

## LAMPIRAN

Lampiran 1. Tabel Temperatur

Waktu	Temperatur				
Detik	100% Cangkang	75% Cangkang	50% Cangkang	25% Cangkang	0% Cangkang
1	30.653	32.286	33.956	33.363	34.753
2	30.944	32.992	33.987	32.956	35.451
3	31.352	33.632	35.945	32.956	35.975
4	31.875	34.097	36.003	32.196	36.615
5	32.341	34.621	36.935	31.905	37.197
6	32.69	35.203	39.204	31.73	37.522
7	33.214	35.785	39.357	31.846	37.929
8	33.621	36.134	40.056	31.788	38.162
9	33.912	36.484	40.924	31.905	38.569
10	34.442	36.891	41.967	31.846	38.918
11	34.733	37.109	43.299	31.963	39.209
12	35.14	37.516	44.515	32.603	39.617
13	35.664	37.807	45.789	32.432	39.85
14	36.071	38.098	47.295	32.607	40.198
15	36.653	38.447	48.627	32.956	40.14
16	36.77	38.564	50.836	33.363	40.138
17	37.468	38.971	52.45	33.654	39.964
18	38.108	39.204	53.948	34.178	40.601
19	38.399	39.553	54.928	34.644	40.601
20	38.853	39.902	55.504	34.818	40.717
21	39.376	40.076	57.983	35.459	40.891
22	39.784	40.366	59.654	36.273	41.006
23	40.248	40.771	61.434	36.275	41.122
24	40.769	40.713	62.352	36.683	41.238
25	41.406	41.119	62.753	37.032	41.537
26	41.986	41.408	64.124	37.439	41.595
27	42.333	41.582	65.558	38.138	41.711
28	42.97	41.872	67.05	38.254	41.943
29	43.525	42.103	67.336	39.011	42.117
30	44.22	42.189	68.598	39.243	42.348
31	44.278	42.536	69.516	39.36	42.522
32	45.262	42.594	70.604	40.022	42.754
33	46.478	42.884	71.463	40.544	42.927

Waktu	Temperatur				
Detik	100% Cangkang	75% Cangkang	50% Cangkang	25% Cangkang	0% Cangkang
34	46.71	43.173	72.264	41.007	43.217
35	47.637	43.289	73.008	41.412	43.436
36	48.737	43.521	73.751	41.702	43.61
37	48.969	43.811	74.381	42.339	43.899
38	50.011	44.1	74.953	42.745	44.131
39	51.088	44.216	75.64	43.324	44.363
40	51.953	45.145	76.212	43.729	44.594
41	52.76	44.972	76.841	44.077	44.768
42	53.682	45.145	77.299	44.573	45.115
43	54.489	45.551	77.814	45.094	45.347
44	55.296	45.783	78.272	44.747	45.689
45	56.276	46.072	78.533	45.442	45.921
46	57.14	46.362	79.048	46.311	46.211
47	58.062	46.709	79.505	46.426	46.5
48	58.997	46.941	79.849	47.063	46.732
49	59.746	47.142	80.25	47.179	47.021
50	60.665	47.49	80.479	47.701	47.369
51	61.468	47.837	80.766	48.435	47.601
52	62.443	48.011	81.053	48.783	47.832
53	63.304	48.416	81.282	49.188	48.122
54	64.279	48.648	81.547	49.999	48.411
55	65.082	49.285	81.719	50.057	48.701
56	65.77	49.285	81.891	51.21	48.991
57	66.635	49.864	82.235	51.44	49.28
58	67.61	49.748	82.407	52.016	49.628
59	68.585	50.133	82.464	52.362	49.801
60	69.56	50.479	82.808	52.65	50.206
61	70.534	50.767	82.866	52.855	50.436
62	71.278	51.055	82.923	53.201	50.782
63	72.194	51.574	83.038	53.892	51.108
64	72.995	51.862	83.183	54.296	51.338
65	73.853	52.323	83.24	54.815	51.742
66	74.654	52.439	83.355	55.679	52.03
67	75.898	52.842	83.412	55.967	52.318
68	76.699	53.095	83.584	56.428	52.606
69	77.157	53.499	83.642	56.717	52.952
70	78.13	53.787	83.527	57.627	53.183

