

Contact angles collected June 22 2021					
Material	transparency film	Trycite (uncoated side)	Trycite (hydrophobically coated side)		
contact angles	68.4	71.9	140.6		
	63.4	89.5	140.2		
	64.2	85.2	142.2		
	60.4	93	131.3		
	61.5	95.1	138.3		
	65.4	92.6	137.2		
	62.3	86.5	141.9		
	63.7	84.5	143.7		
	63.4	82	145.3		
	63.4	86	140.8		
	63.6	86.6			
Average	63.60909091	86.62727273	140.15		
stdev	2.076272884	6.337206152	3.9081823		

June 17 2021 testing volume of air-gap devices varying paper square size (2.5, 5, or 7.5 mm) and air gap (1, 2, or 3 mm). On overhead transparency film with Artgraphix adhesive and Alstrom 319.

7.5x7.5mm paper			5x5mm paper			2.5x2.5mm paper					
gap	1mm	2mm	3mm	gap	1mm	2mm	3mm	gap	1mm	2mm	3mm
volume (uL)	150	210	210	volume	60	90	100	volume	10	20	20
*	170	230	230		60	90	100		10	40	40
	160	200	200		70	110	90		10	30	30
	160	230	220		70	110	110		10	30	30
	170	230	240		60	80	100		10	20	30
	160	200	220		70	110	120		10	30	30
Average	161.6666667	216.6666667	220		65	98.33333333	103.3333333		10	28.33333333	30
Standard deviat	7.527726527	15.05545305	14.14213562		5.477225575	13.29160136	10.32795559		0	7.527726527	6.32455532
rsd	0.04656325687	0.0694867064	0.06428243465		0.08426500885	0.1351688274	0.09994795732		0	0.2656844657	0.2108185107

June 17 2021 volume testing											
Trycite uncoated side											
7.5x7.5			5x5			2.5x2.5					
gap	1mm	2mm	3mm	gap	1mm	2mm	3mm	gap	1mm	2mm	3mm
volume (uL)	140	200	220	volume	60	100	120	volume	10	20	20
	140	200	220		50	90	100		10	30	30
	160	200	200		60	90	110		10	20	30
	170	210	240		60	80	120		10	30	20
	160	190	210		60	100	130		10	20	30
	160	220	250		60	90	120		10	20	30
Average	155	203.3333333	223.3333333	Average	58.33333333	91.66666667	116.6666667	Average	10	23.33333333	26.66666667
Standard deviat	12.24744871	10.32795559	18.61898673	Standard deviat	4.082482905	7.527726527	10.32795559	Standard deviat	0	5.163977795	5.163977795
rsd	0.07901579815	0.05079322421	0.08336859728	rsd	0.06998542122	0.08212065302	0.08852533363	rsd	0	0.2213133341	0.1936491673
Trycite coated side											
7.5x7.5			5x5			2.5x2.5					
gap	1mm	2mm	3mm	gap	1mm	2mm	3mm	gap	1mm	2mm	3mm
volume (uL)	190	210	220	volume	60	110	120	volume	10	20	30
	190	230	240		70	100	150		10	30	30
	210	210	230		60	110	130		10	20	30
	160	250	220		60	110	140		10	20	30
	170	230	200		70	100	120		20	20	30
	170	250	200		70	100	130		10	20	30
Average	181.6666667	230	218.3333333	Average	65	105	131.6666667	Average	11.66666667	21.66666667	30
Standard deviat	18.34847859	17.88854382	16.02081979	Standard deviat	5.477225575	5.477225575	11.69045194	Standard deviat	4.082482905	4.082482905	0
rsd	0.1010007996	0.07777627748	0.07337780055	rsd	0.08426500885	0.0521640531	0.08878824262	rsd	0.3499271061	0.1884222879	0

Data collected August 11, 2022 by RMR. iPhone SE camera, no filters or lighting adjustments. 0.096 M NaOH analyte, either phenolphthalein, 40 uL analyte. On titrators spotted with 5uL of TsOH. Wax printed titrators used black wax. Air gap used laser cut Alhstrom 319 paper and Artgraphix adhesive on hydrophobic tritite from Serim, cut so paper squares were 5x5mm. Phenolphthalein 30x30 square in imageJ

Air Gap 1				Air Gap 2				Air Gap 3				Air Gap 4				average air gap			
TsOH	R	G	B	R	G	B	R	G	B	R	G	B	R	G	B	TsOH	R	G	B
0	234	195	195	229	194	190	230	203	194	225	185	183	0	229.5	194.25	190.5			
0.1	232	188	197	232	186	196	227	182	187	226	181	186	0.1	229.25	184.25	191.5			
0.2	230	183	196	231	183	199	229	179	188	227	177	185	0.2	229.25	180.5	192			
0.3	229	178	195	229	178	197	230	178	191	226	174	186	0.3	228.5	177	192.25			
0.4	229	175	196	230	175	198	230	174	189	226	172	186	0.4	228.75	174	192.25			
0.5	229	172	195	230	172	197	230	173	190	226	169	185	0.5	228.75	171.5	191.75			
0.6	224	208	199	229	214	205	228	207	200	223	209	194	0.6	226	209.5	199.5			
0.7	226	221	201	228	224	204	228	221	203	220	213	194	0.7	225.5	219.75	200.5			
0.8	228	223	203	228	223	203	227	221	202	222	215	195	0.8	226.25	220.5	200.75			
0.9	229	225	206	229	224	205	228	223	203	223	216	197	0.9	227.25	222	202.75			
1	230	226	206	227	222	202	229	223	204	224	218	198	1	227.5	222.25	202.5			
1.5	233	228	208	233	228	209	229	223	203	226	219	197	1.5	230.25	224.5	204.25			
3	235	229	210	236	229	211	235	228	209	229	221	198	3	233.75	226.75	207			

Wax 1				Wax 2				wax 3				Average wax					
TsOH	R	G	B	TsOH	R	G	B	TsOH	R	G	B	TsOH	R	G	B		
0	168	147	156	0	164	152	156	166	146	155	165	145	154	0	165.75	147.5	155.25
0.1	166	142	154	0.1	169	149	158	157	135	147	154	133	145	0.1	161.5	139.75	151
0.2	165	140	153	0.2	159	140	150	143	124	136	156	134	146	0.2	155.75	134.5	146.25
0.3	169	143	154	0.3	157	137	148	151	129	141	146	125	136	0.3	155.75	133.5	144.75
0.4	149	125	138	0.4	158	135	148	151	127	140	143	121	134	0.4	150.25	127	140
0.5	147	123	136	0.5	142	121	136	145	123	135	140	119	132	0.5	143.5	121.5	134.75
0.6	149	121	136	0.6	142	126	136	146	126	135	146	127	137	0.6	145.75	125	138
0.7	140	138	135	0.7	142	142	140	144	143	139	144	143	139	0.7	142.5	141.5	138.25
0.8	132	131	129	0.8	146	146	144	146	145	140	149	148	144	0.8	143.25	142.5	139.25
0.9	143	142	138	0.9	142	142	140	144	143	138	164	161	156	0.9	148.25	147	143
1	149	146	141	1	149	149	147	147	146	140	155	152	149	1	150	148.25	144.25
1.5	146	145	140	1.5	148	147	146	149	147	142	147	146	143	1.5	147.5	146.25	142.75
3	125	124	120	3	148	148	148	150	147	141	152	151	147	3	143.75	142.5	139

40 uL 0.096M NaOH, 5uL listed TsOH. Data collected 12.20.22.

