

Issued 1989-04
Reaffirmed 2008-07
Stabilized 2013-06
Superseding AIR4093

Compendium of Gas Properties

RATIONALE

This document has been determined to contain basic and stable technology which is not dynamic in nature.

STABILIZED NOTICE

This document has been declared "Stabilized" by the A-6C3 Fluids Committee, and will no longer be subjected to periodic reviews for currency. Users are responsible for verifying references and continued suitability of technical requirements. Newer technology may exist.

SAENORM.COM : Click to view the full PDF of air4093A

SAE Technical Standards Board Rules provide that: "This report is published by SAE to advance the state of technical and engineering sciences. The use of this report is entirely voluntary, and its applicability and suitability for any particular use, including any patent infringement arising therefrom, is the sole responsibility of the user."

SAE reviews each technical report at least every five years at which time it may be revised, reaffirmed, stabilized, or cancelled. SAE invites your written comments and suggestions.

Copyright © 2013 SAE International

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of SAE.

TO PLACE A DOCUMENT ORDER: Tel: 877-606-7323 (inside USA and Canada)
Tel: +1 724-776-4970 (outside USA)
Fax: 724-776-0790
Email: CustomerService@sae.org
http://www.sae.org

SAE WEB ADDRESS:

**SAE values your input. To provide feedback
on this Technical Report, please visit
<http://www.sae.org/technical/standards/AIR4093A>**

TABLE OF CONTENTS

	PAGE
1. INTRODUCTION	3
2. COMPRESSIBLE FLOW THROUGH RESTRICTIONS	3
3. NITROGEN DATA	5
Density vs. Pressure and Temperature - Nitrogen	7
Pressure vs. Entropy and Temperature - Nitrogen	8
Pressure vs. Enthalpy and Temperature - Nitrogen	9
Absolute Viscosity vs. Pressure and Temperature - Nitrogen	10
Specific Heat at Constant Pressure vs. Pressure and Temperature - Nitrogen	11
N Tables for $\gamma = 1.40$ (Nitrogen)	12
Tabular Data for Density, Entropy, Enthalpy, Viscosity, Specific Heat	18
4. HELIUM DATA	6
Density vs Pressure and Temperature - Helium	39
Pressure vs. Entropy and Temperature - Helium	40

TABLE OF CONTENTS (Continued)

	PAGE
Pressure vs. Enthalpy and Temperature - Helium	41
Absolute Viscosity vs. Pressure and Temperature - Helium	42
Specific Heat at Constant Pressure vs. Pressure and Temperature - Helium	43
N Tables for $\gamma = 1.667$ (Helium)	44
Tabular Data for Density, Entropy, Enthalpy, Viscosity, Specific Heat	50
5. ARGON DATA	6
Density vs. Pressure and Temperature - Argon	71
Pressure vs. Entropy and Temperature - Argon	72
Pressure vs. Enthalpy and Temperature - Argon	73
Absolute Viscosity vs. Pressure and Temperature - Argon	74
Specific Heat at Constant Pressure vs. Pressure and Temperature - Argon	75
Tabular Data for Density, Entropy, Enthalpy, Viscosity, Specific Heat	76

LIST OF TABLES

I. GAS CONSTANTS FOR COMMON GASES	5
-----------------------------------	---

1. INTRODUCTION:

This compendium is provided to facilitate the computation of compressible flow through restrictions. In addition, graphical data are provided for characterizing nitrogen, helium, and argon gases. The information presented is density, entropy, enthalpy, viscosity, and specific heat as functions of pressure and temperature.

Information for Section 2, Compressible Flow through Restrictions, was extracted from The Analysis and Design of Pneumatic Systems, Andersen, Blaine W.; John Wiley and Sons, Inc., New York, 1967, pp. 17-21.

The information for Sections 3 and 4, Thermodynamic and Physical Properties of Nitrogen and Helium, was generated using a Garrett Fluid Systems Company computer program. The program utilizes equations and coefficients obtained from the National Bureau of Standards and was written by the late Dr. William G. Harrach.