Waktu	Temperatur				
Detik	100% Cangkang	75% Cangkang	50% Cangkang	25% Cangkang	0% Cangkang
71	78.931	54.306	83.642	58.319	53.471
72	80.018	54.594	83.699	58.78	53.854
73	80.821	55.055	83.978	59.356	54.142
74	81.624	55.458	84.115	59.587	54.488
75	82.312	55.747	84.173	60.163	54.776
76	83.1	56.208	84.23	60.679	55.064
77	83.731	56.496	84.597	61.252	55.41
78	84.534	56.945	84.654	61.711	55.756
79	85.337	57.29	84.998	62.285	56.044
80	86.197	57.752	85.056	62.45	56.332
81	87.001	57.867	85.5	62.737	56.678
82	87.631	58.328	85.736	63.54	57.026
83	88.434	58.674	85.736	64.228	57.43
84	89.123	59.308	85.909	64.917	57.718
85	90.098	59.769	85.622	64.687	58.064
86	90.963	60.229	86.023	64.687	58.41
87	91.481	60.473	86.023	66.121	58.755
88	92.228	61.104	86.253	66.982	59.101
89	92.976	61.391	86.31	67.113	59.389
90	93.608	61.85	86.425	67.743	59.793
91	94.356	62.366	86.592	68.547	60.123
92	95.046	62.768	86.764	68.776	60.41
93	95.793	63.169	86.822	68.719	60.754
94	96.368	63.628	87.338	69.808	61.098
95	96.985	64.087	87.51	69.866	61.5
96	97.675	64.603	87.567	70.495	61.786
97	98.193	65.077	87.617	70.896	62.073
98	98.825	65.478	88.363	71.126	62.532
99	99.458	65.995	88.477	71.641	62.819
100	100.09	66.454	88.535	72.041	63.163
101	100.6	66.97	88.68	72.499	63.567
102	101.18	67.486	88.794	73.014	64.026
103	101.87	67.888	89.024	73.415	64.312
104	102.39	68.404	89.138	73.815	64.714
105	102.97	68.863	89.253	74.216	65.058
106	103.6	69.531	89.425	74.502	65.402
107	103.89	69.933	89.597	74.96	65.804

Waktu	Temperatur				
Detik	100% Cangkang	75% Cangkang	50% Cangkang	25% Cangkang	0% Cangkang
108	104.52	70.391	89.769	75.519	66.148
109	104.93	70.906	89.827	75.92	66.549
110	105.5	71.363	90.052	76.32	66.953
111		71.936	90.454	76.778	67.355
112		72.451	90.627	77.064	67.699
113		72.908	90.742	77.579	68.158
114		73.481	90.914	77.98	68.444
115		74.053	91.029	78.38	68.846
116		74.575	91.336	78.781	69.19
117		74.919	91.509	79.218	69.649
118		75.491	91.681	79.619	70.05
119		76.12	91.854	80.019	70.394
120		76.578	91.969	80.364	70.846
121		77.093	92.141	80.65	71.247
122		77.493	92.256	81.052	71.647
123		78.008	92.644	81.568	71.991
124		78.638	92.759	81.798	72.391
125		79.233	92.816	82.199	72.735
126		79.805	93.046	82.543	73.192
127		80.091	93.161	82.96	73.593
128		80.722	93.334	83.304	73.936
129		81.296	93.449	83.763	74.366
130		81.754	93.679	83.992	74.824
131		82.156	93.794	84.336	75.167
132		82.787	93.951	84.795	75.625
133		83.131	94.066	85.025	75.969
134		83.705	94.239	85.369	76.369
135		84.201	94.411	85.77	76.827
136		84.717	94.584	86.181	77.17
137		85.234	94.699	86.468	77.685
138		85.692	94.871	86.927	78.001
139		86.209	94.986	87.214	78.459
140		86.668	95.216	87.787	78.802
141		87.069	95.361	87.902	79.203
142		87.528	95.419	88.304	79.603
143		88.044	95.591	88.762	80.004
144		88.483	95.764	88.762	80.405