Roll-to-roll titrators						
TsOH	G titrator 1	G titrator 2	G titrator 3	G titrator 4	Average G	stdev G
0	190	181	178	171	180	7.874007874
0.1	185	179	176	171	177.75	5.852349955
0.2	184	179	175	170	177	5.944184833
0.3	182	176	173	170	175.25	5.123475383
0.4	200	193	188	187	192	5.944184833
0.5	190	188	181	186	186.25	3.862210075
0.6	199	198	191	194	195.5	3.696845502
0.7	230	227	222	218	224.25	5.315072906
0.8	230	227	223	218	224.5	5.196152423
0.9	229	226	223	221	224.75	3.5
1	228	228	222	222	225	3.464101615
1.5	231	228	226	221	226.5	4.203173404
3	233	230	228	224	228.75	3.774917218

Pad id	Api (actual)	Tester 1	Tester 2	Tester 3	Tester 4	Tester 5
69014	Amoxicillin	Amoxicillin	Amoxicillin	Amoxicillin	Amoxicillin	Amoxicillin
69020	Amoxicillin	Amoxicillin	Amoxicillin	Amoxicillin	Amoxicillin	Amoxicillin
69021	Amoxicillin	Amoxicillin	Amoxicillin	Amoxicillin	Amoxicillin	Amoxicillin
69022	Amoxicillin	Amoxicillin	Amoxicillin	Amoxicillin	Amoxicillin	Amoxicillin
69023	Amoxicillin	Amoxicillin	Amoxicillin	Amoxicillin	Amoxicillin	Amoxicillin
68983	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin
69016	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin
69017	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin
69018	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin
69019	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin	Ciprofloxacin
69000	Isoniazid	Isoniazid	Isoniazid	Isoniazid	Isoniazid	Isoniazid
69004	Isoniazid	Isoniazid	Isoniazid	Isoniazid	Isoniazid	Isoniazid
69005	Isoniazid	Isoniazid	Isoniazid	Isoniazid	Isoniazid	Isoniazid
69006	Isoniazid	Isoniazid	Isoniazid	Isoniazid	Isoniazid	Isoniazid
69007	Isoniazid	Isoniazid	Isoniazid	Isoniazid	Isoniazid	Isoniazid
69001	Pyrazinamide	Pyrazinamide	Rifampicin	Pyrazinamide	Pyrazinamide	Pyrazinamide
69002	Pyrazinamide	Pyrazinamide	Pyrazinamide	Pyrazinamide	Pyrazinamide	Pyrazinamide
69003	Pyrazinamide	Pyrazinamide	Rifampicin	Pyrazinamide	Pyrazinamide	Pyrazinamide
69012	Pyrazinamide	Pyrazinamide	Pyrazinamide	Pyrazinamide	Pyrazinamide	Pyrazinamide
69013	Pyrazinamide	Pyrazinamide	Isoniazid	Pyrazinamide	Pyrazinamide	Pyrazinamide
69008	Rifampicin	Rifampicin	Rifampicin	Rifampicin	Rifampicin	Rifampicin
69009	Rifampicin	Rifampicin	Isoniazid	Rifampicin	Rifampicin	Rifampicin
69010	Rifampicin	Rifampicin	Rifampicin	Rifampicin	Rifampicin	Rifampicin
69011	Rifampicin	Rifampicin	Rifampicin	Rifampicin	Rifampicin	Rifampicin
69015	Rifampicin	Rifampicin	Rifampicin	Rifampicin	Rifampicin	Rifampicin

PAD #	Database ID	Actual Drug	Predicted Drug (NN)	Confidence	Predicted correctly?
69004	46441	Isoniazid	Isoniazid	0.66	TRUE
69004	46442	Isoniazid	Isoniazid	0.63	TRUE
69004	46443	Isoniazid	Isoniazid	0.54	TRUE
69004	46444	Isoniazid	Isoniazid	0.85	TRUE
69006	46445	Isoniazid	Isoniazid	0.76	TRUE
69006	46446	Isoniazid	Isoniazid	0.88	TRUE
69006	46447	Isoniazid	Isoniazid	0.94	TRUE
69006	46448	Isoniazid	Isoniazid	0.96	TRUE
69006	46449	Isoniazid	Isoniazid	0.86	TRUE
69006	46450	Isoniazid	Isoniazid	0.91	TRUE
69004	46451	Isoniazid	Isoniazid	0.82	TRUE
69004	46452	Isoniazid	Isoniazid	0.9	TRUE
69006	46453	Isoniazid	Isoniazid	0.89	TRUE
69007	46454	Isoniazid	Isoniazid	0.98	TRUE
69007	46455	Isoniazid	Isoniazid	0.98	TRUE
69007	46456	Isoniazid	Isoniazid	0.97	TRUE
69007	46457	Isoniazid	Isoniazid	0.78	TRUE
69007	46458	Isoniazid	Isoniazid	0.92	TRUE
69007	46459	Isoniazid	Isoniazid	0.97	TRUE
69006	46460	Isoniazid	Isoniazid	0.95	TRUE
69006	46461	Isoniazid	RIPE	0.78	FALSE
69007	46462	Isoniazid	Isoniazid	0.97	TRUE
69007	46463	Isoniazid	Isoniazid	0.98	TRUE
69004	46464	Isoniazid	Isoniazid	0.88	TRUE
69006	46465	Isoniazid	Isoniazid	0.9	TRUE
69000	46466	Isoniazid	RIPE	0.79	FALSE
69005	46467	Isoniazid	Epinephrine	0.59	FALSE
69005	46468	Isoniazid	Isoniazid	0.88	TRUE
69000	46469	Isoniazid	RIPE	0.52	FALSE

69000	46470	Isoniazid	RIPE	0.48	FALSE
69005	46471	Isoniazid	Isoniazid	0.63	TRUE
69005	46472	Isoniazid	Isoniazid	0.75	TRUE
69000	46473	Isoniazid	RIPE	0.53	FALSE
69005	46474	Isoniazid	Isoniazid	0.95	TRUE
69000	46475	Isoniazid	Isoniazid	0.59	TRUE
69005	46476	Isoniazid	Isoniazid	0.79	TRUE
69000	46477	Isoniazid	RIPE	0.39	FALSE
69000	46478	Isoniazid	RIPE	0.65	FALSE
69005	46479	Isoniazid	Isoniazid	0.96	TRUE
69000	46480	Isoniazid	Isoniazid	0.56	TRUE
69005	46481	Isoniazid	Isoniazid	0.92	TRUE
69001	46482	Pyrazinamide	RIPE	0.53	FALSE
69001	46483	Pyrazinamide	RIPE	0.55	FALSE
69002	46484	Pyrazinamide	RIPE	0.6	FALSE
69003	46485	Pyrazinamide	Amoxicillin	0.37	FALSE
69012	46486	Pyrazinamide	Ceftriaxone	0.41	FALSE
69013	46487	Pyrazinamide	Pyrazinamide	0.92	TRUE
69012	46488	Pyrazinamide	RIPE	0.45	FALSE
69013	46489	Pyrazinamide	Amoxicillin	0.36	FALSE
69001	46490	Pyrazinamide	Pyrazinamide	0.62	TRUE
69002	46491	Pyrazinamide	Amoxicillin	0.88	FALSE
69003	46492	Pyrazinamide	Amoxicillin	0.86	FALSE
69013	46493	Pyrazinamide	Pyrazinamide	0.48	TRUE
69012	46494	Pyrazinamide	Epinephrine	0.41	FALSE
69003	46495	Pyrazinamide	RIPE	0.35	FALSE
69002	46496	Pyrazinamide	RIPE	0.36	FALSE
69001	46497	Pyrazinamide	Pyrazinamide	0.94	TRUE
69013	46498	Pyrazinamide	Pyrazinamide	0.47	TRUE
69012	46499	Pyrazinamide	Epinephrine	0.59	FALSE