The information for Section 5, Thermodynamic and Physical Properties of Argon, was generated using a computer program supplied by the National Bureau of Standards.

2. COMPRESSIBLE FLOW THROUGH RESTRICTIONS:

Consider the duct illustrated in Fig. 1.

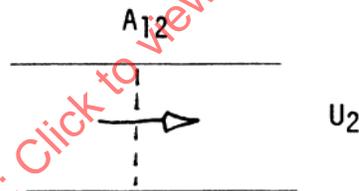


FIGURE 1

At some section, A_{12} , the velocity is U_2 and the static pressure is P_2 . The total pressure, P_1 , is defined as the pressure at the local isentropic stagnation state. The equation for total pressure is

$$P_1 = P_2 \left[1 - \frac{(\gamma - 1) U_2^2}{2\gamma g_c R T_1} \right]^{-\frac{\gamma}{\gamma - 1}} \quad (1)$$

where γ is the ratio of specific heats
 g_c gravitational constant (32.17 ft/lbm/lbf·s²)
 R gas constant, in/·R
 T_1 gas total temperature, ·R

Solving equation (1) for velocity gives

$$U_2 = \left\{ \frac{2\delta g_c RT_1}{\delta - 1} \left[1 - \left(\frac{P_2}{P_1} \right)^{\frac{\delta - 1}{\delta}} \right] \right\}^{1/2} \quad (2)$$

If the velocity is considered uniform across the area A_{12} , the weight flow is given by the equation

$$W_{12} = \rho_2 A_{12} U_2 \quad (3)$$

where ρ_2 is the gas density.

The isentropic process relating P_1 and P_2 determines the relationships between temperature and pressure and between density and pressure. These relationships are

$$\frac{\rho_2}{\rho_1} = \left(\frac{P_2}{P_1} \right)^{1/\delta} \quad (4)$$

$$\frac{T_2}{T_1} = \left(\frac{P_2}{P_1} \right)^{\frac{\delta - 1}{\delta}} \quad (5)$$

The equation of state relates static pressure, density, and temperature by the gas constant, R . For ideal gases, this is

$$P = \rho RT \quad (6)$$

From equations 4 and 6, the relation of static density to pressure ratio and total pressure becomes

$$\rho_2 = \frac{P_1}{RT_1} \left(\frac{P_2}{P_1} \right)^{1/\delta} \quad (7)$$

Substituting equations 2 and 7 into 3 and combining terms leads to the expression for weight flow

$$W_{12} = \frac{A_{12} P_1}{\sqrt{T_1}} \left\{ \frac{2\delta g_c}{(\delta - 1) R} \left[\left(\frac{P_2}{P_1} \right)^{2/\delta} - \left(\frac{P_2}{P_1} \right)^{\frac{\delta + 1}{\delta}} \right] \right\}^{1/2} \quad (8)$$

In applying equation 8 it is convenient to define a parameter, N_{12} , which is the ratio of actual weight flow to sonic flow for a given ratio of static to total pressure.

$$N_{12} = \left\{ \frac{\left(\frac{P_2}{P_1} \right)^{2/\delta} - \left(\frac{P_2}{P_1} \right)^{\frac{\delta + 1}{\delta}}}{\frac{\delta - 1}{2} \left(\frac{2}{\delta + 1} \right)^{\frac{\delta + 1}{\delta - 1}}} \right\}^{1/2} \quad (9)$$

Using N_{12} to simplify equation 8 gives

$$W_{12} = \frac{K P_1 A_{12} N_{12}}{\sqrt{T_1}} \quad (10)$$

The factor K is given by

$$K = \left[\frac{\delta g_c}{R} \left(\frac{2}{\delta + 1} \right)^{\frac{\delta+1}{\delta-1}} \right]^{1/2} \quad (10)$$

Gamma, R, and K values for several common gases are presented in Table I.

