00	90.64	53.58	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	150	7	5.89	10.1016/j.carbpol.2021.118473
Cotton linters	2243.00	172.04	60.72	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	180	6.5	7.67	10.1016/j.carbpol.2021.118473
MCC	183.00	44.90	62.12	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	120	14.6	24.54	10.1016/j.carbpol.2021.118473
MCC	183.00	20.60	62.12	ZnCl ₂ ·xH ₂ O (x≤3) +PA	25	60	14.6	11.26	10.1016/j.carbpol.2021.118473
MCC	183.00	87.90	62.12	ZnCl ₂ ·xH ₂ O (x>3) +PA	25	780	8	48.03	10.1016/j.carbpol.2021.118473
MCC	183.00	78.30	62.12	ZnCl ₂ ·xH ₂ O (x>3) +PA	25	450	8.2	42.79	10.1016/j.carbpol.2021.118473
MCC	183.00	70.80	62.12	ZnCl ₂ ·xH ₂ O (x>3) +PA	25	360	8.8	38.69	10.1016/j.carbpol.2021.118473
MCC	183.00	60.30	62.12	ZnCl ₂ ·xH ₂ O (x>3) +PA	25	300	9.1	32.95	10.1016/j.carbpol.2021.118473
MCC	183.00	41.00	62.12	ZnCl ₂ ·xH ₂ O (x>3) +PA	25	210	9.2	22.40	10.1016/j.carbpol.2021.118473
MCC	183.00	90.30	62.12	ZnCl ₂ ·xH ₂ O (x>3) +PA	25	840	5.6	49.34	10.1016/j.carbpol.2021.118473
MCC	183.00	87.40	62.12	ZnCl ₂ ·xH ₂ O (x>3) +PA	25	600	5.8	47.76	10.1016/j.carbpol.2021.118473

MCC	183.00	86.30	62.12	ZnCl ₂ ·xH ₂ O (x>3) +PA	25	420	6.5	47.16	10.1016/j.carbpol.2021.118473
MCC	183.00	80.30	62.12	ZnCl ₂ ·xH ₂ O (x>3) +PA	25	330	6.5	43.88	10.1016/j.carbpol.2021.118473
MCC	183.00	71.50	62.12	ZnCl ₂ ·xH ₂ O (x>3) +PA	25	300	6.6	39.07	10.1016/j.carbpol.2021.118473
PH101	147.00	122.31		Choline chloride +Amine	110	240	2.91	83.21	10.1007/s10570-022-04771-8
PH101	147.00	122.68		Choline chloride +Amine	110	240	2.91	83.45	10.1007/s10570-022-04771-8
PH101	147.00	122.35		Choline chloride +Amine	110	240	2.91	83.23	10.1007/s10570-022-04771-8
PH101	147.00	130.30		Choline chloride +Amine	110	240	2.91	88.64	10.1007/s10570-022-04771-8
PH101	147.00	123.42		Choline chloride +Amine	110	240	2.91	83.96	10.1007/s10570-022-04771-8
Okara	346.00	307.00		Choline chloride +Amine	100	30	5	88.73	10.1007/s10570-019-02929-5
ramie fibers	1732.80	1664.40	78.84	Choline chloride +Amine	100	120	1	96.05	10.1007/s10570-019-02290-7
Cellulose powder	212.00	195.00	87.00	Choline chloride +Amine	60	60	2.2	91.98	10.1039/d3cp02335d
PH101	147.00	134.09		Choline chloride +Alcohol	110	240	2.91	91.21	10.1007/s10570-022-04771-8
PH101	147.00	135.78		Choline chloride +Alcohol	110	240	2.91	92.36	10.1007/s10570-022-04771-8
PH101	147.00	137.56		Choline chloride +Alcohol	110	240	2.91	93.58	10.1007/s10570-022-04771-8
PH101	147.00	138.52		Choline chloride +Alcohol	110	240	2.91	94.23	10.1007/s10570-022-04771-8
PH101	147.00	143.73		Choline chloride +Alcohol	110	240	2.91	97.77	10.1007/s10570-022-04771-8
Okara	346.00	314.00		Choline chloride +Alcohol	100	30	5	90.75	10.1007/s10570-019-02929-5
Bacterial cellulose	1800.00	740.00	95.00	Choline chloride +Alcohol	65	90	0.3	41.11	10.3390/polym14010078
birch pulp	3500.00	690.00	75.20	Choline chloride +Alcohol	150	60	3.85	19.71	10.1016/j.indcrop.2020.112677
birch pulp	3500.00	780.00	75.20	Choline chloride +Alcohol	150	60	3.85	22.29	10.1016/j.indcrop.2020.112677
Bacterial cellulose	1800.00	1410.00	95.00	Choline chloride +Alcohol	65	90	0.3	78.33	10.3390/polym14010078
Bacterial cellulose	730.00	370.00		Choline chloride +Acid	60	4320	2	50.68	10.3390/polym14235148
PH101	147.00	78.41		Choline chloride +Acid	110	240	2.91	53.34	10.1007/s10570-022-04771-8
PH101	147.00	86.06		Choline chloride +Acid	110	240	2.91	58.55	10.1007/s10570-022-04771-8
PH101	147.00	99.15		Choline chloride +Acid	110	240	2.91	67.45	10.1007/s10570-022-04771-8
PH101	147.00	99.61		Choline chloride +Acid	110	240	2.91	67.76	10.1007/s10570-022-04771-8
PH101	147.00	101.17		Choline chloride +Acid	110	240	2.91	68.82	10.1007/s10570-022-04771-8
PH101	147.00	106.67		Choline chloride +Acid	110	240	2.91	72.57	10.1007/s10570-022-04771-8

PH101	147.00	109.96		Choline chloride +Acid	110	240	2.91	74.80	10.1007/s10570-022-04771-8
Okara	346.00	329.00		Choline chloride +Acid	100	30	5	95.09	10.1007/s10570-019-02929-5
bleached poplar kraft pulp	1452.00	530.00	65.88	Choline chloride +Acid	80	60	5	36.50	10.1021/acsomega.9b00519
bleached poplar kraft pulp	1452.00	595.00	65.88	Choline chloride +Acid	80	60	5	40.98	10.1021/acsomega.9b00519
bleached poplar kraft pulp	1452.00	791.00	65.88	Choline chloride +Acid	80	60	5	54.48	10.1021/acsomega.9b00519
ramie fibers	1732.80	876.00	78.84	Choline chloride +Acid	100	420	1	50.55	10.1007/s10570-019-02290-7
cotton cellulose	1977.00	1102.00	90.08	Choline chloride +Acid	90		4.76	55.74	10.1016/j.ijbiomac.2024.133879
cotton cellulose	1977.00	1373.00	90.08	Choline chloride +Acid	90		4.76	69.45	10.1016/j.ijbiomac.2024.133879
Softwood	1800.00	80.00	80.00	Choline chloride +Acid	25	1440	5	4.44	10.1039/c8ta09959f
MCC	373.00	80.00	80.00	Choline chloride +Acid	25	1440	5	21.45	10.1039/c8ta09959f
MCC	228.00	224.00	48.00	[P ₄₄₄₄][OAc]	70	120	9.09	98.25	10.1021/acssuschemeng.8b06357
MCC	228.00	224.00	48.00	[P ₄₄₄₄][OAc]	70	480	9.09	98.25	10.1021/acssuschemeng.8b06357
MCC	228.00	226.00	48.00	[P ₄₄₄₄][OAc]	70	120	9.09	99.12	10.1021/acssuschemeng.8b06357
MCC	228.00	228.00	48.00	[P ₄₄₄₄][OAc]	70	240	9.09	100.00	10.1021/acssuschemeng.8b06357
MCC	228.00	228.00	48.00	[P ₄₄₄₄][OAc]	70	120	9.09	100.00	10.1021/acssuschemeng.8b06357
Avicel PH-101	221.00	202.00	51.00	[P ₄₄₄₄][OAc]	70	120	9.09	91.40	10.1021/acs.biomac.1c01683
Avicel PH-101	221.00	204.00	51.00	[P ₄₄₄₄][OAc]	70	120	9.09	92.31	10.1021/acs.biomac.1c01683
Avicel PH-101	221.00	207.00	51.00	[P ₄₄₄₄][OAc]	50	120	9.09	93.67	10.1021/acs.biomac.1c01683
Avicel PH-101	221.00	209.00	51.00	[P ₄₄₄₄][OAc]	70	120	9.09	94.57	10.1021/acs.biomac.1c01683
Avicel PH-101	221.00	210.00	51.00	[P ₄₄₄₄][OAc]	50	120	9.09	95.02	10.1021/acs.biomac.1c01683
Avicel PH-101	221.00	210.00	51.00	[P ₄₄₄₄][OAc]	50	120	9.09	95.02	10.1021/acs.biomac.1c01683
Avicel PH-101	221.00	211.00	51.00	[P ₄₄₄₄][OAc]	70	120	9.09	95.48	10.1021/acs.biomac.1c01683
Avicel PH-101	221.00	212.00	51.00	[P ₄₄₄₄][OAc]	70	120	9.09	95.93	10.1021/acs.biomac.1c01683
Avicel PH-101	221.00	213.00	51.00	[P ₄₄₄₄][OAc]	50	120	9.09	96.38	10.1021/acs.biomac.1c01683
MCC	228.00	219.00	48.00	[P ₄₄₄₄][OAc]	70	120	9.09	96.05	10.1021/acssuschemeng.8b06357
MCC	275.00	268.00		[A ₂ mim] [CH ₃ OCH ₂ COO]	30	60	5	97.45	10.1021/acs.macromol.8b00724
MCC	275.00	269.00		[A ₂ mim] [CH ₃ OCH ₂ COO]	30	240	5	97.82	10.1021/acs.macromol.8b00724
MCC	275.00	269.00		[A ₂ mim] [CH ₃ OCH ₂ COO]	30	720	5	97.82	10.1021/acs.macromol.8b00724