69003	46500	Pyrazinamide	Amoxicillin	0.59	FALSE	
69002	46501	Pyrazinamide	Amoxicillin	0.81	FALSE	
69001	46502	Pyrazinamide	Pyrazinamide	0.54	TRUE	
69001	46503	Pyrazinamide	Pyrazinamide	0.5	TRUE	
69002	46504	Pyrazinamide	Epinephrine	0.63	FALSE	
69012	46505	Pyrazinamide	RIPE	0.53	FALSE	
69013	46506	Pyrazinamide	RIPE	0.43	FALSE	
69013	46507	Pyrazinamide	Pyrazinamide	0.69	TRUE	
69012	46508	Pyrazinamide	RIPE	0.76	FALSE	
69003	46509	Pyrazinamide	Pyrazinamide	0.57	TRUE	
69002	46510	Pyrazinamide	Pyrazinamide	0.87	TRUE	
69001	46511	Pyrazinamide	Pyrazinamide	0.81	TRUE	
69001	46512	Pyrazinamide	Pyrazinamide	0.71	TRUE	
69002	46513	Pyrazinamide	Pyrazinamide	0.77	TRUE	
69003	46514	Pyrazinamide	Pyrazinamide	0.81	TRUE	
69012	46515	Pyrazinamide	RIPE	0.33	FALSE	
69013	46516	Pyrazinamide	Pyrazinamide	0.75	TRUE	
69003	46517	Pyrazinamide	Pyrazinamide	0.48	TRUE	
69012	46518	Pyrazinamide	Pyrazinamide	0.34	TRUE	
69013	46519	Pyrazinamide	Pyrazinamide	0.91	TRUE	
69002	46520	Pyrazinamide	Pyrazinamide	0.56	TRUE	
69001	46521	Pyrazinamide	RIPE	0.5	FALSE	
69003	46527	Pyrazinamide	Rifampicin	0.98	TRUE	
69008	46522	Rifampicin	Rifampicin	0.98	TRUE	
69009	46523	Rifampicin	RIPE	0.72	FALSE	
69010	46524	Rifampicin	Rifampicin	0.65	TRUE	
69011	46525	Rifampicin	Rifampicin	0.56	TRUE	
69015	46526	Rifampicin	Epinephrine	0.42	FALSE	
69015	46528	Rifampicin	Epinephrine	0.73	FALSE	
69010	46529	Rifampicin	Rifampicin	0.95	TRUE	

69011	46530	Rifampicin	Rifampicin	0.95	TRUE	
69015	46531	Rifampicin	Rifampicin	0.87	TRUE	
69015	46532	Rifampicin	Rifampicin	0.88	TRUE	
69011	46533	Rifampicin	Rifampicin	0.53	TRUE	
69010	46534	Rifampicin	Rifampicin	0.39	TRUE	
69009	46535	Rifampicin	RIPE	0.46	FALSE	
69008	46536	Rifampicin	Rifampicin	0.66	TRUE	
69015	46537	Rifampicin	Rifampicin	0.91	TRUE	
69011	46538	Rifampicin	Rifampicin	0.96	TRUE	
69010	46539	Rifampicin	Rifampicin	0.96	TRUE	
69009	46540	Rifampicin	Epinephrine	0.63	FALSE	
69008	46541	Rifampicin	Rifampicin	0.99	TRUE	
69008	46542	Rifampicin	Rifampicin	0.97	TRUE	
69009	46543	Rifampicin	Epinephrine	0.8	FALSE	
69010	46544	Rifampicin	Rifampicin	0.63	TRUE	
69011	46545	Rifampicin	RIPE	0.96	FALSE	
69015	46546	Rifampicin	Rifampicin	0.71	TRUE	
69009	46547	Rifampicin	Epinephrine	0.65	FALSE	
69008	46548	Rifampicin	Rifampicin	0.98	TRUE	
69010	46549	Rifampicin	Rifampicin	0.96	TRUE	
69011	46550	Rifampicin	Rifampicin	0.55	TRUE	
69015	46551	Rifampicin	Rifampicin	0.76	TRUE	
69008	46552	Rifampicin	Rifampicin	0.97	TRUE	
69015	46553	Rifampicin	Rifampicin	0.78	TRUE	
69011	46554	Rifampicin	Rifampicin	0.75	TRUE	
69010	46555	Rifampicin	Rifampicin	0.59	TRUE	
69009	46556	Rifampicin	Epinephrine	0.5	FALSE	
69015	46557	Rifampicin	Rifampicin	0.44	TRUE	
69011	46558	Rifampicin	RIPE	0.87	FALSE	
69010	46559	Rifampicin	RIPE	0.65	FALSE	

69009	46560	Rifampicin	Epinephrine	0.58	FALSE	
69008	46561	Rifampicin	Rifampicin	0.98	TRUE	
69023	46562	Rifampicin	Amoxicillin	0.71	FALSE	
69014	46563	Amoxicillin	Ampicillin	0.27	FALSE	
69020	46564	Amoxicillin	Ampicillin	0.88	FALSE	
69021	46565	Amoxicillin	Epinephrine	0.35	FALSE	
69023	46566	Amoxicillin	Amoxicillin	0.94	TRUE	
69014	46567	Amoxicillin	Epinephrine	0.85	FALSE	
69020	46568	Amoxicillin	Epinephrine	0.72	FALSE	
69021	46569	Amoxicillin	Amoxicillin	0.53	TRUE	
69022	46570	Amoxicillin	Amoxicillin	0.93	TRUE	
69022	46571	Amoxicillin	Amoxicillin	0.94	TRUE	
69021	46572	Amoxicillin	Amoxicillin	0.92	TRUE	
69020	46573	Amoxicillin	Epinephrine	0.7	FALSE	
69014	46574	Amoxicillin	Epinephrine	0.78	FALSE	
69023	46575	Amoxicillin	Amoxicillin	0.66	TRUE	
69009	46576	Amoxicillin	Amoxicillin	0.98	TRUE	
69021	46577	Amoxicillin	Amoxicillin	0.72	TRUE	
69014	46578	Amoxicillin	Amoxicillin	0.78	TRUE	
69023	46579	Amoxicillin	Amoxicillin	0.93	TRUE	
69023	46580	Amoxicillin	Amoxicillin	0.95	TRUE	
69014	46581	Amoxicillin	Epinephrine	0.35	FALSE	
69020	46582	Amoxicillin	Ampicillin	0.68	FALSE	
69021	46583	Amoxicillin	Amoxicillin	0.63	TRUE	
69022	46584	Amoxicillin	Amoxicillin	0.88	TRUE	
69023	46585	Amoxicillin	Amoxicillin	0.93	TRUE	
69014	46586	Amoxicillin	Epinephrine	0.44	FALSE	
69020	46587	Amoxicillin	Epinephrine	0.82	FALSE	
69021	46588	Amoxicillin	Amoxicillin	0.46	TRUE	
69021	46589	Amoxicillin	Amoxicillin	0.96	TRUE	