TABLE I - Gas Constants For Common Gases

Gas	δ	R	K
		$\frac{\text{lb}_f\text{-in}}{\text{lbm}\text{-}^\circ\text{R}}$	$\frac{\text{lbm}\text{-}\sqrt{^\circ\text{R}}}{\text{lb}_f\text{-s}}$
Air	1.40	639.6	0.5318
Nitrogen	1.40	661.9	0.5229
Hydrogen	1.40	9202.	0.1402
Oxygen	1.40	579.7	0.5586
Helium	1.66	4636.	0.2077
Methane	1.30	1156.	0.3856
Argon	1.66	464.4	0.6626

3. NITROGEN DATA:

Graphical Data:

Density vs. Pressure, Temperature
 Pressure vs. Entropy, Temperature
 Pressure vs. Enthalpy, Temperature
 Viscosity vs. Pressure, Temperature
 Specific Heat vs. Pressure, Temperature
 N Tables
 Tabular Data

4. HELIUM DATA:

Graphical Data:

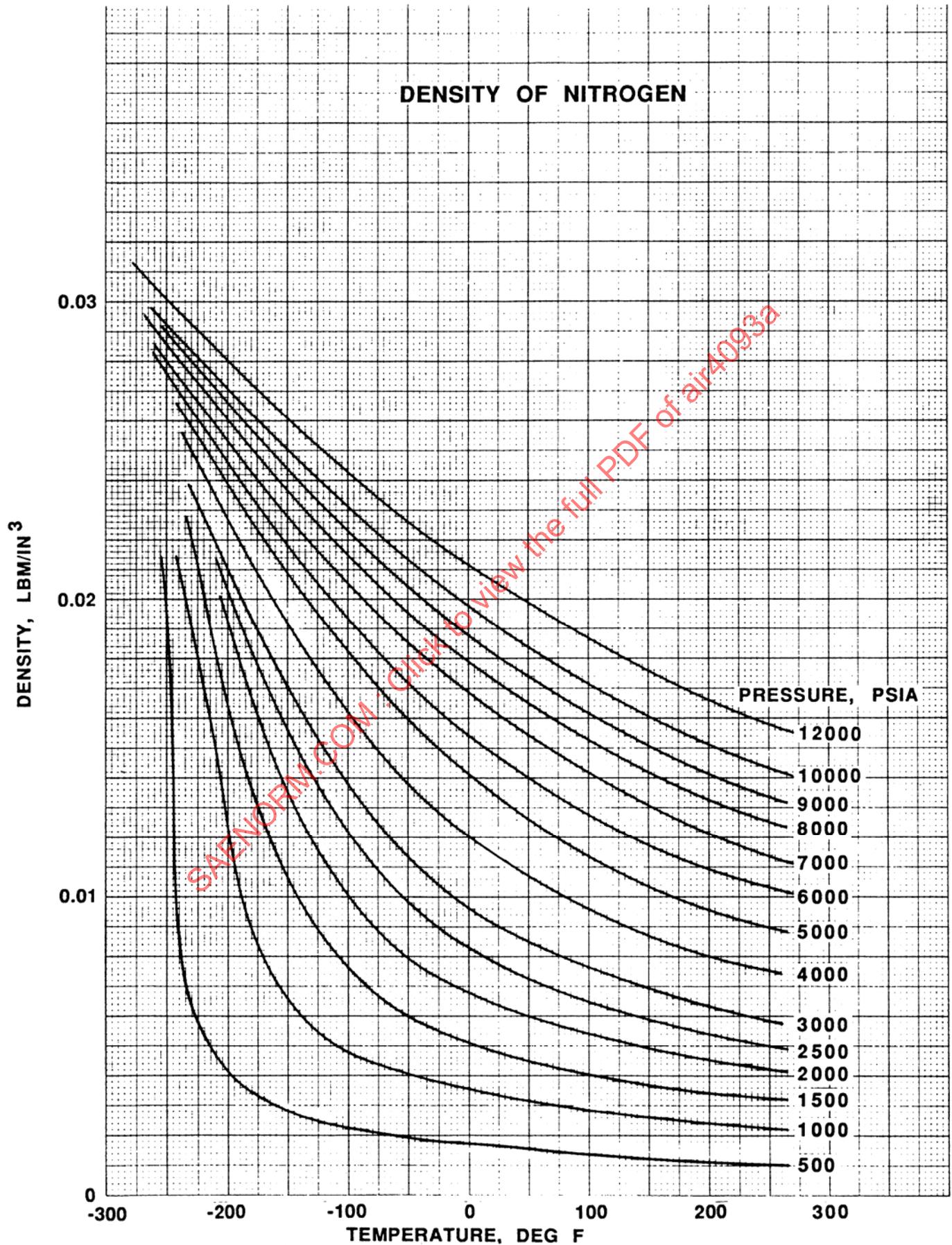
Density vs. Pressure, Temperature
Pressure vs. Entropy, Temperature
Pressure vs. Enthalpy, Temperature
Specific Heat vs. Pressure, Temperature
N Tables
Tabular Data

