



TECHNICAL MEMENTO



THERMAX

DENSITY OF DRY AIR AT ATMOSPHERIC PRESSURE

Temp.	Density	Sp. Heat	Viscosity	Thermal Conductivity	Prandtl No.	Kinematic Viscosity
t	ρ	Cp	$\mu \times 10^6$	k	Pr	$\nu \times 10^6$
°C	kgm/m ³	kcal/kgm°C	kgf-sec/m ²	kcal/hr m°C		m ² /sec
1	2	3	4	5	6	7
0	1.293	0.240	1.75	0.0210	0.707	13.28
10	1.247	0.240	1.80	0.0216	0.705	14.16
20	1.205	0.240	1.85	0.0223	0.703	15.06
30	1.165	0.240	1.90	0.0230	0.701	16.00
40	1.128	0.240	1.95	0.0237	0.699	16.96
50	1.093	0.240	2.00	0.0243	0.698	17.95
60	1.060	0.240	2.05	0.0249	0.696	18.97
70	1.029	0.241	2.10	0.0255	0.694	20.02
80	1.000	0.241	2.15	0.0262	0.692	21.09
90	0.972	0.241	2.19	0.0269	0.690	22.10
100	0.946	0.241	2.23	0.0276	0.688	23.12
120	0.898	0.241	2.33	0.0287	0.686	25.45
140	0.854	0.242	2.42	0.0300	0.684	27.80
160	0.815	0.243	2.50	0.0313	0.682	30.09
180	0.779	0.244	2.58	0.0325	0.681	32.49
200	0.746	0.245	2.65	0.0338	0.680	34.85
250	0.674	0.248	2.79	0.0367	0.677	40.61
300	0.615	0.250	3.03	0.0396	0.674	48.33
350	0.566	0.253	3.20	0.0422	0.676	55.46
400	0.524	0.255	3.37	0.0448	0.678	63.09
500	0.456	0.261	3.69	0.0494	0.687	79.38
600	0.404	0.266	3.99	0.0535	0.699	96.89
700	0.362	0.271	4.26	0.0577	0.706	115.4
800	0.329	0.276	4.52	0.0617	0.713	134.8
900	0.301	0.280	4.76	0.0656	0.717	155.1
1000	0.277	0.283	5.00	0.0694	0.719	177.1