69022	46590	Amoxicillin	Amoxicillin	0.91	TRUE	
69021	46591	Amoxicillin	Epinephrine	0.79	FALSE	
69020	46592	Amoxicillin	Epinephrine	0.76	FALSE	
69014	46593	Amoxicillin	Epinephrine	0.79	FALSE	
69023	46594	Amoxicillin	Amoxicillin	0.5	TRUE	
69022	46595	Amoxicillin	Amoxicillin	0.99	TRUE	
69021	46596	Amoxicillin	Amoxicillin	0.77	TRUE	
69020	46597	Amoxicillin	Epinephrine	0.63	FALSE	
69014	46598	Amoxicillin	Epinephrine	0.42	FALSE	
69023	46599	Amoxicillin	Amoxicillin	0.83	TRUE	
68983	46600	Ciprofloxacin	Ciprofloxacin	0.91	TRUE	
69016	46601	Ciprofloxacin	Ciprofloxacin	0.98	TRUE	
69017	46602	Ciprofloxacin	Ciprofloxacin	0.9	TRUE	
69018	46603	Ciprofloxacin	Hydroxychloroquine	0.69	FALSE	
69018	46606	Ciprofloxacin	Hydroxychloroquine	0.75	FALSE	
69017	46607	Ciprofloxacin	Ciprofloxacin	0.84	TRUE	
69016	46608	Ciprofloxacin	Ciprofloxacin	0.95	TRUE	
68983	46609	Ciprofloxacin	Ciprofloxacin	0.81	TRUE	
68983	46610	Ciprofloxacin	Ciprofloxacin	0.84	TRUE	
69016	46611	Ciprofloxacin	Ciprofloxacin	0.77	TRUE	
69017	46612	Ciprofloxacin	Ciprofloxacin	0.59	TRUE	
69018	46613	Ciprofloxacin	Hydroxychloroquine	0.95	FALSE	
69018	46616	Ciprofloxacin	Hydroxychloroquine	0.8	FALSE	
69017	46617	Ciprofloxacin	Ciprofloxacin	0.75	TRUE	
69016	46618	Ciprofloxacin	Ciprofloxacin	0.96	TRUE	
68983	46619	Ciprofloxacin	Ciprofloxacin	0.86	TRUE	
68983	46620	Ciprofloxacin	Promethazine HCl	0.3	FALSE	
69016	46621	Ciprofloxacin	Ciprofloxacin	0.97	TRUE	
69017	46622	Ciprofloxacin	Ciprofloxacin	0.75	TRUE	
69018	46623	Ciprofloxacin	Hydroxychloroquine	0.91	FALSE	

69018	46626	Ciprofloxacin	Hydroxychloroquine	0.62	FALSE	
69017	46627	Ciprofloxacin	Ciprofloxacin	0.83	TRUE	
69016	46628	Ciprofloxacin	Ciprofloxacin	0.97	TRUE	
68983	46629	Ciprofloxacin	Ciprofloxacin	0.56	TRUE	
69018	46631	Ciprofloxacin	Hydroxychloroquine	0.81	FALSE	
69017	46632	Ciprofloxacin	Ciprofloxacin	0.79	TRUE	
69016	46633	Ciprofloxacin	Ciprofloxacin	0.96	TRUE	
68983	46634	Ciprofloxacin	Ciprofloxacin	0.64	TRUE	
68983	46635	Ciprofloxacin	Ciprofloxacin	0.76	TRUE	
69016	46636	Ciprofloxacin	Ciprofloxacin	0.86	TRUE	
69017	46637	Ciprofloxacin	Ciprofloxacin	0.96	TRUE	
69018	46638	Ciprofloxacin	Hydroxychloroquine	0.76	FALSE	

data collected June 22 2021. 1cm water																		
2.5mm (12 lane PAD)																		
time (s)	sqrt t															Average Distance	stdev	
1	1	0	0.1	0.2	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0	0.116666667	0.071774
2	1.414214	0.7	0.8	0.8	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.775	0.045227
5	2.236068	1.1	1.2	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.2	1.1	1.1	1.1	1.1	1.141666667	0.051493
7	2.645751	1.4	1.4	1.4	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.3	1.3	1.3	1.366666667	0.049237
10	3.162278	1.5	1.5	1.5	1.4	1.4	1.6	1.6	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	1.5	0.060302
15	3.872983	1.8	1.9	1.8	1.8	1.8	1.8	1.8	1.9	1.8	1.8	1.8	1.9	1.9	1.9	1.9	1.841666667	0.051493
20	4.472136	2.1	2.2	2.1	2	2.1	2.2	2.2	2.1	2.1	2.1	2.1	2.2	2.1	2.1	2.1	2.125	0.062158
30	5.477226	2.4	2.5	2.4	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.5	2.5	2.475	0.062158
40	6.324555	2.8	2.9	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.8	2.9	2.9	2.9	2.825	0.045227
50	7.071068	3.1	3.2	3.1	3	3	3	3	3.1	3.1	3.1	3.1	3.1	3.2	3.2	3.2	3.1	0.073855
60	7.745967	3.4	3.4	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.3	3.4	3.5	3.5	3.5	3.358333333	0.079296
70	8.3666	3.6	3.6	3.5	3.5	3.5	3.5	3.5	3.5	3.5	3.6	3.6	3.7	3.7	3.7	3.7	3.566666667	0.07785
80	8.944272	3.8	3.8	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.8	3.9	3.9	3.9	3.758333333	0.079296
90	9.486833	3.9	4	3.9	3.9	3.9	3.8	3.9	3.9	3.9	3.9	4	4.1	4	4	4	3.933333333	0.07785
100	10	4.1	4.2	4	4	4	4	4	4	4.1	4	4.2	4.3	4.2	4.2	4.2	4.091666667	0.108362
110	10.48809	4.3	4.3	4.2	4.2	4.2	4.2	4.2	4.3	4.3	4.3	4.4	4.5	4.4	4.4	4.4	4.3	0.095346
120	10.95445	4.5	4.5	4.4	4.4	4.4	4.3	4.4	4.4	4.5	4.4	4.5	4.6	4.5	4.5	4.5	4.45	0.079772

June 22, 2021 Ahlstrom 319 on artgraphix adhesive laser cut, stuck to cline transparency film, stuck in 1cm di water with 2 drops blue food coloring, videoed up to 3 minutes