Waktu	Temperatur				
Detik	100% Cangkang	75% Cangkang	50% Cangkang	25% Cangkang	0% Cangkang
145		88.942	95.936	89.221	80.749
146		89.458	96.051	89.77	81.151
147		89.86	96.224	89.999	81.552
148		90.319	96.396	90.286	81.956
149		90.779	96.569	90.516	82.415
150		91.182	96.741	90.804	82.816
151		91.642	96.886	91.264	83.161
152		91.987	97.001	91.551	83.62
153		92.492	97.174	91.724	83.964
154		92.895	97.346	92.184	84.308
155		93.297	97.461	92.371	84.709
156		93.7	97.634	92.601	85.053
157		94.159	97.749	92.889	85.435
158		94.562	97.921	93.234	85.894
159		94.849	98.036	93.521	86.238
160		95.252	98.216	93.751	86.639
161		95.597	98.389	94.039	87.041
162		95.999	98.561	94.326	87.385
163		96.444	98.676	94.556	87.787
164		96.732	98.849	94.844	88.131
165		97.249	99.021	94.924	88.532
166		97.479	99.136	95.039	88.876
167		97.882	99.309	95.671	89.258
168		98.227	99.481	95.786	89.659
169		98.572	99.596	95.843	90.003
170		98.917	99.719	96.246	90.348
171		99.262	99.891	96.476	90.693
172		99.609	100	96.821	91.038
173		99.897	100.23	96.993	91.383
174		100.24	100.29	97.603	91.786
175		100.58	100.46	97.603	92.131
176		100.87	100.64	97.833	92.513
177		101.22	100.75	98.178	92.916
178		101.51	100.92	98.293	93.203
179		101.79	101.03	98.523	93.606
180		102.14	101.2	98.753	93.893
181		102.43	101.37	98.983	94.238

Waktu	Temperatur				
Detik	100% Cangkang	75% Cangkang	50% Cangkang	25% Cangkang	0% Cangkang
182		102.86	101.49	99.155	94.583
183		103.09	101.66	99.195	94.871
184		103.43	101.78	99.483	95.273
185		103.72	101.95	99.598	95.618
186		104.01	102.07	99.828	95.966
187		104.3	102.3	100.05	96.311
188		104.53	102.43	100.4	96.656
189		104.87	102.61	100.63	96.943
190		105.1	102.72	100.92	97.346
191			102.84	101.09	97.633
192			103.18	101.32	97.978
193			103.58	101.63	98.323
194			103.98	101.74	98.611
195			104.27	102.09	99.016
196			104.02	102.2	99.361
197			104.43	102.38	99.648
198			104.66	102.55	99.936
199			104.89	102.78	100.33
200			105.18	102.95	100.57
201				103.18	100.91
202				103.41	101.2
203				103.58	101.55
204				103.93	101.83
205				104.04	102.2
206				104.22	102.54
207				104.45	102.83
208				104.5	103.12
209				104.73	103.46
210				105.02	103.75
211					104.04
212					104.39
213					104.62
214					105.05

Lampiran 2. Tabel Massa

Waktu	Massa				
Detik	100% Cangkang	75% Cangkang	50% Cangkang	25% Cangkang	0% Cangkang
1	30.992	31.346	30.689	31.18	31.919
2	30.983	31.244	30.662	31.163	31.846
3	30.962	31.199	30.637	31.06	31.835
4	30.887	31.136	30.606	31.01	31.829
5	30.795	31.023	30.589	30.789	31.795
6	30.764	30.992	30.559	30.574	31.769
7	30.736	30.971	30.531	30.556	31.757
8	30.688	30.952	30.5	30.528	31.751
9	30.615	30.934	30.473	30.393	31.708
10	30.556	30.915	30.469	30.349	31.634
11	30.537	30.876	30.465	30.301	31.595
12	30.512	30.859	30.461	30.289	31.589
13	30.505	30.859	30.457	30.269	31.57
14	30.525	30.857	30.455	30.252	31.556
15	30.498	30.851	30.437	30.243	31.556
16	30.468	30.836	30.419	30.221	31.555
17	30.434	30.816	30.401	30.21	31.496
18	30.412	30.782	30.383	30.211	31.451
19	30.386	30.714	30.365	30.199	31.403
20	30.354	30.634	30.347	30.182	31.307
21	30.35	30.604	30.329	30.171	31.255
22	30.325	30.559	30.311	30.162	31.235
23	30.264	30.492	30.273	30.139	31.222
24	30.191	30.462	30.235	30.135	31.183
25	30.141	30.404	30.179	30.127	31.152
26	30.066	30.33	30.134	30.113	31.153
27	29.986	30.311	30.112	30.111	31.15
28	29.948	30.294	30.083	30.091	31.138
29	29.935	30.253	30.076	30.08	31.1
30	29.928	30.23	30.059	30.068	31.073
31	29.919	30.216	30.051	30.059	31.068
32	29.917	30.193	30.028	30.047	31.07
33	29.9	30.183	29.984	30.039	31.074
34	29.871	30.17	29.952	30.035	31.083
35	29.868	30.163	29.916	30.031	31.074
36	29.829	30.159	29.885	30.027	31.026

