

BACA GAZI FİZİKSEL ÖZELLİKLERİ

SICAKLIK T [°C]	ÖZGÜL KÜTLE ρ [kg/m³]	İLETİM KATSAYISI λ [kcal/mh°C]	ÖZGÜL ISI		DİNAMİK VİSKOZİTE μ 10⁶ [kgs/m²]	KİNEMATİK VİSKOZİTE ν 10⁴ [m²/s]	ISIL YAYINIM a [m²/h]	ISIL GENLEŞME β 10³ [1/°K]	PRANDLE Pr
0	1.295	0.0196	0.249	0.323	1.611	0.122	0.0608	3.66	0.72
100	0.950	0.0270	0.256	0.331	2.081	0.215	0.1109	2.68	0.69
200	0.748	0.0345	0.262	0.340	2.499	0.328	0.1760	2.11	0.67
300	0.617	0.0417	0.268	0.348	2.876	0.458	0.2516	1.75	0.65
400	0.525	0.0491	0.275	0.357	3.233	0.604	0.3395	1.49	0.64
500	0.457	0.0565	0.283	0.367	3.549	0.763	0.4360	1.29	0.63
600	0.405	0.0639	0.290	0.376	3.865	0.936	0.5432	1.15	0.62
700	0.363	0.0712	0.296	0.384	4.151	1.121	0.6617	1.03	0.61
800	0.330	0.0788	0.302	0.392	4.426	1.318	0.7909	0.93	0.60
900	0.301	0.0861	0.309	0.400	4.681	1.525	0.9288	0.85	0.59
1000	0.275	0.0939	0.312	0.405	4.936	1.743	1.0922	0.79	0.58
1100	0.257	0.1012	0.317	0.410	5.171	1.971	1.2438	0.73	0.57
1200	0.240	0.1087	0.321	0.415	5.405	2.210	1.4126	0.68	0.56

V. P. Isachenko, V. A. Osipova, A. S. Sukomel; HEAT TRANSFER, Mir Publishers Moscow 1977

$$\rho = 1 / (4 \times 10^{-9} T^2 + 0.0028 T + 0.7701)$$

$$\mu = 1 \times 10^{-6} \times (-9.8 \times 10^{-7} T^2 + 0.00427 T + 1.65603)$$

$$\lambda = 8 \times 10^{-10} T^2 + 7.32 \times 10^{-5} T + 0.019683$$

$$\nu = 1 \times 10^{-4} \times (6.38 \times 10^{-7} T^2 + 0.00991 T + 0.11107)$$

$$c_p = -2.28 \times 10^{-11} T^3 + 2.66 \times 10^{-8} T^2 + 5.99 \times 10^{-5} T + 0.249233$$

$$a = 5.38 \times 10^{-7} T^2 + 0.000486 T + 0.058352$$

$$c_v = -2.95 \times 10^{-11} T^3 + 3.45 \times 10^{-8} T^2 + 7.76 \times 10^{-5} T + 0.322757$$

$$Pr = -1.1 \times 10^{-10} T^3 + 2.55 \times 10^{-7} T^2 - 0.00028 T + 0.71753$$