2.5mm	time (s)	sqrt t	distance (lane 1)													Average	
	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	2	1.414214	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.733333	0.049237
	5	2.236068	0.9	0.9	0.9	1	1	1	1	0.8	0.9	0.9	0.9	0.9	0.9	0.925	0.062158
	7	2.645751	1.3	1.2	1.3	1.4	1.4	1.4	1.4	1.3	1.4	1.4	1.4	1.3	1.4	1.35	0.06742
	10	3.162278	1.7	1.6	1.7	1.7	1.8	1.8	1.8	1.7	1.7	1.7	1.7	1.6	1.8	1.716667	0.071774
	15	3.872983	2	1.9	2	2	2.1	2	2.1	1.9	2	2	1.9	2	2	1.991667	0.066856
	20	4.472136	2.3	2.2	2.3	2.4	2.4	2.4	2.5	2.2	2.3	2.3	2.3	2.4	2.4	2.333333	0.088763
	30	5.477226	2.8	2.7	2.8	2.9	2.9	2.8	2.9	2.7	2.8	2.9	2.9	2.7	2.8	2.808333	0.079296
	40	6.324555	3.2	3.1	3.2	3.3	3.4	3.3	3.4	3.1	3.2	3.3	3.1	3.3	3.3	3.241667	0.108362
	50	7.071068	3.5	3.4	3.5	3.6	3.7	3.6	3.7	3.5	3.6	3.7	3.5	3.7	3.7	3.583333	0.102986
	60	7.745967	3.8	3.7	3.8	4	4	4	4	3.8	3.9	4	3.8	4	4	3.9	0.112815
	70	8.3666	4.1	4	4.1	4.3	4.3	4.3	4.4	4.1	4.2	4.3	4	4.3	4.3	4.2	0.13484
	80	8.944272	4.3	4.3	4.4	4.5	4.5	4.5	5.6	4.4	4.5	4.5	4.3	4.5	4.5	4.525	0.34935
	90	9.486833	4.5	4.5	4.6	4.7	4.8	4.8	4.9	4.6	4.7	4.8	4.5	4.7	4.7	4.675	0.13568
	100	10	4.7	4.7	4.8	4.9	5	5	5.1	4.8	4.9	5	4.7	4.9	4.9	4.875	0.13568
	110	10.48809	5	4.9	5	5.2	5.2	5.2	5.2	5	5.1	5.2	4.9	5.1	5.1	5.083333	0.119342
	120	10.95445	5.2	5.2	5.2	5.5	5.5	5.5	5.5	5.2	5.3	5.4	5.1	5.4	5.4	5.333333	0.149747

videos collected 09.12.2022. Analyzed 09.13.2022. Hydrophobically coated polystyrene "Trycite" obtained from Serim. Alhstrom 319, artgraphix adhesive, laser cut. 1 cm water, 2 drops blue food color

2.5mm															
time (s)	sqrt t	lane 1	lane 2	lane 3	lane 4	lane 5	lane 6	lane 7	lane 8	lane 9	lane 10	lane 11	lane 12	Average	stdev
1	1	0.1	0	0.1	0	0	0	0	0	0	0	0	0	0.0166666667	0.03892494721
2	1.414214	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5166666667	0.03892494721
5	2.236068	1.1	1.2	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.1	1.1	1.2	1.1	1.141666667
7	2.645751	1.3	1.4	1.3	1.3	1.3	1.4	1.4	1.4	1.3	1.3	1.4	1.4	1.4	1.358333333
10	3.162278	1.6	1.7	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.7	1.7	1.666666667
15	3.872983	2.1	2.2	2	2.1	2.1	2.2	2.2	2.2	2.2	2	2.1	2.1	2.1	2.116666667
20	4.472136	2.4	2.5	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.4	2.4	2.4	2.4	2.441666667
30	5.477226	2.9	3	2.9	3	3	3	3	3	3	2.9	2.9	2.9	2.9	2.95
40	6.324555	3.3	3.4	3.3	3.4	3.4	3.4	3.4	3.4	3.4	3.3	3.3	3.3	3.35	0.05222329679
50	7.071068	3.6	3.7	3.6	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.7	3.683333333
60	7.745967	4	4.1	4	4.1	4.1	4.1	4.1	4.1	4.1	4	4	4	4	4.05
70	8.3666	4.3	4.4	4.3	4.4	4.4	4.4	4.4	4.4	4.4	4.3	4.3	4.3	4.4	4.358333333
80	8.944272	4.6	4.7	4.6	4.7	4.7	4.7	4.7	4.7	4.7	4.6	4.6	4.7	4.7	4.666666667
90	9.486833	4.8	4.9	4.8	4.8	4.9	4.9	4.9	4.9	4.8	4.8	4.8	4.8	4.8	4.833333333
100	10	5	5.2	5	5.1	5.2	5.2	5.2	5.2	5.2	5	5.1	5.2	5.2	5.133333333
110	10.48809	5.3	5.4	5.3	5.4	5.4	5.4	5.4	5.4	5.4	5.4	5.3	5.3	5.4	5.366666667
120	10.95445	5.4	5.5	5.4	5.5	5.5	5.5	5.5	5.5	5.4	5.4	5.5	5.5	5.5	5.466666667

Data collected June 22, 2021																	
5mm wax																	
time (s)	sqrt t	distance (cm)	lan	lane 2	lane 3	lane 4	lane 5	lane 6	lane 7	lane 8	lane 9	lane 10	lane 11	lane 12	Average Distance	stdev	
1	1	0		0	0	0	0	0	0	0	0	0	0	0	0	0	
2	1.414214	0.7		0.6	0.6	0.6	0.6	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.658333	0.051493
5	2.236068	1.3		1.2	1.3	1.3	1.3	1.4	1.3	1.3	1.3	1.3	1.3	1.4	1.3	1.308333	0.051493
7	2.645751	1.5		1.4	1.4	1.5	1.6	1.6	1.6	1.5	1.5	1.5	1.5	1.6	1.5	1.508333	0.066856
10	3.162278	1.8		1.7	1.8	1.8	1.9	1.8	1.8	1.8	1.7	1.8	1.8	1.8	1.8	1.791667	0.051493
15	3.872983	2.2		2	2.1	2.1	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.2	2.2	2.15	0.06742
20	4.472136	2.4		2.3	2.4	2.4	2.6	2.5	2.5	2.4	2.4	2.5	2.6	2.5	2.5	2.458333	0.090034
30	5.477226	3		2.8	3	3	3.2	3.1	3	3	3	2.9	3	3	3	3	0.095346
40	6.324555	3.4		3.3	3.4	3.4	3.6	3.4	3.4	3.3	3.3	3.4	3.4	3.4	3.4	3.391667	0.079296
50	7.071068	3.8		3.7	3.8	3.8	3.8	4	3.8	3.8	3.8	3.7	3.8	3.8	3.8	3.8	0.073855
60	7.745967	4.1		4	4.2	4.1	4.3	4.2	4.2	4.1	4.1	4.1	4.1	4.1	4.1	4.133333	0.07785
70	8.3666	4.4		4.3	4.4	4.4	4.6	4.4	4.4	4.4	4.3	4.4	4.4	4.4	4.4	4.4	0.073855
80	8.944272	4.6		4.5	4.6	4.5	4.8	4.5	4.6	4.5	4.5	4.6	4.6	4.6	4.6	4.575	0.086603
90	9.486833	5		4.8	5	4.9	5.2	4.9	5	5	4.8	4.9	5	5	5	4.958333	0.108362
100	10	5.2		5.1	5.2	5.1	5.4	5.2	5.2	5.1	5	5.1	5.2	5.2	5.2	5.166667	0.098473
110	10.48809	5.4		5.3	5.4	5.4	5.6	5.5	5.5	5.4	5.3	5.4	5.5	5.5	5.5	5.433333	0.088763
120	10.95445	5.7		5.5	5.6	5.5	5.8	5.6	5.6	5.5	5.5	5.5	5.6	5.6	5.6	5.583333	0.093744

June 22, 2021 Ahlstrom 319 on artgraphix adhesive laser cut, stuck to cline transparency film, stuck in 1cm di water with 2 drops blue food coloring, videoed up to 3 minutes