MCC	275.00	270.00		[A ₂ mim] [CH ₃ OCH ₂ COO]	30	420	5	98.18	10.1021/acs.macromol.8b00724
MCC	275.00	272.00		[A ₂ mim] [CH ₃ OCH ₂ COO]	50	60	5	98.91	10.1021/acs.macromol.8b00724
MCC	275.00	273.00		[A ₂ mim] [CH ₃ OCH ₂ COO]	40	60	5	99.27	10.1021/acs.macromol.8b00724
Wood pulp cellulose	900.00	0.00	68.00	[Amim] [Cl]	90	4320	4	0.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	0.00	68.00	[Amim] [Cl]	100	900	4	0.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	0.00	68.00	[Amim] [Cl]	110	480	4	0.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	0.00	68.00	[Amim] [Cl]	110	600	4	0.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	0.00	68.00	[Amim] [Cl]	110	720	4	0.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	0.00	68.00	[Amim] [Cl]	120	300	4	0.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	0.00	68.00	[Amim] [Cl]	120	360	4	0.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	0.00	68.00	[Amim] [Cl]	130	120	4	0.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	0.00	68.00	[Amim] [Cl]	130	180	4	0.00	10.1016/j.molliq.2020.113153
MCC	220.00	0.00	75.00	[Amim] [Cl]	90	4320	4	0.00	10.1016/j.molliq.2020.113153
MCC	220.00	0.00	75.00	[Amim] [Cl]	100	720	4	0.00	10.1016/j.molliq.2020.113153
MCC	220.00	0.00	75.00	[Amim] [Cl]	100	900	4	0.00	10.1016/j.molliq.2020.113153
MCC	220.00	0.00	75.00	[Amim] [Cl]	110	240	4	0.00	10.1016/j.molliq.2020.113153
MCC	220.00	0.00	75.00	[Amim] [Cl]	110	300	4	0.00	10.1016/j.molliq.2020.113153
MCC	220.00	0.00	75.00	[Amim] [Cl]	110	360	4	0.00	10.1016/j.molliq.2020.113153
MCC	220.00	0.00	75.00	[Amim] [Cl]	120	150	4	0.00	10.1016/j.molliq.2020.113153
MCC	220.00	0.00	75.00	[Amim] [Cl]	120	240	4	0.00	10.1016/j.molliq.2020.113153
MCC	220.00	0.00	75.00	[Amim] [Cl]	130	180	4	0.00	10.1016/j.molliq.2020.113153
MCC	220.00	2.00	75.00	[Amim] [Cl]	120	180	4	0.91	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	3.00	68.00	[Amim] [Cl]	100	720	4	0.33	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	4.00	68.00	[Amim] [Cl]	120	240	4	0.44	10.1016/j.molliq.2020.113153
MCC	220.00	4.00	75.00	[Amim] [Cl]	90	2880	4	1.82	10.1016/j.molliq.2020.113153
MCC	220.00	4.00	75.00	[Amim] [Cl]	90	3600	4	1.82	10.1016/j.molliq.2020.113153
MCC	220.00	4.00	75.00	[Amim] [Cl]	100	480	4	1.82	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	5.00	68.00	[Amim] [Cl]	110	360	4	0.56	10.1016/j.molliq.2020.113153

MCC	220.00	5.00	75.00	[Amim] [CI]	100	600	4	2.27	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	6.00	68.00	[Amim] [CI]	90	3600	4	0.67	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	6.00	68.00	[Amim] [CI]	120	180	4	0.67	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	6.00	68.00	[Amim] [CI]	130	150	4	0.67	10.1016/j.molliq.2020.113153
MCC	220.00	7.00	75.00	[Amim] [CI]	130	150	4	3.18	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	9.00	68.00	[Amim] [CI]	100	480	4	1.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	9.00	68.00	[Amim] [CI]	100	600	4	1.00	10.1016/j.molliq.2020.113153
MCC	220.00	10.00	75.00	[Amim] [CI]	110	150	4	4.55	10.1016/j.molliq.2020.113153
MCC	220.00	10.00	75.00	[Amim] [CI]	120	120	4	4.55	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	11.00	68.00	[Amim] [CI]	110	300	4	1.22	10.1016/j.molliq.2020.113153
MCC	220.00	12.00	75.00	[Amim] [CI]	110	120	4	5.45	10.1016/j.molliq.2020.113153
MCC	220.00	12.00	75.00	[Amim] [CI]	130	90	4	5.45	10.1016/j.molliq.2020.113153
MCC	220.00	12.00	75.00	[Amim] [CI]	130	120	4	5.45	10.1016/j.molliq.2020.113153
MCC	220.00	13.00	75.00	[Amim] [CI]	130	60	4	5.91	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	14.00	68.00	[Amim] [CI]	100	360	4	1.56	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	14.00	68.00	[Amim] [CI]	120	150	4	1.56	10.1016/j.molliq.2020.113153
MCC	220.00	14.00	75.00	[Amim] [CI]	100	360	4	6.36	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	15.00	68.00	[Amim] [CI]	130	90	4	1.67	10.1016/j.molliq.2020.113153
MCC	220.00	15.00	75.00	[Amim] [CI]	90	2160	4	6.82	10.1016/j.molliq.2020.113153
MCC	220.00	16.00	75.00	[Amim] [CI]	110	180	4	7.27	10.1016/j.molliq.2020.113153
MCC	220.00	17.00	75.00	[Amim] [CI]	110	90	4	7.73	10.1016/j.molliq.2020.113153
MCC	220.00	17.00	75.00	[Amim] [CI]	120	90	4	7.73	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	18.00	68.00	[Amim] [CI]	90	2880	4	2.00	10.1016/j.molliq.2020.113153
MCC	220.00	18.00	75.00	[Amim] [CI]	120	60	4	8.18	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	19.00	68.00	[Amim] [CI]	120	120	4	2.11	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	20.00	68.00	[Amim] [CI]	100	300	4	2.22	10.1016/j.molliq.2020.113153
MCC	220.00	21.00	75.00	[Amim] [CI]	100	300	4	9.55	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	26.00	68.00	[Amim] [CI]	110	240	4	2.89	10.1016/j.molliq.2020.113153

MCC	220.00	27.00	75.00	[Amim] [CI]	90	1440	4	12.27	10.1016/j.molliq.2020.113153
MCC	220.00	27.00	75.00	[Amim] [CI]	100	240	4	12.27	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	30.00	68.00	[Amim] [CI]	100	240	4	3.33	10.1016/j.molliq.2020.113153
MCC	220.00	30.00	75.00	[Amim] [CI]	100	180	4	13.64	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	32.00	68.00	[Amim] [CI]	90	2160	4	3.56	10.1016/j.molliq.2020.113153
MCC	220.00	33.00	75.00	[Amim] [CI]	90	900	4	15.00	10.1016/j.molliq.2020.113153
MCC	220.00	34.00	75.00	[Amim] [CI]	90	1080	4	15.45	10.1016/j.molliq.2020.113153
MCC	220.00	35.00	75.00	[Amim] [CI]	130	30	4	15.91	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	36.00	68.00	[Amim] [CI]	130	60	4	4.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	43.00	68.00	[Amim] [CI]	90	1440	4	4.78	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	46.00	68.00	[Amim] [CI]	120	90	4	5.11	10.1016/j.molliq.2020.113153
MCC	220.00	47.00	75.00	[Amim] [CI]	110	60	4	21.36	10.1016/j.molliq.2020.113153
MCC	220.00	49.00	75.00	[Amim] [CI]	90	720	4	22.27	10.1016/j.molliq.2020.113153
MCC	220.00	49.00	75.00	[Amim] [CI]	100	150	4	22.27	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	56.00	68.00	[Amim] [CI]	100	180	4	6.22	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	56.00	68.00	[Amim] [CI]	110	180	4	6.22	10.1016/j.molliq.2020.113153
MCC	220.00	61.00	75.00	[Amim] [CI]	120	30	4	27.73	10.1016/j.molliq.2020.113153
MCC	220.00	62.00	75.00	[Amim] [CI]	90	600	4	28.18	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	72.00	68.00	[Amim] [CI]	90	1080	4	8.00	10.1016/j.molliq.2020.113153
MCC	220.00	80.00	75.00	[Amim] [CI]	100	120	4	36.36	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	92.00	68.00	[Amim] [CI]	100	150	4	10.22	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	98.00	68.00	[Amim] [CI]	130	30	4	10.89	10.1016/j.molliq.2020.113153
MCC	220.00	103.00	75.00	[Amim] [CI]	90	480	4	46.82	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	113.00	68.00	[Amim] [CI]	90	900	4	12.56	10.1016/j.molliq.2020.113153
MCC	220.00	113.00	75.00	[Amim] [CI]	110	30	4	51.36	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	124.00	68.00	[Amim] [CI]	110	150	4	13.78	10.1016/j.molliq.2020.113153
MCC	220.00	135.00	75.00	[Amim] [CI]	100	90	4	61.36	10.1016/j.molliq.2020.113153
MCC	220.00	136.00	75.00	[Amim] [CI]	90	360	4	61.82	10.1016/j.molliq.2020.113153