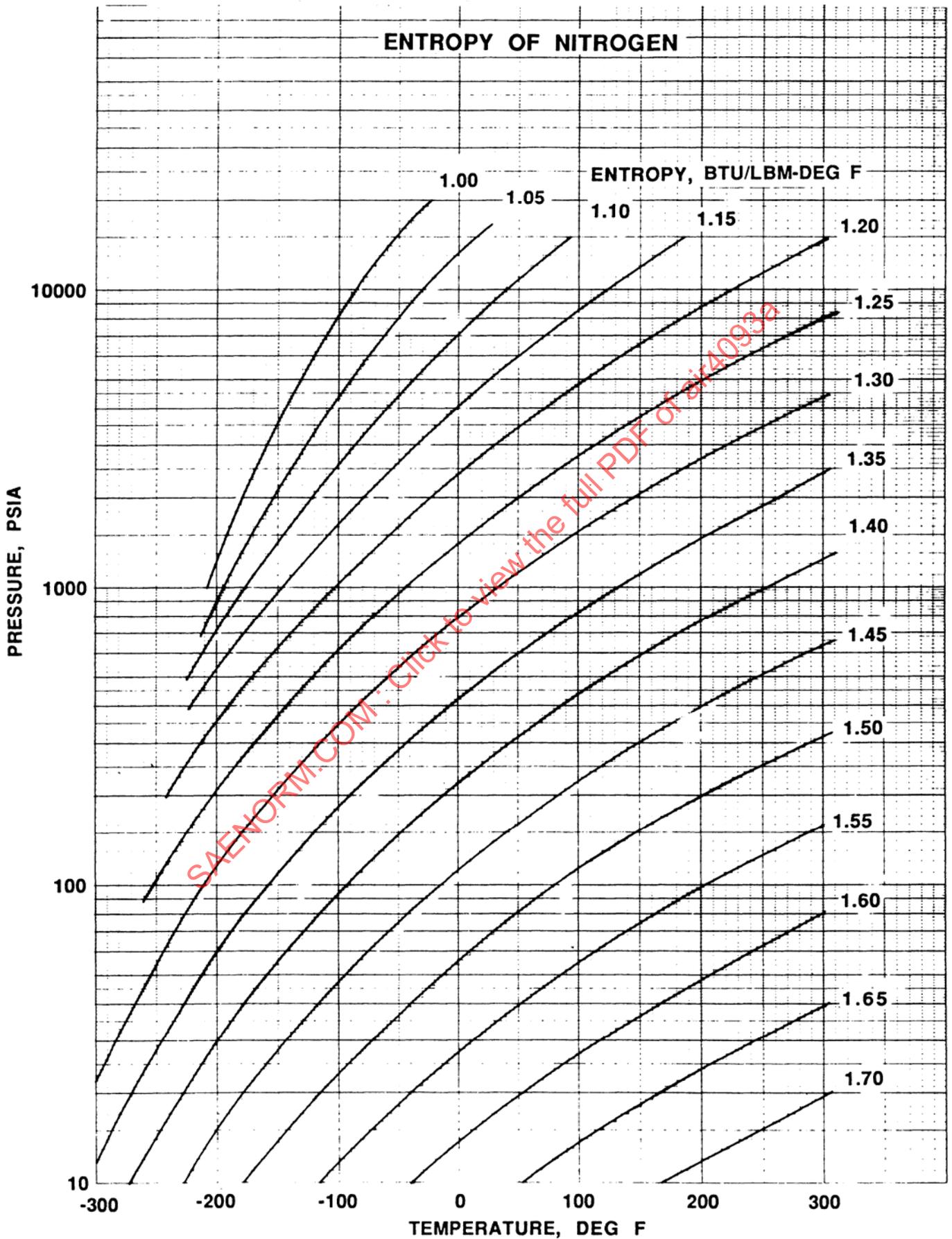
5. ARGON DATA:

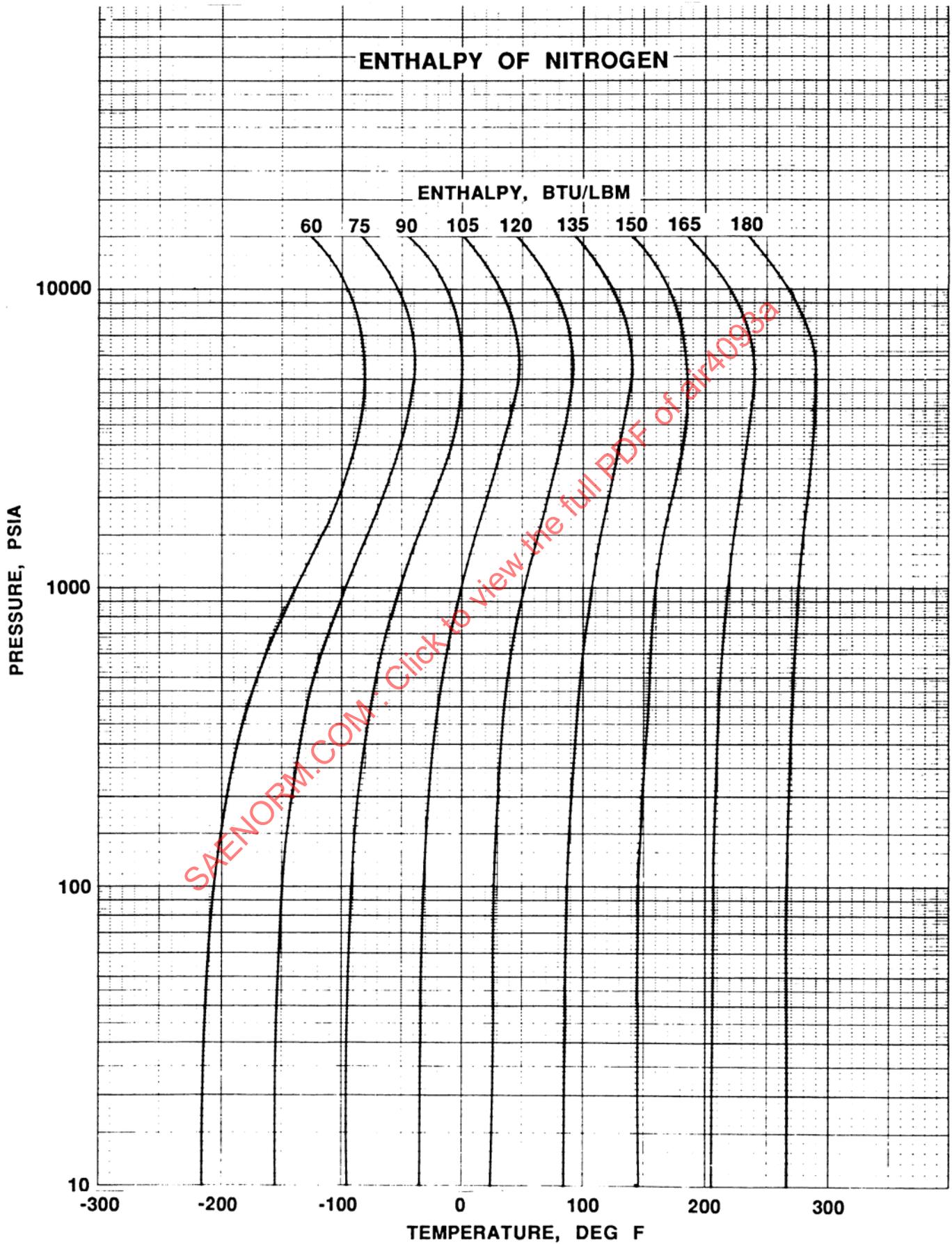
Graphical Data:

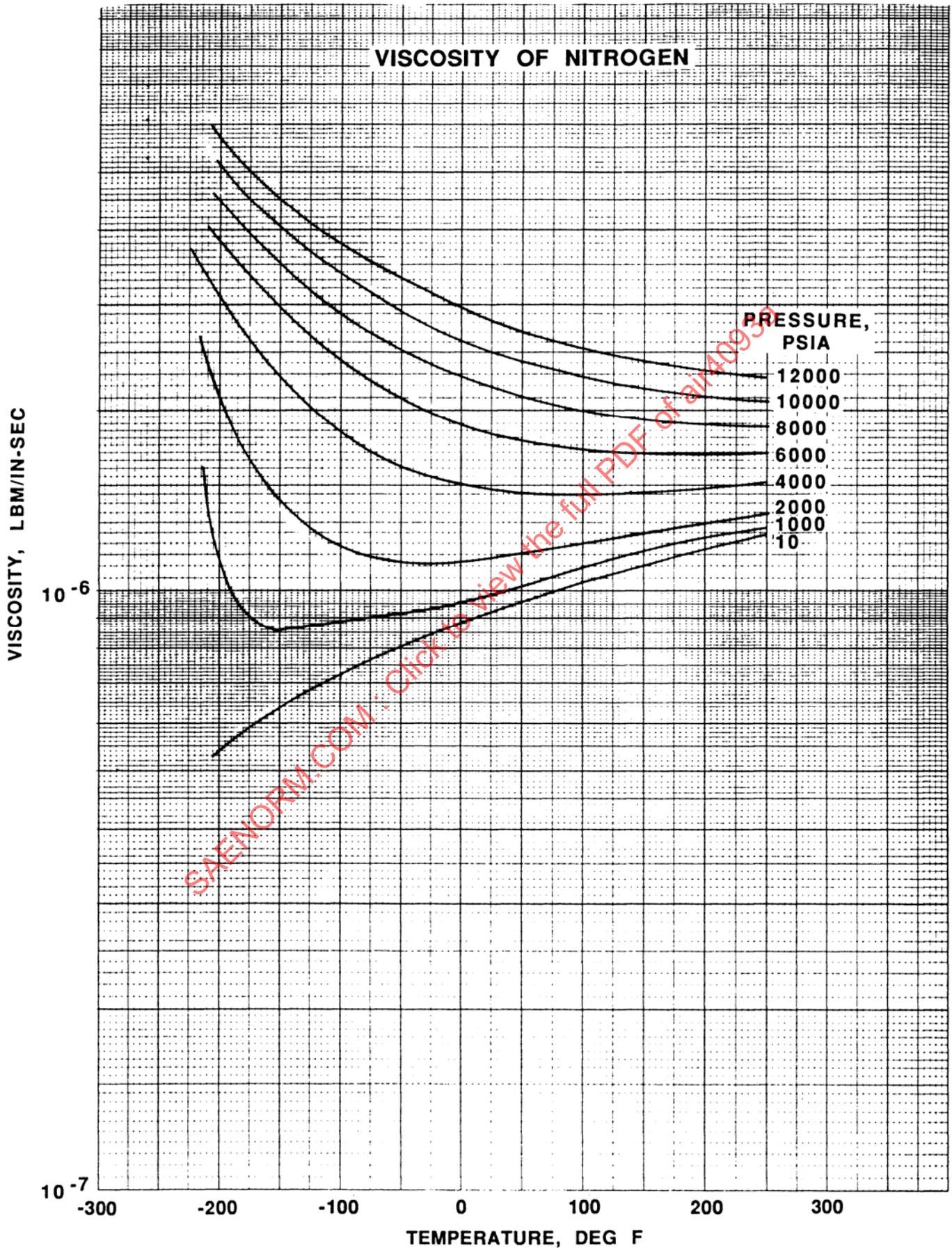
Density vs. Pressure, Temperature
Pressure vs. Entropy, Temperature
Pressure vs. Enthalpy, Temperature
Viscosity vs. Pressure, Temperature
Specific Heat vs. Pressure, Temperature
N Tables
Tabular Data