5mm															Average	stdev
time (s)	sqrt t	distance (lane 1) (cm)	lane 3	lane 4	lane 5	lane 6	lane 7	lane 8	lane 9	lane 10	lane 11	lane 12	Average	stdev		
1	1	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.508333	0.028868	
2	1.414214	0.8	0.8	0.8	0.8	0.8	0.8	0.7	0.8	0.8	0.8	0.8	0.9	0.8	0.04264	
5	2.236068	1.3	1.3	1.4	1.3	1.3	1.3	1.3	1.4	1.3	1.3	1.3	1.3	1.316667	0.038925	
7	2.645751	1.5	1.5	1.6	1.5	1.5	1.5	1.5	1.6	1.5	1.5	1.5	1.5	1.516667	0.038925	
10	3.162278	1.8	1.8	1.9	1.8	1.9	1.8	1.8	1.9	1.8	1.8	1.8	1.9	1.833333	0.049237	
15	3.872983	2.2	2.2	2.3	2.2	2.3	2.2	2.2	2.3	2.2	2.2	2.2	2.3	2.233333	0.049237	
20	4.472136	2.5	2.5	2.6	2.5	2.6	2.5	2.5	2.6	2.5	2.5	2.5	2.6	2.533333	0.049237	
30	5.477226	3	3	3.1	3	3.2	3	3	3.2	3.1	3	3	3.1	3.058333	0.079296	
40	6.324555	3.4	3.5	3.6	3.5	3.6	3.5	3.4	3.5	3.6	3.5	3.4	3.5	3.5	0.073855	
50	7.071068	3.8	3.8	4	3.9	4	3.9	3.8	4	3.9	3.8	3.8	3.9	3.883333	0.083485	
60	7.745967	4.1	4.2	4.3	4.2	4.3	4.2	4.1	4.4	4.2	4.2	4.1	4.2	4.208333	0.090034	
70	8.3666	4.5	4.5	4.6	4.6	4.6	4.6	4.6	4.5	4.7	4.5	4.5	4.5	4.558333	0.066856	
80	8.944272	4.7	4.8	4.9	4.8	4.9	4.8	4.7	4.8	4.7	4.7	4.7	4.7	4.766667	0.07785	
90	9.486833	4.9	5	5.1	5	5.1	5.1	5	5.2	5	5	5	5	5.033333	0.07785	
100	10	5.2	5.3	5.4	5.3	5.4	5.3	5.2	5.4	5.3	5.2	5.2	5.2	5.283333	0.083485	
110	10.48809	5.4	5.5	5.6	5.5	5.6	5.5	5.4	5.6	5.5	5.4	5.4	5.4	5.483333	0.083485	
120	10.95445	5.6	5.7	5.8	5.7	5.8	5.7	5.6	5.8	5.7	5.6	5.6	5.6	5.683333	0.083485	

videos collected 09.12.2022. Analyzed 09.13.2022. Hydrophobically coated polystyrene "Trycrite" obtained from Serim. Alhstrom 319, artgraphix adhesive, laser cut. 1 cm water, 2 drops blue food color

5mm															
time (s)	sqrt t	lane 1	lane 2	lane 3	lane 4	lane 5	lane 6	lane 7	lane 8	lane 9	lane 10	lane 11	lane 12	Average	stdev
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	1.414214	0.5	0.4	0.5	0.5	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.425 0.06215815605
5	2.236068	1.1	1	1	1	1	0.9	1	1	1	1	1	1.1	1.2	1.025 0.07537783614
7	2.645751	1.4	1.3	1.2	1.3	1.2	1.2	1.2	1.3	1.2	1.3	1.3	1.3	1.4	1.283333333 0.07177405626
10	3.162278	1.6	1.6	1.5	1.6	1.5	1.5	1.5	1.5	1.5	1.6	1.6	1.6	1.7	1.566666667 0.06513389473
15	3.872983	2	2	2	2	2	1.9	1.9	2	2	1.9	2	2	2.1	1.983333333 0.05773502692
20	4.472136	2.4	2.3	2.3	2.4	2.2	2.2	2.2	2.3	2.2	2.2	2.3	2.4	2.4	2.3 0.08528028654
30	5.477226	2.8	2.7	2.7	2.8	2.7	2.7	2.7	2.8	2.7	2.7	2.8	2.8	2.9	2.758333333 0.06685579234
40	6.324555	3.2	3.1	3.1	3.2	3	3	3.2	3.1	3.1	3.1	3.1	3.2	3.3	3.133333333 0.08876253646
50	7.071068	3.6	3.5	3.5	3.6	3.4	3.4	3.5	3.5	3.5	3.5	3.6	3.6	3.6	3.525 0.07537783614
60	7.745967	4	3.8	3.8	4	3.8	3.8	3.8	3.9	3.8	3.8	3.8	3.8	3.9	3.85 0.07977240352
70	8.3666	4.3	4.1	4.1	4.3	4	4	4.2	4	4	4	4.1	4	4.2	4.108333333 0.1164500153
80	8.944272	4.6	4.4	4.4	4.6	4.3	4.3	4.5	4.3	4.3	4.3	4.4	4.4	4.5	4.416666667 0.1114640858
90	9.486833	4.8	4.7	4.7	4.8	4.6	4.6	4.5	4.7	4.6	4.6	4.7	4.6	4.7	4.666666667 0.08876253646
100	10	5	4.8	4.8	5	4.8	4.8	5	4.8	4.8	4.8	5	4.9	5	4.891666667 0.09962049199
110	10.48809	5.3	5	5	5.4	5	5	5.3	5	5	5	5.2	5.1	5.2	5.125 0.1484771179
120	10.95445	5.6	5.4	5.4	5.6	5.3	5.3	5.5	5.3	5.3	5.3	5.4	5.3	5.4	5.4 0.112815215

data collected 11.16.2022. 5mm laser-cut paper lanes, Alhstrom 319. Trycite backing. Tape to within 1 cm of bottom. put in 1cm of blue water.

Time	Lane 1	Lane 2	Lane 3	Lane 4	Lane 5	Lane 6	Lane 7	Lane 8	Lane 9	Lane 10	Lane 11	Lane 12	average	stdev
1	0.1	0	0.1	0	0.1	0	0.1	0.1	0	0	0	0	0.0416666667	0.05149286505
2	0.4	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.3833333333	0.05773502692
5	1	1.2	1.3	1.2	1.2	1	1.2	1.1	1	1	0.9	1	1.091666667	0.1240112409
7	1.3	1.5	1.5	1.5	1.5	1.4	1.5	1.4	1.2	1.2	1.1	1.2	1.358333333	0.1505042031
10	1.6	1.9	2	2	2.1	2	2	1.9	1.6	1.7	1.4	1.5	1.808333333	0.2353269808
15	2.1	2.4	2.5	2.6	2.6	2.5	2.4	2.3	2.1	2.2	1.8	2.1	2.3	0.2449489743
20	2.5	2.8	2.9	3	3	3	2.7	2.8	2.6	2.6	2.1	2.5	2.708333333	0.2678477632
30	3.2	3.4	3.5	3.6	3.7	3.6	3.3	3.4	3.2	3.3	2.8	3.3	3.358333333	0.2391588796
40	3.7	4	4.1	4.2	4.3	4.3	4	4	4.8	3.9	3.3	4	4.05	0.3605551275
50	4.2	4.5	4.6	4.7	4.8	4.8	4.4	4.4	4.3	4.4	3.8	4.6	4.458333333	0.2810963385
60	4.6	4.8	5	5.1	5.2	5.3	4.7	4.7	4.6	4.8	4.1	5	4.825	0.3250874008
70	5.1	5.2	5.4	5.5	5.5	5.6	5.2	5.1	5	5.1	4.5	5.5	5.225	0.3048844789
80	5.4	5.5	5.7	5.8	5.9	6	5.5	5.4	5.3	5.4	4.9	5.8	5.55	0.3060005942
90	5.7	5.7	6	6.2	6.2	6.2	5.7	5.7	5.6	5.7	5.2	6.1	5.833333333	0.3084663923
100	6.1	6	6.3	6.4	6.5	6.5	6	6	5.9	6	5.4	6.4	6.125	0.3165869118
110	6.4	6.3	6.5	6.7	6.7	6.7	6.3	6.3	6.1	6.2	5.6	6.6	6.366666667	0.3171845844