MCC	220.00	145.00	75.00	[Amim] [CI]	90	300	4	65.91	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	154.00	68.00	[Amim] [CI]	100	120	4	17.11	10.1016/j.molliq.2020.113153
MCC	220.00	155.00	75.00	[Amim] [CI]	90	240	4	70.45	10.1016/j.molliq.2020.113153
MCC	220.00	156.00	75.00	[Amim] [CI]	100	60	4	70.91	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	157.00	68.00	[Amim] [CI]	120	60	4	17.44	10.1016/j.molliq.2020.113153
MCC	220.00	159.00	75.00	[Amim] [CI]	90	150	4	72.27	10.1016/j.molliq.2020.113153
MCC	220.00	159.00	75.00	[Amim] [CI]	90	180	4	72.27	10.1016/j.molliq.2020.113153
MCC	220.00	162.00	75.00	[Amim] [CI]	90	90	4	73.64	10.1016/j.molliq.2020.113153
MCC	220.00	163.00	75.00	[Amim] [CI]	90	120	4	74.09	10.1016/j.molliq.2020.113153
MCC	220.00	176.00	75.00	[Amim] [CI]	90	60	4	80.00	10.1016/j.molliq.2020.113153
MCC	220.00	177.00	75.00	[Amim] [CI]	90	30	4	80.45	10.1016/j.molliq.2020.113153
MCC	220.00	177.00	75.00	[Amim] [CI]	100	30	4	80.45	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	188.00	68.00	[Amim] [CI]	110	120	4	20.89	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	204.00	68.00	[Amim] [CI]	90	720	4	22.67	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	275.00	68.00	[Amim] [CI]	90	600	4	30.56	10.1016/j.molliq.2020.113153
Waste textiles	310.00	280.00		[Amim] [CI]	80	180	4	90.32	10.1016/j.jece.2021.106182
Waste textiles	310.00	287.00		[Amim] [CI]	80	180	4	92.58	10.1016/j.jece.2021.106182
Wood pulp cellulose	900.00	291.00	68.00	[Amim] [CI]	100	90	4	32.33	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	325.00	68.00	[Amim] [CI]	110	90	4	36.11	10.1016/j.molliq.2020.113153
Coniferous dissolving pulp	500.00	354.00	73.80	[Amim] [CI]	90	30	3	70.80	10.1016/j.carbpol.2018.09.060
Coniferous dissolving pulp	500.00	354.00	73.80	[Amim] [CI]	90	30	3	70.80	10.1016/j.carbpol.2018.09.060
Wood pulp cellulose	900.00	411.00	68.00	[Amim] [CI]	90	480	4	45.67	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	448.00	68.00	[Amim] [CI]	100	60	4	49.78	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	463.00	68.00	[Amim] [CI]	120	30	4	51.44	10.1016/j.molliq.2020.113153
Bleached softwood kraft pulp	620.00	539.00	65.00	[Amim] [CI]	80		4	86.94	10.1016/j.cej.2023.142718
Wood pulp cellulose	900.00	596.00	68.00	[Amim] [CI]	90	360	4	66.22	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	630.00	68.00	[Amim] [CI]	110	60	4	70.00	10.1016/j.molliq.2020.113153
cotton cellulose	796.00	697.00	77.80	[Amim] [CI]	80	52	2	87.56	10.1021/acssuschemeng.9b05159

Wood pulp cellulose	900.00	707.00	68.00	[Amim] [Cl]	90	300	4	78.56	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	746.00	68.00	[Amim] [Cl]	110	30	4	82.89	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	806.00	68.00	[Amim] [Cl]	90	240	4	89.56	10.1016/j.molliq.2020.113153
Waste poly-cotton fabrics	1087.00	822.00		[Amim] [Cl]	80	300	1.38	75.62	10.1016/j.molliq.2023.122757
Wood pulp cellulose	900.00	880.00	68.00	[Amim] [Cl]	90	180	4	97.78	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	883.00	68.00	[Amim] [Cl]	90	60	4	98.11	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	886.00	68.00	[Amim] [Cl]	90	90	4	98.44	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	890.00	68.00	[Amim] [Cl]	90	120	4	98.89	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	893.00	68.00	[Amim] [Cl]	100	30	4	99.22	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	894.00	68.00	[Amim] [Cl]	90	150	4	99.33	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	897.00	68.00	[Amim] [Cl]	90	30	4	99.67	10.1016/j.molliq.2020.113153
waste corrugated board	600.00	485.00	72.19	[Amim] [Cl]+Salt	90	240	4	80.83	10.1021/acsomega.0c02713
cotton cellulose	796.00	627.00	77.80	[Amim] [Cl]+Salt	60	300	2	78.77	10.1021/acssuschemeng.9b05159
cotton cellulose	796.00	634.00	77.80	[Amim] [Cl]+Salt	90	60	2	79.65	10.1021/acssuschemeng.9b05159
cotton cellulose	796.00	640.00	77.80	[Amim] [Cl]+Salt	80	60	2	80.40	10.1021/acssuschemeng.9b05159
cotton cellulose	796.00	653.00	77.80	[Amim] [Cl]+Salt	70	60	2	82.04	10.1021/acssuschemeng.9b05159
cotton cellulose	796.00	657.00	77.80	[Amim] [Cl]+Salt	60	180	2	82.54	10.1021/acssuschemeng.9b05159
cotton cellulose	796.00	674.00	77.80	[Amim] [Cl]+Salt	60	60	2	84.67	10.1021/acssuschemeng.9b05159
cotton cellulose	796.00	693.00	77.80	[Amim] [Cl]+Salt	80	19	2	87.06	10.1021/acssuschemeng.9b05159
cotton cellulose	796.00	705.00	77.80	[Amim] [Cl]+Salt	80	10	2	88.57	10.1021/acssuschemeng.9b05159
cotton cellulose	796.00	717.00	77.80	[Amim] [Cl]+Salt	80	5	2	90.08	10.1021/acssuschemeng.9b05159
Waste poly-cotton fabrics	1087.00	810.00		[Amim] [Cl]+Salt	80	300	1	74.52	10.1016/j.molliq.2023.122757
MCC	304.00	218.00	66.72	[Amim] [(CH ₃ O)PHO ₂]	80	120	5	71.71	10.1016/j.carbpol.2018.12.040
MCC	304.00	230.00	66.72	[Amim] [(CH ₃ O)PHO ₂]	80	120	5	75.66	10.1016/j.carbpol.2018.12.040
MCC	304.00	243.00	66.72	[Amim] [(CH ₃ O)PHO ₂]	80	120	5	79.93	10.1016/j.carbpol.2018.12.040
MCC	304.00	262.00	66.72	[Amim] [(CH ₃ O)PHO ₂]	80	120	5	86.18	10.1016/j.carbpol.2018.12.040
MCC	124.00	74.00	76.00	[Bmim] [Cl]	100		22.48	59.68	10.1016/j.carbpol.2017.09.025
MCC	150.00	125.00	67.80	[Bmim] [Cl]	110	45	4.76	83.33	10.1515/hf-2019-0100

MCC	150.00	127.00	67.80	[Bmim] [Cl]		110	45	4.76	84.67	10.1515/hf-2019-0100
MCC	150.00	130.00	67.80	[Bmim] [Cl]		110	45	4.76	86.67	10.1515/hf-2019-0100
MCC	150.00	134.00	67.80	[Bmim] [Cl]		110	45	4.76	89.33	10.1515/hf-2019-0100
oil palm empty fruit bunch	681.00	367.00	59.00	[Bmim] [Cl]		80	360	4	53.89	10.15376/biores.15.4.8268-8290
Coniferous dissolving pulp	500.00	400.00	73.80	[Bmim] [Cl]		90	30	3	80.00	10.1016/j.carbpol.2018.09.060
Coniferous dissolving pulp	500.00	400.00	73.80	[Bmim] [Cl]		90	30	3	80.00	10.1016/j.carbpol.2018.09.060
cotton linters pulp	454.00	442.00		[Bmim] [Cl]		115	60	10.5	97.36	10.1007/s10570-007-9160-x
cotton linters pulp	454.00	444.00		[Bmim] [Cl]		115	60	13.4	97.80	10.1007/s10570-007-9160-x
Eucalyptus	569.00	516.00		[Bmim] [Cl]		115	60	10.4	90.69	10.1007/s10570-007-9160-x
oil palm empty fruit bunch	681.00	530.00	59.00	[Bmim] [Cl]		80	360	6.5	77.83	10.15376/biores.15.4.8268-8290
Eucalyptus	569.00	533.00		[Bmim] [Cl]		115	60	11.5	93.67	10.1007/s10570-007-9160-x
oil palm empty fruit bunch	681.00	582.00	59.00	[Bmim] [Cl]		80	360	9	85.46	10.15376/biores.15.4.8268-8290
old corrugated container pulp	884.00	737.00	72.90	[Bmim] [Cl]		90	100	1.96	83.37	10.1016/j.jenvman.2020.110853
Bacterial cellulose	730.00	715.00		[Bmim] [Cl]		60	4320	2	97.95	10.3390/polym14235148
hardwood pulp	650.00	389.00	78.50	DBU/DBN+ Acid/Proline	Aspartic	90	25	2	59.85	10.1002/marc.202300175
hardwood pulp	650.00	414.00	78.50	DBU/DBN+ Acid/Proline	Aspartic	90	25	2	63.69	10.1002/marc.202300175
Bleached softwood kraft pulp	526.00	470.00	62.70	DBU/DBN+acid		80		4	89.35	10.1021/acs.macromol.0c00592
Bleached softwood kraft pulp	526.00	471.00	62.70	DBU/DBN+acid		80		4	89.54	10.1021/acs.macromol.0c00592
hardwood pulp	650.00	397.00	78.50	DBU/DBN+ Acid/Proline	Aspartic	90	25	2	61.08	10.1002/marc.202300175
hardwood pulp	650.00	416.00	78.50	DBU/DBN+ Acid/Proline	Aspartic	90	25	2	64.00	10.1002/marc.202300175
MCC	260.00	225.00	83.80	DBU/DBN+acid		110	270	8	86.54	10.1039/d4gc02083a
MCC	260.00	232.00	83.80	DBU/DBN+acid		110	180	6	89.23	10.1039/d4gc02083a
MCC	260.00	241.00	83.80	DBU/DBN+acid		110	90	4	92.69	10.1039/d4gc02083a
MCC	260.00	249.00	83.80	DBU/DBN+acid		110	45	2	95.77	10.1039/d4gc02083a
MCC	268.00	219.00	85.00	DBU/DBN+acid		75	60	5	81.72	10.1016/j.carbpol.2024.121836
MCC	268.00	221.00	85.00	DBU/DBN+acid		75	5	5	82.46	10.1016/j.carbpol.2024.121836