Waktu	Massa				
Detik	100% Cangkang	75% Cangkang	50% Cangkang	25% Cangkang	0% Cangkang
37	29.817	30.19	29.861	30.022	31.011
38	29.8	30.193	29.837	30.021	31.012
39	29.78	30.204	29.82	30.019	31.016
40	29.757	30.193	29.804	30.02	31.018
41	29.747	30.188	29.794	30.02	31.014
42	29.733	30.186	29.79	30.018	30.997
43	29.722	30.176	29.787	30.015	30.978
44	29.713	30.17	29.783	30.015	30.964
45	29.7	30.168	29.775	30.012	30.95
46	29.689	30.166	29.766	30.01	30.956
47	29.684	30.163	29.753	30.002	30.969
48	29.678	30.159	29.744	30.005	30.982
49	29.672	30.155	29.737	30.007	30.985
50	29.667	30.147	29.729	30.009	30.988
51	29.66	30.097	29.721	30.011	30.992
52	29.65	30.082	29.713	30.008	30.989
53	29.638	30.074	29.705	30.002	30.977
54	29.634	30.065	29.7	30.003	30.962
55	29.631	30.064	29.692	30.003	30.96
56	29.629	30.061	29.679	30.007	30.954
57	29.625	30.059	29.669	30.011	30.951
58	29.622	30.047	29.659	30.015	30.942
59	29.616	30.045	29.645	30.018	30.94
60	29.613	30.048	29.637	30.021	30.93
61	29.61	30.054	29.637	30.027	30.924
62	29.598	30.054	29.637	30.029	30.913
63	29.593	30.053	29.636	30.029	30.912
64	29.591	30.04	29.63	30.029	30.913
65	29.587	30.036	29.627	30.028	30.896
66	29.582	30.037	29.618	30.034	30.887
67	29.58	30.04	29.603	30.036	30.887
68	29.575	30.04	29.595	30.036	30.891
69	29.569	30.039	29.594	30.032	30.896
70	29.566	30.038	29.591	30.03	30.897
71	29.562	30.038	29.587	30.029	30.898
72	29.558	30.038	29.582	30.026	30.901
73	29.554	30.038	29.578	30.016	30.906

Waktu	Massa				
Detik	100% Cangkang	75% Cangkang	50% Cangkang	25% Cangkang	0% Cangkang
74	29.549	30.036	29.572	30.003	30.904
75	29.546	30.034	29.57	30.001	30.889
76	29.543	30.029	29.57	29.997	30.88
77	29.538	30.029	29.568	29.981	30.876
78	29.535	30.028	29.566	29.98	30.883
79	29.531	30.027	29.562	29.987	30.882
80	29.527	30.025	29.562	29.995	30.884
81	29.523	30.021	29.558	30.007	30.884
82	29.519	30.019	29.555	29.996	30.884
83	29.514	30.019	29.55	30.01	30.884
84	29.51	30.017	29.548	30.01	30.886
85	29.505	30.017	29.544	30.012	30.889
86	29.5	30.017	29.54	30.008	30.89
87	29.496	30.016	29.532	30.003	30.885
88	29.491	30.014	29.526	29.991	30.875
89	29.487	30.012	29.52	29.989	30.864
90	29.484	30.012	29.519	29.988	30.854
91	29.481	30.01	29.526	29.99	30.852
92	29.473	30.007	29.531	29.991	30.852
93	29.47	30.007	29.531	29.991	30.848
94	29.468	30.006	29.531	29.989	30.843
95	29.465	30.008	29.528	29.99	30.839
96	29.461	30.01	29.526	30.001	30.831
97	29.454	30.021	29.523	30.003	30.827
98	29.451	30.028	29.52	30.003	30.827
99	29.446	30.028	29.517	29.999	30.826
100	29.441	30.023	29.514	29.998	30.824
101	29.436	30.022	29.512	29.996	30.82
102	29.431	30.019	29.508	29.993	30.818
103	29.427	30.016	29.508	29.992	30.815
104	29.423	30.015	29.506	29.992	30.813
105	29.416	30.021	29.506	29.992	30.813
106	29.412	30.013	29.506	29.991	30.813
107	29.407	30.003	29.505	29.99	30.811
108	29.396	29.998	29.502	29.989	30.808
109	29.392	29.996	29.5	29.99	30.804
110	29.39	29.995	29.496	29.99	30.802