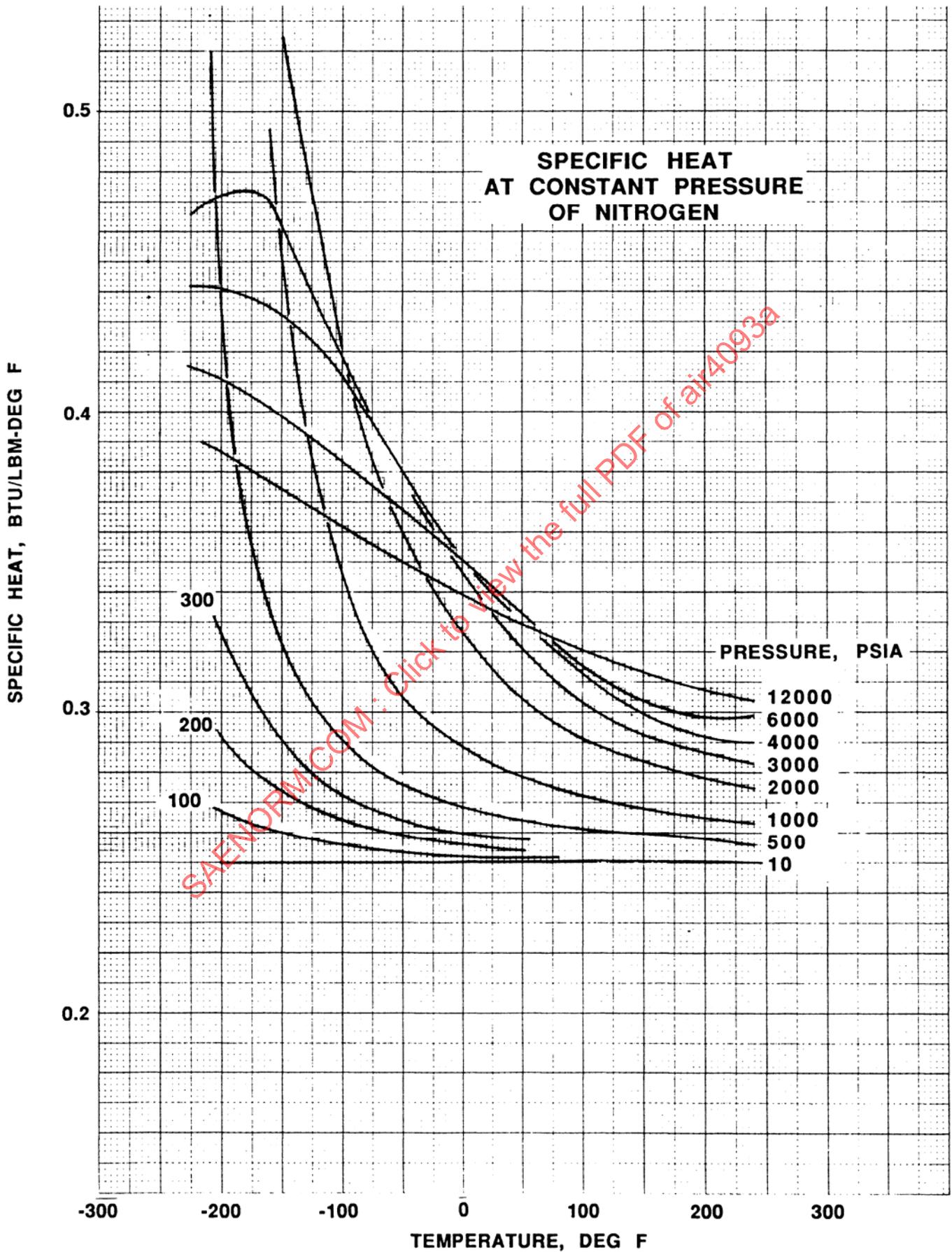
¹Separate N Tables are not provided for argon. Because N is a function of and P/P only, N Tables for argon and helium are identical.