Dissolving wood pulp	526.00	408.00	58.60	DBU/DBN+acid	80	10	6	77.57	10.1016/j.cej.2024.148841
Dissolving wood pulp	526.00	476.00	58.60	DBU/DBN+acid	80	10	6	90.49	10.1016/j.cej.2024.148841
Bamboo pulp	753.00	495.00		DBU/DBN+acid	75		5	65.74	10.1016/j.carbpol.2024.121836
Hardwood pulp	1158.00	711.00		DBU/DBN+acid	75		5	61.40	10.1016/j.carbpol.2024.121836
Linter pulp	2505.00	1376.00		DBU/DBN+acid	75		5	54.93	10.1016/j.carbpol.2024.121836
Bleached softwood kraft pulp	526.00	486.00	62.70	DBU/DBN+acid	80		4	92.40	10.1021/acs.macromol.0c00592
Bleached softwood kraft pulp	526.00	483.00	62.70	DBU/DBN+acid	80		4	91.83	10.1021/acs.macromol.0c00592
Bleached softwood kraft pulp	526.00	495.00	62.70	DBU/DBN+acid	80		4	94.11	10.1021/acs.macromol.0c00592
Bleached softwood kraft pulp	526.00	503.00	62.70	DBU/DBN+acid	80		4	95.63	10.1021/acs.macromol.0c00592
Bleached softwood kraft pulp	526.00	497.00	62.70	DBU/DBN+acid	80		4	94.49	10.1021/acs.macromol.0c00592
bleached softwood kraft pulp	620.00	548.00	65.00	DBU/DBN+acid	80		4	88.39	10.1016/j.cej.2023.142718
MCC	124.00	77.00	76.00	[Emim] [Ac]	100		18.7	62.10	10.1016/j.carbpol.2017.09.025
MCC	124.00	105.00	76.00	[Emim] [Ac]	75		15.25	84.68	10.1016/j.carbpol.2017.09.025
MCC	124.00	114.00	76.00	[Emim] [Ac]	50		9.91	91.94	10.1016/j.carbpol.2017.09.025
MCC	334.00	221.00		[Emim] [Ac]	60	120	2.5	66.17	10.1016/j.eurpolymj.2020.109743
Wood pulp cellulose	300.00	273.00	83.60	[Emim] [Ac]	80		4	91.00	10.1007/s10570-023-05301-w
Wood pulp cellulose	300.00	278.00	83.60	[Emim] [Ac]	80		4	92.67	10.1007/s10570-023-05301-w
Wood pulp cellulose	300.00	280.00	83.60	[Emim] [Ac]	80		4	93.33	10.1007/s10570-023-05301-w
Coniferous dissolving pulp	500.00	451.00	73.80	[Emim] [Ac]	90	30	3	90.20	10.1016/j.carbpol.2018.09.060
Coniferous dissolving pulp	500.00	451.00	73.80	[Emim] [Ac]	90	30	3	90.20	10.1016/j.carbpol.2018.09.060
Cotton fibers	2989.00	2009.00		[Emim] [Ac]	60	120	2.5	67.21	10.1016/j.eurpolymj.2020.109743
MCC	124.00	74.00	76.00	[Emim] [Cl]	100		10.71	59.68	10.1016/j.carbpol.2017.09.025
Cotton wool	1268.00	449.00	71.40	[Emim] [Cl]	110		2.91	35.41	10.1007/s00396-024-05324-0
Cotton	1493.00	488.00	70.90	[Emim] [Cl]	110		2.91	32.69	10.1007/s00396-024-05324-0
Cotton	1353.00	553.00	78.00	[Emim] [Cl]	110		2.91	40.87	10.1007/s00396-024-05324-0
MCC	220.00	76.00	75.00	[Emim] [DEP]	130	4320	4	34.55	10.1016/j.molliq.2020.113153
MCC	220.00	92.00	75.00	[Emim] [DEP]	130	2880	4	41.82	10.1016/j.molliq.2020.113153
MCC	220.00	92.00	75.00	[Emim] [DEP]	130	3600	4	41.82	10.1016/j.molliq.2020.113153

MCC	220.00	108.00	75.00	[Emim] [DEP]	120	2880	4	49.09	10.1016/j.molliq.2020.113153
MCC	220.00	108.00	75.00	[Emim] [DEP]	120	3600	4	49.09	10.1016/j.molliq.2020.113153
MCC	220.00	108.00	75.00	[Emim] [DEP]	120	4320	4	49.09	10.1016/j.molliq.2020.113153
MCC	220.00	108.00	75.00	[Emim] [DEP]	130	1440	4	49.09	10.1016/j.molliq.2020.113153
MCC	220.00	108.00	75.00	[Emim] [DEP]	130	2160	4	49.09	10.1016/j.molliq.2020.113153
MCC	220.00	122.00	75.00	[Emim] [DEP]	120	900	4	55.45	10.1016/j.molliq.2020.113153
MCC	220.00	122.00	75.00	[Emim] [DEP]	120	1080	4	55.45	10.1016/j.molliq.2020.113153
MCC	220.00	122.00	75.00	[Emim] [DEP]	120	1440	4	55.45	10.1016/j.molliq.2020.113153
MCC	220.00	122.00	75.00	[Emim] [DEP]	120	2160	4	55.45	10.1016/j.molliq.2020.113153
MCC	220.00	137.00	75.00	[Emim] [DEP]	110	720	4	62.27	10.1016/j.molliq.2020.113153
MCC	220.00	137.00	75.00	[Emim] [DEP]	110	900	4	62.27	10.1016/j.molliq.2020.113153
MCC	220.00	137.00	75.00	[Emim] [DEP]	110	2160	4	62.27	10.1016/j.molliq.2020.113153
MCC	220.00	137.00	75.00	[Emim] [DEP]	110	2880	4	62.27	10.1016/j.molliq.2020.113153
MCC	220.00	137.00	75.00	[Emim] [DEP]	110	3600	4	62.27	10.1016/j.molliq.2020.113153
MCC	220.00	137.00	75.00	[Emim] [DEP]	110	4320	4	62.27	10.1016/j.molliq.2020.113153
MCC	220.00	137.00	75.00	[Emim] [DEP]	130	720	4	62.27	10.1016/j.molliq.2020.113153
MCC	220.00	137.00	75.00	[Emim] [DEP]	130	900	4	62.27	10.1016/j.molliq.2020.113153
MCC	220.00	137.00	75.00	[Emim] [DEP]	130	1080	4	62.27	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	100	540	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	100	720	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	100	1080	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	100	2880	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	110	180	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	110	240	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	110	300	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	110	360	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	110	540	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	110	1080	4	68.64	10.1016/j.molliq.2020.113153

MCC	220.00	151.00	75.00	[Emim] [DEP]	110	1440	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	120	180	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	120	540	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	120	720	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	130	60	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	130	120	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	130	240	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	130	300	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	130	360	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	151.00	75.00	[Emim] [DEP]	130	540	4	68.64	10.1016/j.molliq.2020.113153
MCC	220.00	166.00	75.00	[Emim] [DEP]	90	2880	4	75.45	10.1016/j.molliq.2020.113153
MCC	220.00	166.00	75.00	[Emim] [DEP]	90	3600	4	75.45	10.1016/j.molliq.2020.113153
MCC	220.00	167.00	75.00	[Emim] [DEP]	90	720	4	75.91	10.1016/j.molliq.2020.113153
MCC	220.00	167.00	75.00	[Emim] [DEP]	90	900	4	75.91	10.1016/j.molliq.2020.113153
MCC	220.00	167.00	75.00	[Emim] [DEP]	90	1080	4	75.91	10.1016/j.molliq.2020.113153
MCC	220.00	167.00	75.00	[Emim] [DEP]	90	1440	4	75.91	10.1016/j.molliq.2020.113153
MCC	220.00	167.00	75.00	[Emim] [DEP]	90	2160	4	75.91	10.1016/j.molliq.2020.113153
MCC	220.00	167.00	75.00	[Emim] [DEP]	90	4320	4	75.91	10.1016/j.molliq.2020.113153
MCC	220.00	167.00	75.00	[Emim] [DEP]	100	900	4	75.91	10.1016/j.molliq.2020.113153
MCC	220.00	167.00	75.00	[Emim] [DEP]	100	1440	4	75.91	10.1016/j.molliq.2020.113153
MCC	220.00	167.00	75.00	[Emim] [DEP]	100	2160	4	75.91	10.1016/j.molliq.2020.113153
MCC	220.00	167.00	75.00	[Emim] [DEP]	100	3600	4	75.91	10.1016/j.molliq.2020.113153
MCC	220.00	167.00	75.00	[Emim] [DEP]	100	4320	4	75.91	10.1016/j.molliq.2020.113153
MCC	220.00	167.00	75.00	[Emim] [DEP]	110	60	4	75.91	10.1016/j.molliq.2020.113153
MCC	220.00	167.00	75.00	[Emim] [DEP]	110	120	4	75.91	10.1016/j.molliq.2020.113153
MCC	220.00	167.00	75.00	[Emim] [DEP]	120	60	4	75.91	10.1016/j.molliq.2020.113153
MCC	220.00	167.00	75.00	[Emim] [DEP]	120	120	4	75.91	10.1016/j.molliq.2020.113153
MCC	220.00	167.00	75.00	[Emim] [DEP]	120	360	4	75.91	10.1016/j.molliq.2020.113153