video taken 12.16.22, analyzed 12.17.22
unlaminated 0.2in roll-to-roll

Time	sqrt time	lane 1	lane 2	lane 3	lane 4	lane 5	lane 6	lane 7	lane 8	lane 9	lane 10	lane 11	lane 12	Average (cm)	stdev
1	1	0	0	0	0.1	0.1	0.1	0.2	0.2	0.2	0.3	0.4	0.4	0.166666667	0.1435481125
2	1.414213562	0.5	0.5	0.6	0.6	0.6	0.7	0.6	0.7	0.8	0.8	0.9	0.8	0.675	0.1288057029
5	2.236067977	1	1.1	1.1	1.2	1.2	1.3	1.2	1.1	1.3	1.3	1.4	1.3	1.208333333	0.1164500153
7	2.645751311	1.3	1.3	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.5	1.4	1.6	1.5	1.416666667
10	3.16227766	1.5	1.5	1.6	1.7	1.6	1.5	1.5	1.6	1.7	1.7	1.8	1.6	1.608333333	0.09962049199
15	3.872983346	2	2	2	2.2	2	2	2	2	2.1	2.2	2.2	2.3	2.1	2.075
20	4.472135955	2.3	2.3	2.4	2.5	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.6	2.4	2.391666667
30	5.477225575	2.8	2.7	2.8	3.2	2.8	2.7	2.8	2.8	2.8	2.9	3	3	2.9	2.866666667
40	6.32455532	3.3	3.2	3.3	3.5	3.2	3.2	3.2	3.3	3.4	3.4	3.5	3.5	3.3	3.316666667
50	7.071067812	3.7	3.6	3.7	3.8	3.6	3.6	3.6	3.5	3.7	3.7	3.8	3.8	3.7	3.683333333
60	7.745966692	3.9	3.8	3.9	4	3.8	3.9	3.8	4	4	4	4.2	4	4	3.941666667
70	8.366600265	4.3	4.2	4.3	4.4	4.1	4.2	4.1	4.3	4.4	4.4	4.4	4.4	4.2	4.275
80	8.94427191	4.5	4.4	4.4	4.6	5.5	5.5	5.4	4.5	4.6	4.7	4.7	4.5	4.775	0.4287932326
90	9.486832981	4.7	4.6	4.7	4.8	4.6	4.6	4.6	4.8	4.8	4.8	4.9	4.9	4.7	4.725
100	10	5	4.8	4.9	5	4.8	4.9	4.8	5	5.2	5.2	5.2	5	4.983333333	0.1527525232
110	10.48808848	5.3	5.1	5.2	5.4	5	5.1	5	5.3	5.3	5.4	5.4	5.2	5.225	0.1484771179
120	10.95445115	5.4	5.2	5.4	5.5	5.2	5.3	5.3	5.5	5.5	5.6	5.7	5.6	5.433333333	0.161432977

video taken 12.16.22, analyzed 12.17.22
laminated 0.2in roll-to-roll

Time	sqrt time	lane 1	lane 2	lane 3	lane 4	lane 5	lane 6	lane 7	lane 8	lane 9	lane 10	lane 11	lane 12	average (cm)	stdev
1	1	0	0	0	0	0	0	0.1	0.1	0.1	0.2	0.2	0.2	0.075	0.08660254038
2	1.414213562	0.4	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.5	1.4	0.6083333333
5	2.236067977	1.6	1.6	1.6	1.5	1.4	1.3	1.5	1.4	1.4	1.5	1.5	1.5	2.2	1.541666667
7	2.645751311	2.1	1.9	1.8	1.7	1.7	1.6	1.8	1.7	1.8	1.8	1.8	1.7	2.4	1.833333333
10	3.16227766	2.4	2.2	2.1	2	2.2	2	2.3	2	2	2.1	2.3	2.6	2.183333333	0.1898963034
15	3.872983346	2.9	2.6	2.5	2.5	2.5	2.4	2.7	2.4	2.4	2.5	2.5	2.7	3.1	2.6
20	4.472135955	3.3	2.9	2.8	2.8	2.9	2.7	3	2.7	2.7	2.7	3	3.4	2.908333333	0.2353269808
30	5.477225575	3.7	3.4	3.3	3.3	3.5	3.4	3.7	3.3	3.3	3.4	3.4	3.6	3.9	3.491666667
40	6.32455532	4.3	3.8	3.7	3.8	3.9	3.8	4.4	3.6	3.7	3.8	4	4.4	3.933333333	0.2806917861
50	7.071067812	4.7	4.1	4	4.1	4.4	4.3	4.9	4	4.2	4.2	4.2	4.4	4.8	4.341666667
60	7.745966692	5.2	4.4	4.3	4.4	4.6	4.6	5.4	4.3	4.4	4.4	4.9	5.2	4.675	0.3957156922
70	8.366600265	5.5	4.7	4.6	4.6	5	5	5.7	4.5	5.7	4.7	5.2	5.4	5.05	0.4421024151
80	8.94427191	5.8	5	4.9	5	5.4	5.4	6.2	4.9	5	5	5.4	5.7	5.308333333	0.4187825067
90	9.486832981	6.1	5.3	5.2	5.3	5.6	5.6	6.4	5.1	5.4	5.4	5.7	6	5.591666667	0.3964807305
100	10	6.4	5.5	5.4	5.5	5.9	5.9	6.7	5.4	5.6	5.5	5.9	6.3	5.833333333	0.4334498678