Waktu	Massa				
Detik	100% Cangkang	75% Cangkang	50% Cangkang	25% Cangkang	0% Cangkang
111		29.994	29.493	29.992	30.802
112		29.988	29.492	29.992	30.8
113		29.985	29.49	29.992	30.799
114		29.977	29.487	29.992	30.798
115		29.983	29.482	29.991	30.798
116		29.986	29.474	29.991	30.797
117		29.986	29.463	29.992	30.798
118		29.987	29.441	29.992	30.795
119		29.985	29.422	29.992	30.792
120		29.983	29.432	29.99	30.791
121		29.981	29.427	29.989	30.789
122		29.977	29.438	29.989	30.795
123		29.973	29.434	29.991	30.799
124		29.971	29.439	29.991	30.803
125		29.972	29.453	29.99	30.795
126		29.972	29.45	29.98	30.792
127		29.97	29.446	29.98	30.79
128		29.968	29.439	29.983	30.788
129		29.966	29.431	29.996	30.788
130		29.965	29.429	29.997	30.786
131		29.964	29.429	29.995	30.784
132		29.963	29.429	29.992	30.781
133		29.961	29.427	29.994	30.779
134		29.959	29.429	29.999	30.778
135		29.956	29.43	29.999	30.778
136		29.956	29.425	29.997	30.778
137		29.954	29.418	29.997	30.773
138		29.954	29.411	29.996	30.77
139		29.951	29.406	29.996	30.768
140		29.949	29.401	29.993	30.768
141		29.949	29.399	29.99	30.767
142		29.949	29.397	29.99	30.767
143		29.952	29.396	29.988	30.767
144		29.961	29.394	29.987	30.766
145		29.973	29.394	29.987	30.765
146		29.975	29.394	29.987	30.762
147		29.976	29.397	29.988	30.76

Waktu	Massa				
Detik	100% Cangkang	75% Cangkang	50% Cangkang	25% Cangkang	0% Cangkang
148		29.974	29.397	29.988	30.759
149		29.949	29.4	29.987	30.757
150		29.937	29.411	29.985	30.756
151		29.928	29.426	29.983	30.754
152		29.924	29.429	29.984	30.753
153		29.922	29.417	29.986	30.753
154		29.918	29.417	29.986	30.751
155		29.915	29.417	29.984	30.749
156		29.915	29.413	29.983	30.747
157		29.912	29.412	29.981	30.744
158		29.909	29.412	29.976	30.742
159		29.905	29.415	29.97	30.739
160		29.903	29.415	29.967	30.737
161		29.901	29.414	29.964	30.736
162		29.899	29.409	29.963	30.736
163		29.897	29.402	29.962	30.735
164		29.895	29.395	29.963	30.735
165		29.893	29.395	29.966	30.735
166		29.891	29.395	29.963	30.735
167		29.888	29.392	29.963	30.735
168		29.886	29.38	29.961	30.733
169		29.882	29.376	29.958	30.731
170		29.881	29.376	29.955	30.729
171		29.879	29.376	29.953	30.727
172		29.877	29.38	29.953	30.725
173		29.875	29.377	29.953	30.723
174		29.871	29.371	29.953	30.722
175		29.869	29.367	29.953	30.72
176		29.867	29.359	29.953	30.718
177		29.865	29.362	29.952	30.715
178		29.863	29.361	29.951	30.713
179		29.861	29.36	29.949	30.712
180		29.859	29.358	29.948	30.712
181		29.858	29.35	29.947	30.708
182		29.857	29.346	29.947	30.706
183		29.852	29.341	29.945	30.705
184		29.851	29.338	29.944	30.703

Waktu	Massa				
	100% Cangkang	75% Cangkang	50% Cangkang	25% Cangkang	0% Cangkang
185		29.85	29.337	29.941	30.702
186		29.85	29.336	29.938	30.699
187		29.848	29.337	29.933	30.698
188		29.845	29.338	29.928	30.697
189		29.84	29.339	29.924	30.695
190		29.839	29.338	29.922	30.695
191			29.336	29.921	30.692
192			29.334	29.928	30.691
193			29.332	29.935	30.689
194			29.33	29.935	30.687
195			29.329	29.929	30.685
196			29.328	29.919	30.683
197			29.327	29.915	30.681
198			29.327	29.915	30.678
199			29.327	29.911	30.677
200			29.328	29.911	30.676
201				29.91	30.674
202				29.907	30.671
203				29.904	30.67
204				29.898	30.669
205				29.89	30.666
206				29.89	30.666
207				29.892	30.664
208				29.892	30.661
209				29.886	30.658
210				29.878	30.657
211					30.655
212					30.652
213					30.65
214					30.647