MCC	220.00	167.00	75.00	[Emim] [DEP]	130	180	4	75.91	10.1016/j.molliq.2020.113153
MCC	220.00	181.00	75.00	[Emim] [DEP]	90	60	4	82.27	10.1016/j.molliq.2020.113153
MCC	220.00	181.00	75.00	[Emim] [DEP]	90	120	4	82.27	10.1016/j.molliq.2020.113153
MCC	220.00	181.00	75.00	[Emim] [DEP]	90	180	4	82.27	10.1016/j.molliq.2020.113153
MCC	220.00	181.00	75.00	[Emim] [DEP]	90	240	4	82.27	10.1016/j.molliq.2020.113153
MCC	220.00	181.00	75.00	[Emim] [DEP]	90	300	4	82.27	10.1016/j.molliq.2020.113153
MCC	220.00	181.00	75.00	[Emim] [DEP]	90	360	4	82.27	10.1016/j.molliq.2020.113153
MCC	220.00	181.00	75.00	[Emim] [DEP]	90	540	4	82.27	10.1016/j.molliq.2020.113153
MCC	220.00	181.00	75.00	[Emim] [DEP]	100	60	4	82.27	10.1016/j.molliq.2020.113153
MCC	220.00	181.00	75.00	[Emim] [DEP]	100	120	4	82.27	10.1016/j.molliq.2020.113153
MCC	220.00	181.00	75.00	[Emim] [DEP]	100	180	4	82.27	10.1016/j.molliq.2020.113153
MCC	220.00	181.00	75.00	[Emim] [DEP]	100	240	4	82.27	10.1016/j.molliq.2020.113153
MCC	220.00	181.00	75.00	[Emim] [DEP]	100	300	4	82.27	10.1016/j.molliq.2020.113153
MCC	220.00	181.00	75.00	[Emim] [DEP]	100	360	4	82.27	10.1016/j.molliq.2020.113153
MCC	220.00	181.00	75.00	[Emim] [DEP]	120	240	4	82.27	10.1016/j.molliq.2020.113153
MCC	220.00	181.00	75.00	[Emim] [DEP]	120	300	4	82.27	10.1016/j.molliq.2020.113153
Wood pulp cellulose	300.00	246.00	67.15	[Emim] [DEP]	100	4320	8	82.00	10.1016/j.molliq.2022.119071
Wood pulp cellulose	300.00	267.00	67.15	[Emim] [DEP]	100	720	8	89.00	10.1016/j.molliq.2022.119071
wood pulp cellulose	300.00	277.00	62.11	[Emim] [DEP]	100	4320	10	92.33	10.1016/j.ijbiomac.2023.128124
Wood pulp cellulose	300.00	282.00	67.15	[Emim] [DEP]	80	4320	8	94.00	10.1016/j.molliq.2022.119071
wood pulp cellulose	300.00	282.00	62.11	[Emim] [DEP]	90	2880	10	94.00	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	288.00	62.11	[Emim] [DEP]	90	1440	10	96.00	10.1016/j.ijbiomac.2023.128124
Wood pulp cellulose	300.00	294.00	67.15	[Emim] [DEP]	80	720	8	98.00	10.1016/j.molliq.2022.119071
wood pulp cellulose	300.00	294.10	62.11	[Emim] [DEP]	90	720	10	98.03	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	297.00	62.11	[Emim] [DEP]	100	180	10	99.00	10.1016/j.ijbiomac.2023.128124
Wood pulp cellulose	900.00	307.00	68.00	[Emim] [DEP]	130	4320	4	34.11	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	323.00	68.00	[Emim] [DEP]	120	4320	4	35.89	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	361.00	68.00	[Emim] [DEP]	130	3600	4	40.11	10.1016/j.molliq.2020.113153

Wood pulp cellulose	900.00	376.00	68.00	[Emim] [DEP]	130	2880	4	41.78	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	378.00	68.00	[Emim] [DEP]	120	3600	4	42.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	428.00	68.00	[Emim] [DEP]	130	2160	4	47.56	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	442.00	68.00	[Emim] [DEP]	120	2880	4	49.11	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	476.00	68.00	[Emim] [DEP]	110	4320	4	52.89	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	493.00	68.00	[Emim] [DEP]	120	2160	4	54.78	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	509.00	68.00	[Emim] [DEP]	130	1440	4	56.56	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	524.00	68.00	[Emim] [DEP]	130	1080	4	58.22	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	543.00	68.00	[Emim] [DEP]	110	3600	4	60.33	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	558.00	68.00	[Emim] [DEP]	130	900	4	62.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	559.00	68.00	[Emim] [DEP]	120	1440	4	62.11	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	574.00	68.00	[Emim] [DEP]	120	900	4	63.78	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	575.00	68.00	[Emim] [DEP]	130	720	4	63.89	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	588.00	68.00	[Emim] [DEP]	120	1080	4	65.33	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	589.00	68.00	[Emim] [DEP]	110	2880	4	65.44	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	603.00	68.00	[Emim] [DEP]	110	2160	4	67.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	603.00	68.00	[Emim] [DEP]	120	720	4	67.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	618.00	68.00	[Emim] [DEP]	130	540	4	68.67	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	635.00	68.00	[Emim] [DEP]	110	1440	4	70.56	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	649.00	68.00	[Emim] [DEP]	130	360	4	72.11	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	650.00	68.00	[Emim] [DEP]	130	300	4	72.22	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	653.00	68.00	[Emim] [DEP]	110	1080	4	72.56	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	664.00	68.00	[Emim] [DEP]	120	300	4	73.78	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	664.00	68.00	[Emim] [DEP]	120	360	4	73.78	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	665.00	68.00	[Emim] [DEP]	120	540	4	73.89	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	678.00	68.00	[Emim] [DEP]	120	240	4	75.33	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	679.00	68.00	[Emim] [DEP]	110	540	4	75.44	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	679.00	68.00	[Emim] [DEP]	110	720	4	75.44	10.1016/j.molliq.2020.113153

Wood pulp cellulose	900.00	679.00	68.00	[Emim] [DEP]	110	900	4	75.44	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	679.00	68.00	[Emim] [DEP]	130	240	4	75.44	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	696.00	68.00	[Emim] [DEP]	130	180	4	77.33	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	698.00	68.00	[Emim] [DEP]	130	120	4	77.56	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	728.00	68.00	[Emim] [DEP]	110	360	4	80.89	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	742.00	68.00	[Emim] [DEP]	120	180	4	82.44	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	757.00	68.00	[Emim] [DEP]	120	120	4	84.11	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	757.00	68.00	[Emim] [DEP]	130	60	4	84.11	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	771.00	68.00	[Emim] [DEP]	100	4320	4	85.67	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	772.00	68.00	[Emim] [DEP]	110	300	4	85.78	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	773.00	68.00	[Emim] [DEP]	120	60	4	85.89	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	786.00	68.00	[Emim] [DEP]	100	2880	4	87.33	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	786.00	68.00	[Emim] [DEP]	110	240	4	87.33	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	787.00	68.00	[Emim] [DEP]	100	2160	4	87.44	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	787.00	68.00	[Emim] [DEP]	100	3600	4	87.44	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	815.00	68.00	[Emim] [DEP]	100	1080	4	90.56	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	815.00	68.00	[Emim] [DEP]	100	1440	4	90.56	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	815.00	68.00	[Emim] [DEP]	110	60	4	90.56	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	815.00	68.00	[Emim] [DEP]	110	120	4	90.56	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	815.00	68.00	[Emim] [DEP]	110	180	4	90.56	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	829.00	68.00	[Emim] [DEP]	90	4320	4	92.11	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	830.00	68.00	[Emim] [DEP]	90	2880	4	92.22	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	845.00	68.00	[Emim] [DEP]	90	3600	4	93.89	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	858.00	68.00	[Emim] [DEP]	100	720	4	95.33	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	859.00	68.00	[Emim] [DEP]	90	1440	4	95.44	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	859.00	68.00	[Emim] [DEP]	100	540	4	95.44	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	859.00	68.00	[Emim] [DEP]	100	900	4	95.44	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	860.00	68.00	[Emim] [DEP]	90	2160	4	95.56	10.1016/j.molliq.2020.113153

Wood pulp cellulose	900.00	871.00	68.00	[Emim] [DEP]	100	300	4	96.78	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	872.00	68.00	[Emim] [DEP]	90	360	4	96.89	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	872.00	68.00	[Emim] [DEP]	100	360	4	96.89	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	873.00	68.00	[Emim] [DEP]	90	240	4	97.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	873.00	68.00	[Emim] [DEP]	90	540	4	97.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	873.00	68.00	[Emim] [DEP]	90	720	4	97.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	873.00	68.00	[Emim] [DEP]	90	1080	4	97.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	873.00	68.00	[Emim] [DEP]	100	60	4	97.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	873.00	68.00	[Emim] [DEP]	100	120	4	97.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	873.00	68.00	[Emim] [DEP]	100	180	4	97.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	873.00	68.00	[Emim] [DEP]	100	240	4	97.00	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	874.00	68.00	[Emim] [DEP]	90	900	4	97.11	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	887.00	68.00	[Emim] [DEP]	90	180	4	98.56	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	888.00	68.00	[Emim] [DEP]	90	60	4	98.67	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	888.00	68.00	[Emim] [DEP]	90	120	4	98.67	10.1016/j.molliq.2020.113153
Wood pulp cellulose	900.00	888.00	68.00	[Emim] [DEP]	90	300	4	98.67	10.1016/j.molliq.2020.113153
Waste poly-cotton fabrics	1087.00	1033.00		[Emim] [DEP]	80	300	1.38	95.03	10.1016/j.molliq.2023.122757
wood pulp cellulose	300.00	278.60	62.11	[Emim] [DEP]+metal ion	90	2880	10	92.87	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	257.00	62.11	[Emim] [DEP]+metal ion	100	4320	10	85.67	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	262.60	62.11	[Emim] [DEP]+metal ion	90	2880	10	87.53	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	266.00	62.11	[Emim] [DEP]+metal ion	100	4320	10	88.67	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	267.00	62.11	[Emim] [DEP]+metal ion	100	4320	10	89.00	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	270.40	62.11	[Emim] [DEP]+metal ion	90	2880	10	90.13	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	271.00	62.11	[Emim] [DEP]+metal ion	90	1440	10	90.33	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	271.00	62.11	[Emim] [DEP]+metal ion	100	4320	10	90.33	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	273.00	62.11	[Emim] [DEP]+metal ion	100	4320	10	91.00	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	273.30	62.11	[Emim] [DEP]+metal ion	90	2880	10	91.10	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	274.00	62.11	[Emim] [DEP]+metal ion	100	4320	10	91.33	10.1016/j.ijbiomac.2023.128124