data collected June 22, 2021																	
7.5mm wax																	
time (s)	sqrt t															Average Distance	stdev
1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2	1.414214	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.708333	0.028868
5	2.236068	1.2	1.2	1.1	1.2	1.2	1.2	1.1	1.2	1.2	1.2	1.2	1.2	1.1	1.175	0.045227	
7	2.645751	1.5	1.4	1.4	1.5	1.5	1.4	1.5	1.5	1.5	1.5	1.5	1.4	1.4	1.458333	0.051493	
10	3.162278	1.7	1.7	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.7	1.6	1.6	1.6	1.666667	0.049237	
15	3.872983	2.2	2.1	2	2.1	2.1	2	2	2.1	2.1	2.1	2	2	2.1	2.066667	0.065134	
20	4.472136	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.5	2.4	2.4	2.4	2.4	2.408333	0.028868	
30	5.477226	3	2.9	2.9	2.9	3	2.9	2.9	2.9	2.9	3	2.9	2.9	3	2.933333	0.049237	
40	6.324555	3.4	3.4	3.3	3.4	3.4	3.3	3.3	3.4	3.5	3.4	3.3	3.4	3.4	3.375	0.062158	
50	7.071068	3.7	3.7	3.6	3.7	3.8	3.6	3.7	3.7	3.7	3.8	3.7	3.6	3.7	3.691667	0.066856	
60	7.745967	4	4	3.9	4	4.1	4	4	4.1	4.2	4	3.9	4	4	4.016667	0.083485	
70	8.3666	4.3	4.3	4.2	4.3	4.4	4.3	4.2	4.3	4.5	4.3	4.2	4.3	4.3	4.3	0.08528	
80	8.944272	4.5	4.5	4.4	4.5	4.6	4.7	4.6	4.6	4.6	4.7	4.5	4.4	4.4	4.55	0.1	
90	9.486833	4.7	4.7	4.7	4.8	4.8	4.8	4.9	4.9	4.9	5	4.8	4.7	4.8	4.8	0.095346	
100	10	5	5	4.9	5	5	5	5	5	5.1	5.2	5	4.9	5	5.008333	0.079296	
110	10.48809	5.3	5.3	5.2	5.3	5.3	5.2	5.2	5.3	5.5	5.2	5.3	5.3	5.3	5.283333	0.083485	
120	10.95445	5.4	5.4	5.3	5.4	5.4	5.4	5.4	5.5	5.6	5.4	5.3	5.5	5.5	5.416667	0.083485	

June 22, 2021 Ahlstrom 319 on artgraphix adhesive laser cut, stuck to cline transparency film, stuck in 1cm di water with 2 drops blue food coloring, videoed up to 3 minutes

7.5mm transparency

time (s)	sqrt t	distance (lane 1)													Average	stdev
1	1	0	0	0	0	0	0	0	0.7	0.7	0.6	0.6	0.6	0.5	0.308333	0.326018
2	1.414214	0.7	0.7	0.7	0.7	0.8	0.7	0.9	0.8	0.8	0.8	0.8	0.7	0.7	0.75	0.06742
5	2.236068	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	1.3	1.2	1.2	1.1	1.3	0.095346	
7	2.645751	1.6	1.6	1.6	1.6	1.7	1.6	1.6	1.6	1.6	1.5	1.5	1.4	1.575	0.075378	
10	3.162278	1.9	1.9	1.9	1.9	2	1.9	1.9	1.8	1.8	1.7	1.7	1.6	1.833333	0.11547	
15	3.872983	2.3	2.3	2.3	2.3	2.4	2.3	2.3	2.3	2.2	2.2	2.1	2	2.25	0.108711	
20	4.472136	2.6	2.5	2.5	2.6	2.7	2.6	2.6	2.7	2.5	2.6	2.5	2.4	2.566667	0.088763	
30	5.477226	3.2	3.1	3.1	3.2	3.3	3.1	3.2	3.2	3	3	3	2.8	3.1	0.13484	
40	6.324555	3.6	3.6	3.6	3.7	3.8	3.6	3.6	3.6	3.5	3.5	3.4	3.3	3.566667	0.130268	
50	7.071068	4	3.9	3.9	4	4.1	3.9	4	4	3.9	3.9	3.8	3.6	3.916667	0.12673	
60	7.745967	4.4	4.3	4.3	4.4	4.5	4.3	4.3	4.3	4.2	4.3	4.1	3.9	4.275	0.154479	
70	8.3666	4.6	4.6	4.6	4.7	4.8	4.6	4.7	4.7	4.5	4.6	4.4	4.3	4.591667	0.137895	
80	8.944272	4.9	4.8	4.8	5	5.1	4.8	5	5	4.8	4.9	4.7	4.6	4.866667	0.143548	
90	9.486833	5.2	5.1	5.1	5.3	5.3	5.1	5.2	5.2	5.1	5.2	5	4.8	5.133333	0.137069	
100	10	5.4	5.4	5.4	5.5	5.6	5.4	5.4	5.4	5.3	5.4	5.2	5	5.366667	0.149747	
110	10.48809	5.7	5.6	5.6	5.8	5.8	5.5	5.7	5.7	5.5	5.6	5.5	5.3	5.608333	0.144338	
120	10.95445	5.9	5.9	5.9	6	6	5.8	5.9	5.9	5.8	5.9	5.7	5.5	5.85	0.13817	

videos collected 09.12.2022. Analyzed 09.13.2022. Hydrophobically coated polystyrene "Trycite" obtained from Serim. Alhstrom 319, artgraphix adhesive, laser cut. 1 cm water, 2 drops blue food color

7.5mm trycite																
time (s)	sqrt t	lane 1	lane 2	lane 3	lane 4	lane 5	lane 6	lane 7	lane 8	lane 9	lane 10	lane 11	lane 12	Average	stdev	
1	1	0.2	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.1833333333	0.03892494721
2	1.414214	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.6333333333	0.04923659639
5	2.236068	1.3	1.3	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.2	1.3	1.3	1.3	1.241666667	0.05149286505
7	2.645751	1.5	1.5	1.4	1.4	1.4	1.5	1.4	1.4	1.4	1.3	1.4	1.5	1.5	1.4333333333	0.06513389473
10	3.162278	1.7	1.6	1.6	1.6	1.7	1.7	1.7	1.7	1.7	1.7	1.8	1.8	1.8	1.7	0.07385489459
15	3.872983	2.2	2.1	2	2	2	2.1	2	2	2	2	2	2.1	2.2	2.0583333333	0.07929614611
20	4.472136	2.5	2.5	2.4	2.4	2.4	2.4	2.4	2.4	2.3	2.4	2.4	2.4	2.5	2.416666667	0.05773502692
30	5.477226	2.9	2.9	2.8	2.8	2.9	2.9	2.8	2.8	2.8	2.9	2.9	3	3	2.8833333333	0.07177405626
40	6.324555	3.4	3.4	3.3	3.4	3.4	3.4	3.3	3.3	3.3	3.3	3.2	3.3	3.4	3.341666667	0.06685579234
50	7.071068	3.7	3.7	3.6	3.6	3.7	3.7	3.6	3.6	3.6	3.6	3.7	3.7	3.8	3.666666667	0.06513389473
60	7.745967	4	4	3.9	4	4	4	4	4	4	3.9	4	4	4.1	3.991666667	0.05149286505
70	8.3666	4.4	4.4	4.2	4.3	4.4	4.4	4.3	4.3	4.3	4.2	4.3	4.4	4.4	4.3333333333	0.07784989442
80	8.944272	4.7	4.7	4.5	4.6	4.7	4.6	4.6	4.5	4.5	4.5	4.6	4.6	4.7	4.6083333333	0.07929614611
90	9.486833	4.9	4.9	4.8	4.8	4.9	4.9	4.8	4.7	4.7	4.7	4.8	4.8	4.9	4.825	0.07537783614
100	10	5.1	5.1	4.9	5	5.1	5.1	5	5	5	4.9	5	5	5.2	5.0333333333	0.08876253646
110	10.48809	5.3	5.4	5.2	5.3	5.4	5.4	5.4	5.3	5.2	5.2	5.3	5.3	5.4	5.316666667	0.08348471099
120	10.95445	5.5	5.5	5.4	5.5	5.5	5.5	5.5	5.5	5.4	5.4	5.5	5.5	5.5	5.475	0.04522670169