wood pulp cellulose	300.00	276.10	62.11	[Emim] [DEP]+metal ion	90	2880	10	92.03	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	276.20	62.11	[Emim] [DEP]+metal ion	90	1440	10	92.07	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	276.50	62.11	[Emim] [DEP]+metal ion	90	2880	10	92.17	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	280.10	62.11	[Emim] [DEP]+metal ion	90	720	10	93.37	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	280.20	62.11	[Emim] [DEP]+metal ion	90	1440	10	93.40	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	281.50	62.11	[Emim] [DEP]+metal ion	90	1440	10	93.83	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	283.50	62.11	[Emim] [DEP]+metal ion	90	1440	10	94.50	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	283.80	62.11	[Emim] [DEP]+metal ion	90	1440	10	94.60	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	284.70	62.11	[Emim] [DEP]+metal ion	90	720	10	94.90	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	288.70	62.11	[Emim] [DEP]+metal ion	90	720	10	96.23	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	289.00	62.11	[Emim] [DEP]+metal ion	100	180	10	96.33	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	289.30	62.11	[Emim] [DEP]+metal ion	90	720	10	96.43	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	291.00	62.11	[Emim] [DEP]+metal ion	100	180	10	97.00	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	291.40	62.11	[Emim] [DEP]+metal ion	90	720	10	97.13	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	291.90	62.11	[Emim] [DEP]+metal ion	90	720	10	97.30	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	293.00	62.11	[Emim] [DEP]+metal ion	100	180	10	97.67	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	295.00	62.11	[Emim] [DEP]+metal ion	100	180	10	98.33	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	296.00	62.11	[Emim] [DEP]+metal ion	100	180	10	98.67	10.1016/j.ijbiomac.2023.128124
wood pulp cellulose	300.00	296.00	62.11	[Emim] [DEP]+metal ion	100	180	10	98.67	10.1016/j.ijbiomac.2023.128124
MCC	219.00	213.00	78.80	[Emim] [DEP]+H ₂ O	70	30	0.2	97.26	10.1016/j.molliq.2024.126315
MCC	219.00	214.00	78.80	[Emim] [DEP]+H ₂ O	70	30	0.2	97.72	10.1016/j.molliq.2024.126315
MCC	219.00	217.00	78.80	[Emim] [DEP]+H ₂ O	70	30	0.2	99.09	10.1016/j.molliq.2024.126315
MCC	219.00	218.00	78.80	[Emim] [DEP]+H ₂ O	70	30	0.2	99.54	10.1016/j.molliq.2024.126315
Waste poly-cotton fabrics	1087.00	1021.00		[Emim] [DEP]	80	300	0.7	93.93	10.1016/j.molliq.2023.122757
MCC	219.00	212.00	78.80	[Emim] [DEP]+H ₂ O	70	30	0.2	96.80	10.1016/j.molliq.2024.126315
MCC	250.00	220.00	93.20	[Emim] [Oph]	20	360	15	88.00	10.1016/j.carbpol.2019.115594
MCC	250.00	228.00	93.20	[Emim] [Oph]	20	4320	5	91.20	10.1016/j.carbpol.2019.115594
cotton fibers	805.00	695.00	92.36	[HOOC ₄ mim] [Cl]	60	300	19	86.34	10.1007/s10570-022-04974-z

cotton fibers	805.00	733.00	92.36	[HOOC ₄ mim] [Cl]	25	300	14.5	91.06	10.1007/s10570-022-04974-z
cotton fibers	805.00	737.00	92.36	[HOOC ₄ mim] [Cl]	25	180	5	91.55	10.1007/s10570-022-04974-z
MCC	137.00	94.00		TMG+Propionic acid	80	120	15	68.61	10.1007/s10570-020-03444-8
MCC	137.00	120.00		TMG+Propionic acid	80	120	15	87.59	10.1007/s10570-020-03444-8
MCC	137.00	124.00		TMG+Propionic acid	80	120	15	90.51	10.1007/s10570-020-03444-8
MCC	137.00	135.00		TMG+Propionic acid	80	120	15	98.54	10.1007/s10570-020-03444-8
Whatman CF-1	180.00	170.00		Ca(SCN) ₂ ·3H ₂ O	120	20	1	94.44	10.1007/s10570-014-0183-9
Dissolving sulfite pulp	770.00	490.00		Ca(SCN) ₂ ·3H ₂ O	120	40	1	63.64	10.1016/0021-9797(80)90311-2
Cotton linter cellulose	1620.00	500.00		Ca(SCN) ₂ ·3H ₂ O	140	40	1	30.86	10.1007/s10570-014-0183-9
WhatmanNo. 1 paper	2500.00	1068.00		Ca(SCN) ₂ ·6H ₂ O	120	60	1	42.72	10.1039/d1gc03918k
WhatmanNo. 1 paper	2500.00	1623.00		Ca(SCN) ₂ ·6H ₂ O	120	30	1	64.92	10.1039/c9gc02297j
WhatmanNo. 1 paper	2500.00	1900.00		Ca(SCN) ₂ ·6H ₂ O	100	60	1	76.00	10.1039/c9gc02297j
WhatmanNo. 1 paper	2500.00	2121.00		Ca(SCN) ₂ ·6H ₂ O	100	30	1	84.84	10.1007/s10570-014-0183-9
WhatmanNo. 1 paper	2500.00	1217.00		Ca(SCN) ₂ ·7H ₂ O	120	60	1	48.68	10.3390/polym11091494
WhatmanNo. 1 paper	2500.00	1323.00		Ca(SCN) ₂ ·7H ₂ O	120	30	1	52.92	10.1039/d1gc03918k
WhatmanNo. 1 paper	2500.00	1741.00		Ca(SCN) ₂ ·7H ₂ O	100	60	1	69.64	10.1039/d1gc03918k
WhatmanNo. 1 paper	2500.00	1852.00		Ca(SCN) ₂ ·7H ₂ O	100	30	1	74.08	10.1039/d1gc03918k
WhatmanNo. 1 paper	2500.00	1782.00		Ca(SCN) ₂ ·8H ₂ O	120	60	1	71.28	10.3390/polym11091494
WhatmanNo. 1 paper	2500.00	1855.00		Ca(SCN) ₂ ·8H ₂ O	120	30	1	74.20	10.3390/polym11091494
WhatmanNo. 1 paper	2500.00	1874.00		Ca(SCN) ₂ ·8H ₂ O	100	60	1	74.96	10.3390/polym11091494
WhatmanNo. 1 paper	2500.00	2207.00		Ca(SCN) ₂ ·8H ₂ O	100	30	1	88.28	10.3390/polym11091494
Cotton cellulose	248.60	114.60	84.20	FeCl ₃ ·6H ₂ O	60	180	2	46.10	10.3390/polym11091494
Cotton cellulose	248.60	143.70	84.20	FeCl ₃ ·6H ₂ O	60	120	2	57.80	10.3390/polym11091494
Cotton cellulose	248.60	153.40	84.20	FeCl ₃ ·6H ₂ O	60	60	2	61.71	10.3390/polym11091494
Cotton cellulose	248.60	170.20	84.20	FeCl ₃ ·6H ₂ O	60	40	2	68.46	10.3390/polym11091494
nonactivated cellulose	950.00	251.00		FeCl ₃ ·6H ₂ O	55			26.42	10.3390/polym11091494
Cotton cellulose	248.60	171.40	84.20	FeCl ₃ ·6H ₂ O	60	20	2	68.95	10.3390/polym11091494
MCC	160.00	146.00	87.00	LiBr·3H ₂ O	120	6	4	91.25	10.1016/j.carpta.2024.100522

MCC	160.00	122.00	87.00	LiBr·3H ₂ O	120	5	4	76.25	10.1016/j.carpta.2024.100522
MCC	160.00	109.00	87.00	LiBr·3H ₂ O	120	3	4	68.13	10.1016/j.carpta.2024.100522
MCC	160.00	152.00	87.00	LiBr·3H ₂ O	120	6	4	95.00	10.1016/j.carpta.2024.100522
MCC	160.00	156.00	87.00	LiBr·3H ₂ O	120	7	4	97.50	10.1016/j.carpta.2024.100522
MCC	160.00	160.00	87.00	LiBr·3H ₂ O	120	8	4	100.00	10.1016/j.carpta.2024.100522
MCC	160.00	141.00	87.00	LiBr·3H ₂ O	120	6	4	88.13	10.1016/j.carpta.2024.100522
MCC	138.00	132.00	79.10	LiBr·3H ₂ O	25	7200	5	95.65	10.1016/j.carbpol.2022.119180
MCC	138.00	135.00	79.10	LiBr·3H ₂ O	25	1440	5	97.83	10.1016/j.carbpol.2022.119180
MCC	138.00	137.00	79.10	LiBr·3H ₂ O	25	60	5	99.28	10.1016/j.carbpol.2022.119180
MCC	138.00	137.00	79.10	LiBr·3H ₂ O	25	180	5	99.28	10.1016/j.carbpol.2022.119180
MCC	138.00	137.00	79.10	LiBr·3H ₂ O	25	360	5	99.28	10.1016/j.carbpol.2022.119180
MCC	138.00	138.00	79.10	LiBr·3H ₂ O	25	5	5	100.00	10.1016/j.carbpol.2022.119180
MCC	138.00	138.00	79.10	LiBr·3H ₂ O	25	15	5	100.00	10.1016/j.carbpol.2022.119180
MCC	138.00	138.00	79.10	LiBr·3H ₂ O	25	30	5	100.00	10.1016/j.carbpol.2022.119180
MCC	406.00	260.00		LiBr·3H ₂ O	130	60	1.64	64.04	10.1016/j.indcrop.2022.114722
Filter paper pulp	890.00	420.00		LiBr·3H ₂ O	130	15	1	47.19	10.1016/j.indcrop.2022.114722
hardwood dissolving pulp	750.00	592.00	83.23	LiBr·3H ₂ O	25	60	9.09	78.93	10.1021/acssuschemeng.2c07746
Filter paper pulp	890.00	600.00		LiBr·3H ₂ O	120	20	1	67.42	10.1016/j.indcrop.2022.114722
hardwood dissolving pulp	750.00	605.00	83.23	LiBr·3H ₂ O	25	30	9.09	80.67	10.1021/acssuschemeng.2c07746
Filter paper pulp	890.00	655.00		LiBr·3H ₂ O	110	30	1	73.60	10.1016/j.indcrop.2022.114722
hardwood dissolving pulp	713.00	713.00	72.30	LiBr·3H ₂ O	25	5	5	100.00	10.1016/j.indcrop.2023.117455
hardwood dissolving pulp	713.00	713.00	72.30	LiBr·3H ₂ O	25	15	5	100.00	10.1016/j.indcrop.2023.117455
hardwood dissolving pulp	713.00	713.00	72.30	LiBr·3H ₂ O	25	30	5	100.00	10.1016/j.indcrop.2023.117455
hardwood dissolving pulp	713.00	713.00	72.30	LiBr·3H ₂ O	25	60	5	100.00	10.1016/j.indcrop.2023.117455
Eucalyptus globulus	1336.00	1120.00	74.90	LiBr·3H ₂ O	25	60	2.46	83.83	10.1016/j.carpta.2024.100556
Eucalyptus globulus	1336.00	1247.00	74.90	LiBr·3H ₂ O	25	15	2.46	93.34	10.1016/j.carpta.2024.100556
Filter paper pulp	890.00	300.00		LiBr·4H ₂ O	130	30	1	33.71	10.1007/s10570-014-0183-9
Filter paper pulp	890.00	375.00		LiBr·4H ₂ O	120	40	1	42.13	10.1007/s10570-014-0183-9

Filter paper pulp	890.00	420.00		LiBr·4H ₂ O	110	50	1	47.19	10.1007/s10570-014-0183-9
Filter paper pulp	890.00	335.00		LiBr·4H ₂ O	130	20	1	37.64	10.1007/s10570-014-0183-9
Filter paper pulp	890.00	430.00		LiBr·4H ₂ O	120	30	1	48.31	10.1007/s10570-014-0183-9
Filter paper pulp	890.00	440.00		LiBr·4H ₂ O	110	40	1	49.44	10.1007/s10570-014-0183-9
Filter paper pulp	890.00	245.00		LiBr·4H ₂ O	120	60	1	27.53	10.1016/j.fuproc.2021.106739
Filter paper pulp	890.00	250.00		LiBr·4H ₂ O	130	40	1	28.09	10.1016/j.fuproc.2021.106739
Cellulose (PH101)	165.26	96.40	85.00	ZnBr ₂ ·3H ₂ O	70	30	5	58.33	10.1007/s10570-023-05378-3
Cellulose (PH101)	165.26	104.60	85.00	ZnBr ₂ ·3H ₂ O	60	45	5	63.29	10.1007/s10570-023-05378-3
Cellulose (PH101)	165.26	112.50	85.00	ZnBr ₂ ·3H ₂ O	50	50	5	68.07	10.1007/s10570-023-05378-3
Cellulose (PH101)	165.26	132.50	85.00	ZnBr ₂ ·3H ₂ O	40	90	5	80.18	10.1007/s10570-023-05378-3
Cellulose (PH101)	165.26	94.30	85.00	ZnBr ₂ ·4H ₂ O	70	18	5	57.06	10.1007/s10570-023-05378-3
Cellulose (PH101)	165.26	106.20	85.00	ZnBr ₂ ·4H ₂ O	50	48	5	64.26	10.1007/s10570-023-05378-3
Cellulose (PH101)	165.26	112.40	85.00	ZnBr ₂ ·4H ₂ O	60	22	5	68.01	10.1007/s10570-023-05378-3
Cellulose (PH101)	165.26	130.40	85.00	ZnBr ₂ ·4H ₂ O	40	80	5	78.91	10.1007/s10570-023-05378-3
Cellulose (PH101)	165.26	90.30	85.00	ZnBr ₂ ·4H ₂ O	70	15	5	54.64	10.1007/s10570-023-05378-3
Cellulose (PH101)	165.26	92.30	85.00	ZnBr ₂ ·4H ₂ O	60	23	5	55.85	10.1007/s10570-023-05378-3
Cellulose (PH101)	165.26	101.40	85.00	ZnBr ₂ ·4H ₂ O	50	40	5	61.36	10.1007/s10570-023-05378-3
Cellulose (PH101)	165.26	129.20	85.00	ZnBr ₂ ·4H ₂ O	40	70	5	78.18	10.1007/s10570-023-05378-3
Cotton cellulose	248.60	215.60	84.20	ZnBr ₂ ·4H ₂ O	50	180	2	86.73	10.1016/j.indcrop.2022.114722
Cotton cellulose	248.60	216.60	84.20	ZnBr ₂ ·4H ₂ O	50	120	2	87.13	10.1016/j.indcrop.2022.114722
Cotton cellulose	248.60	221.00	84.20	ZnBr ₂ ·4H ₂ O	50	60	2	88.90	10.1016/j.indcrop.2022.114722
Cotton cellulose	248.60	221.30	84.20	ZnBr ₂ ·4H ₂ O	50	40	2	89.02	10.1016/j.indcrop.2022.114722
Cotton cellulose	248.60	225.30	84.20	ZnBr ₂ ·4H ₂ O	50	20	2	90.63	10.1016/j.indcrop.2022.114722
Cellulose (PH101)	165.26	92.40	85.00	ZnBr ₂ ·5H ₂ O	70	9	5	55.91	10.1007/s10570-023-05378-3
Cellulose (PH101)	165.26	95.60	85.00	ZnBr ₂ ·5H ₂ O	60	11	5	57.85	10.1007/s10570-023-05378-3
Cellulose (PH101)	165.26	105.10	85.00	ZnBr ₂ ·5H ₂ O	50	28	5	63.60	10.1007/s10570-023-05378-3
Cellulose (PH101)	165.26	123.20	85.00	ZnBr ₂ ·5H ₂ O	40	65	5	74.55	10.1007/s10570-023-05378-3
Cellulose (PH101)	165.26	91.20	85.00	ZnBr ₂ ·5H ₂ O	70	160	5	55.19	10.1007/s10570-023-05378-3

Cellulose (PH101)	165.26	102.30	85.00	ZnBr ₂ ·5H ₂ O	60	200	5	61.90	10.1007/s10570-023-05378-3
Cellulose (PH101)	165.26	103.40	85.00	ZnBr ₂ ·5H ₂ O	50	250	5	62.57	10.1007/s10570-023-05378-3
Cellulose (PH101)	165.26	143.20	85.00	ZnBr ₂ ·5H ₂ O	40	300	5	86.65	10.1007/s10570-023-05378-3
Bacterial cellulose	4135.00	855.00	73.71	ZnCl ₂ ·3H ₂ O	95	60	3	20.68	10.1016/j.carbpol.2011.04.042
Bacterial cellulose	4135.00	1295.00	73.71	ZnCl ₂ ·3H ₂ O	90	75	3	31.32	10.1016/j.carbpol.2011.04.042
Bacterial cellulose	4135.00	1585.00	73.71	ZnCl ₂ ·3H ₂ O	75	210	3	38.33	10.1016/j.carbpol.2011.04.042
Bacterial cellulose	4135.00	1638.00	73.71	ZnCl ₂ ·3H ₂ O	50	360	3	39.61	10.1016/j.carbpol.2011.04.042
Bacterial cellulose	4135.00	1872.00	73.71	ZnCl ₂ ·3H ₂ O	85	105	3	45.27	10.1016/j.carbpol.2011.04.042
Bacterial cellulose	4135.00	2060.00	73.71	ZnCl ₂ ·3H ₂ O	80	135	3	49.82	10.1016/j.carbpol.2011.04.042
Bacterial cellulose	4135.00	2204.00	73.71	ZnCl ₂ ·3H ₂ O	40	450	3	53.30	10.1016/j.carbpol.2011.04.042
Bacterial cellulose	4135.00	3196.00	73.71	ZnCl ₂ ·3H ₂ O	30	600	3	77.29	10.1016/j.carbpol.2011.04.042
Hardwood dissolving pulp	500.00	398.00	84.00	ZnCl ₂ ·4H ₂ O	25	60	1	79.60	10.1016/j.ijbiomac.2024.132912
MCC	180.00	53.00		ZnCl ₂ ·4H ₂ O	80	15	1	29.44	10.1039/d1gc03918k
Bleached wood pulp	706.00	205.00		ZnCl ₂ ·4H ₂ O	80	120	1	29.04	10.1039/d1gc03918k
Hardwood dissolving pulp	500.00	270.00	84.00	ZnCl ₂ ·4H ₂ O	80	60	1	54.00	10.1016/j.ijbiomac.2024.132912
Viscose waste	685.00	299.00	72.51	ZnCl ₂ ·4H ₂ O	60		1.42	43.65	10.1016/j.jclepro.2024.142107
cotton liner pulp	2016.00	600.00		ZnCl ₂ ·4H ₂ O	80	120	1	29.76	10.1039/d1gc03918k
Degreased cotton	4080.00	1220.00		ZnCl ₂ ·4H ₂ O	80	120	1	29.90	10.1039/d1gc03918k

Data related to the calculation of cation descriptors

Cation	SMILES	ESPmax	nHBA	nHBD	nRot	BalabanJ	TPSA	MolLogP	PSA	LUMO	μ	Polar	Vdw	Sphericity
Benzyltrimethylammonium	<chem>C[N+](C)(C)CC1=CC=CC=C1</chem>	5.04	0	0	5	2.24	0.00	1.89	204.94	-0.17	6.01	116.93	217.61	0.86
Choline	<chem>C[N+](C)(C)CCO</chem>	5.32	1	1	6	3.15	20.23	-0.32	157.79	-0.15	3.66	67.37	158.85	0.89
Tetramethyl-ammonium	<chem>C[N+](C)(C)C</chem>	5.41	0	0	4	3.02	0.00	0.32	130.41	-0.16	0.00	51.50	124.60	0.92
Hydrated Zn ion	<chem>[Zn+2](->O)</chem>	17.61	1	1	0	1.00	21.40	-0.18	57.42	-0.67	0.59	11.59	38.33	0.96
Hydrated Zn ion	<chem>[Zn+2](->O)(->O)</chem>	13.56	2	2	0	1.63	42.80	-0.36	85.01	-0.52	0.00	19.79	61.43	0.89
Betaine	<chem>C[N+](C)(C)CC(=O)O</chem>	6.35	2	1	5	3.39	37.30	-0.22	158.45	-0.18	6.75	68.56	158.55	0.89

Guanidine	[NH2+]=C(N)N	6.64	0	3	0	2.32	77.63	-2.98	97.38	-0.19	0.00	32.96	80.76	0.92
Benzyltriethylammonium	CC[N+](CC)(CC)CC1=CC=CC=C1	4.67	0	0	8	2.44	0.00	3.06	246.76	-0.16	4.18	150.71	283.78	0.85
Tetrabutylphosphonium	CCCC[P+](CCCC)(CCCC)CCCC	4.66	0	0	16	4.39	0.00	6.20	377.42	-0.12	1.17	211.08	420.81	0.72
1,3-diallylimidazolium cation	C=CC[n+]1ccn(CC=C)c1	5.11	1	0	4	2.12	8.81	1.15	213.26	-0.19	0.95	111.90	216.23	0.81
1-allyl-3-methylimidazolium	C=CC[n+]1ccn(C)c1	5.23	1	0	3	2.14	8.81	0.50	181.51	-0.19	3.11	89.40	174.28	0.83
1-butyl-3-methylimidazolium	CCCC[n+]1ccn(C)c1	5.20	1	0	5	2.06	8.81	1.11	199.88	-0.19	3.64	99.02	205.79	0.84
1,5-Diazabicyclo[4.3.0]non-5-ene	C1CC2=NCCC[N+]2C1	5.60	2	0	0	1.97	18.26	0.72	172.91	-0.18	1.15	85.42	171.53	0.86
1,8-Diazabicyclo[5.4.0]undec-7-ene	C1CCC2=NCCC[N+]2CC1	5.50	2	0	0	1.93	18.26	1.50	200.50	-0.17	2.27	107.76	215.20	0.86
1-ethyl-3-methylimidazolium	CC[n+]1ccn(C)c1	5.26	1	0	3	2.22	8.81	0.33	167.84	-0.19	1.65	76.84	160.15	0.84
1,1,3,3-tetramethylguanidine	C[N+](C)=C(N)N(C)C	5.65	0	1	4	3.46	32.27	-0.87	172.46	-0.17	1.40	81.41	168.41	0.86
1-(4-carboxybutyl)-3-methylimidazolium	O=C(O)CCC[n+]1ccn(C)c1	5.42	3	1	5	2.00	46.11	0.18	206.33	-0.18	3.76	103.27	216.64	0.84
Hydrated Ca ion	[Ca+2](->O)(->O)(->O)	14.46	3	3	0	2.32	64.20	-0.91	125.87	-0.38	0.00	27.92	95.72	0.79
Hydrated Ca ion	[Ca+2](->O)(->O)(->O)(->O)(->O)(->O)	8.77	6	6	0	4.43	128.40	-1.44	193.12	-0.30	0.00	52.50	171.93	0.78
Hydrated Ca ion	[Ca+2](->O)(->O)(->O)(->O)(->O)(->O)(->O)	9.18	7	7	0	5.14	149.80	-1.62	203.40	-0.29	0.25	61.10	195.57	0.80
Hydrated Ca ion	[Ca+2](->O)(->O)(->O)(->O)(->O)(->O)(->O)(->O)	8.28	8	8	0	5.84	171.20	-1.80	213.87	-0.28	0.00	69.84	221.71	0.82
Hydrated Fe ion	[Fe+3](->O)(->O)(->O)(->O)(->O)(->O)(->O)	13.64	6	6	0	4.43	128.40	-1.06	158.63	-0.59	0.00	63.92	146.03	0.85
Hydrated Li ion	[Li+](->O)(->O)(->O)	8.63	3	3	0	2.32	64.20	-3.53	115.42	-0.18	0.00	23.66	84.47	0.81
Hydrated Li ion	[Li+](->O)(->O)(->O)(->O)	5.61	4	4	0	3.02	85.60	-3.70	138.81	-0.17	0.00	32.36	112.40	0.81
Hydrated Zn ion	[Zn+2](->O)(->O)(->O)	12.12	3	3	0	2.32	64.20	-0.53	111.06	-0.44	0.00	27.44	86.47	0.85
Hydrated Zn ion	[Zn+2](->O)(->O)(->O)(->O)	10.45	4	4	0	3.02	85.60	-0.71	134.55	-0.39	0.00	35.26	108.75	0.82
Hydrated Zn ion	[Zn+2](->O)(->O)(->O)(->O)(->O)	9.69	5	5	0	3.73	107.00	-0.89	151.62	-0.35	0.46	43.39	131.30	0.83

Data related to the calculation of anion descriptors

Anion	SMILES	nHBA	TPSA	ESPmin	NSA	HOMO	Polar	Vdw	μ
Cl ⁻	[Cl-]	0	0	-5.98	68.89	-0.03	15.82	53.80	0.00
OH ⁻	[OH-]	1	30	-7.63	56.19	0.05	12.00	39.40	1.77
Ac ⁻	CC(=O)[O-]	2	40.13	-6.71	102.05	-0.04	43.01	87.07	3.85
CH ₃ OCH ₂ COO ⁻	COCC(=O)[O-]	3	49.36	-6.52	134.65	-0.05	59.47	123.14	8.17
CH ₃ O-PHO ₂ ⁻	[H]P(=O)([O-])OC	3	49.36	-5.93	125.22	-0.08	53.16	114.02	5.04
Asp (Aspartic Acid)	C([C@@H](C(=O)[O-])N)C(=O)[O-]	5	106.28	-8.81	168.36	0.07	91.60	167.70	1.55
Pro (Proline)	C1C[C@H](NC1)C(=O)[O-]	3	52.16	-6.33	156.93	-0.05	81.57	157.84	7.45
CH ₃ CH ₂ OCH ₂ COO ⁻	CCOCC(=O)[O-]	3	49.36	-6.40	153.25	-0.05	71.20	142.84	7.87
HOOCCH ₂ COO ⁻	OC(=O)CC(=O)[O-]	4	80.26	-5.61	129.94	-0.09	55.93	118.77	1.60
CH ₃ COCH ₂ CH ₂ COO ⁻	CC(=O)CCC(=O)[O-]	3	57.2	-6.22	160.38	-0.06	78.89	158.38	6.01
CH ₂ =CHCOO ⁻	C=CC(=O)[O-]	2	40.13	-6.57	115.02	-0.05	53.33	102.07	5.11
CH ₃ CH ₂ COO ⁻	CCC(=O)[O-]	2	40.13	-6.65	121.86	-0.04	54.48	111.20	5.60
DEP (diethyl phosphate)	CCOP(=O)([O-])OCC	4	58.59	-5.79	195.13	-0.08	91.93	193.20	5.97
Oph (phenolate)	C1=CC=C(C=C1)[O-]	1	23.06	-5.88	141.57	-0.01	88.82	136.66	4.65
SCN ⁻	C(#N)[S-]	2	23.79	-5.43	96.30	-0.04	44.82	81.61	1.66
Br ⁻	[Br-]	0	0	-5.66	74.64	-0.03	25.39	61.27	0.00

Data related to the calculation of other descriptors

Other	nHBA	nHBD	nRot	TPSA	BalabanJ	MolLogP	μ	Polar	Vdw
Formic acid	2	1	0	37.30	1.63	-0.30	4.08	20.85	56.71
Urea	1	2	0	69.11	2.32	-0.98	3.89	33.79	78.68
Phosphoric acid	4	3	3	77.76	3.02	-0.93	0.36	35.59	92.49
Acetamide	1	1	1	43.09	2.32	-0.51	3.98	36.86	86.38
Monoethanolamine	2	2	3	46.25	1.97	-1.06	1.06	39.72	95.70
Thiourea	1	2	0	52.04	2.32	-0.81	5.00	52.94	98.99
Triethanolamine	4	3	9	63.93	3.30	-1.73	1.99	96.84	209.03
Ethylene glycol	2	2	3	40.46	1.97	-1.03	2.64	35.43	87.92
Xylitol	5	5	9	101.15	3.69	-2.95	4.01	83.30	184.73
Propanediol	2	2	4	40.46	2.54	-0.29	0.32	47.63	113.32
Sorbitol	6	6	11	121.38	3.99	-3.59	3.49	99.54	217.97
Glycerol	3	3	5	60.69	2.75	-1.67	3.86	51.66	121.28
Oxalic acid	4	2	0	74.60	2.99	-0.84	0.00	36.62	90.87
Citric acid	7	4	6	132.13	4.34	-1.25	6.69	93.41	201.82
Malic acid	5	3	4	94.83	3.38	-1.09	4.80	64.86	146.65
Tartaric acid	6	4	5	115.06	3.81	-2.12	3.34	68.96	153.71
Lactic acid	3	2	3	57.53	2.99	-0.55	3.72	48.05	114.21
Acetic acid	2	1	1	37.30	2.32	0.09	4.58	31.92	78.41

Data related to the calculation of other descriptors

Other	ESPmax	ESPmin	Sphericity	PSA	NSA	LUMO	HOMO	NBO(H+)	NBO(-)
Formic acid	2.73	-1.56	0.95	36.15	38.84	-0.03	-0.31	0.47	-0.67
Urea	1.92	-1.92	0.93	51.77	44.09	-0.01	-0.27	0.40	-0.84
Phosphoric acid	2.58	-1.68	0.91	48.22	59.89	-0.03	-0.32	0.51	-0.97
Acetamide	2.03	-1.94	0.92	66.01	36.33	-0.01	-0.26	0.40	-0.81
Monoethanolamine	1.77	-1.50	0.91	68.49	42.44	0.00	-0.25	0.46	-0.85
Thiourea	2.23	-1.25	0.93	53.08	57.76	-0.02	-0.22	0.41	-0.80
Triethanolamine	1.82	-1.79	0.85	125.01	75.50	-0.01	-0.21	0.46	-0.74
Ethylene glycol	2.03	-1.63	0.92	64.01	40.00	-0.01	-0.28	0.47	-0.76
Xylitol	2.20	-1.97	0.87	104.55	77.93	-0.02	-0.27	0.48	-0.77
Propanediol	1.74	-1.34	0.90	78.53	45.64	0.00	-0.29	0.47	-0.75
Sorbitol	2.20	-1.63	0.85	119.13	87.59	-0.02	-0.27	0.50	-0.78
Glycerol	2.29	-1.72	0.90	76.53	54.30	-0.02	-0.27	0.48	-0.76
Oxalic acid	2.27	-1.07	0.91	53.84	53.31	-0.10	-0.32	0.50	-0.64
Citric acid	3.47	-1.76	0.85	104.73	89.85	-0.07	-0.29	0.50	-0.75
Malic acid	3.18	-1.56	0.88	80.96	71.92	-0.05	-0.31	0.50	-0.74
Tartaric acid	2.15	-1.41	0.88	92.36	65.36	-0.05	-0.32	0.51	-0.76
Lactic acid	2.76	-1.47	0.90	73.21	51.70	-0.03	-0.30	0.49	-0.74
Acetic acid	2.59	-1.76	0.92	57.05	40.02	-0.02	-0.29	0.47	-0.68