N TABLE FJR GAMMA = 1.400

P1/P2	0	1	2	3	4	5	6	7	8	9
1.0000	0.0000	.0065	.0092	.0113	.0131	.0146	.0160	.0173	.0185	.0195
1.0001	.0207	.0217	.0226	.0235	.0244	.0253	.0261	.0269	.0277	.0285
1.0002	.0292	.0299	.0306	.0313	.0320	.0326	.0333	.0339	.0345	.0352
1.0003	.0358	.0364	.0369	.0375	.0381	.0386	.0392	.0397	.0402	.0408
1.0004	.0413	.0418	.0423	.0428	.0433	.0438	.0443	.0448	.0452	.0457
1.0005	.0462	.0466	.0471	.0475	.0480	.0484	.0488	.0493	.0497	.0501
1.0006	.0506	.0510	.0514	.0518	.0522	.0526	.0530	.0534	.0538	.0542
1.0007	.0546	.0550	.0554	.0558	.0561	.0565	.0569	.0573	.0576	.0580
1.0008	.0584	.0587	.0591	.0595	.0598	.0602	.0605	.0609	.0612	.0615
1.0009	.0619	.0622	.0626	.0629	.0633	.0636	.0639	.0643	.0646	.0649
1.0010	.0652	.0656	.0659	.0662	.0665	.0669	.0672	.0675	.0678	.0681
1.0011	.0684	.0687	.0690	.0693	.0697	.0700	.0703	.0706	.0709	.0712
1.0012	.0715	.0718	.0720	.0723	.0726	.0729	.0732	.0735	.0738	.0741
1.0013	.0744	.0747	.0749	.0752	.0755	.0758	.0761	.0763	.0765	.0769
1.0014	.0772	.0774	.0777	.0780	.0783	.0785	.0788	.0791	.0793	.0796
1.0015	.0799	.0801	.0804	.0807	.0809	.0812	.0814	.0817	.0820	.0822
1.0016	.0825	.0827	.0830	.0832	.0835	.0838	.0840	.0843	.0845	.0848
1.0017	.0850	.0853	.0855	.0858	.0860	.0862	.0865	.0867	.0870	.0872
1.0018	.0875	.0877	.0879	.0882	.0884	.0887	.0889	.0891	.0894	.0895
1.0019	.0898	.0901	.0903	.0906	.0908	.0910	.0913	.0915	.0917	.0919
1.0020	.0922	.0924	.0926	.0929	.0931	.0933	.0935	.0938	.0940	.0942
1.0021	.0944	.0947	.0949	.0951	.0953	.0956	.0958	.0960	.0962	.0964
1.0022	.0967	.0969	.0971	.0973	.0975	.0977	.0980	.0982	.0984	.0986
1.0023	.0988	.0990	.0992	.0995	.0997	.0999	.1001	.1003	.1005	.1007
1.0024	.1009	.1011	.1013	.1016	.1018	.1020	.1022	.1024	.1026	.1028
1.0025	.1030	.1032	.1034	.1036	.1038	.1040	.1042	.1044	.1045	.1048
1.0026	.1050	.1052	.1054	.1056	.1058	.1060	.1062	.1064	.1065	.1068
1.0027	.1070	.1072	.1074	.1076	.1078	.1080	.1082	.1084	.1085	.1088
1.0028	.1090	.1092	.1094	.1096	.1097	.1099	.1101	.1103	.1105	.1107
1.0029	.1109	.1111	.1113	.1115	.1116	.1118	.1120	.1122	.1124	.1126

N TABLE FJR GAMMA = 1.400

PL/PZ	0	1	2	3	4	5	6	7	8	9
1.0030	.1128	.1146	.1164	.1182	.1200	.1217	.1235	.1252	.1268	.1285
1.0040	.1301	.1317	.1333	.1348	.1364	.1379	.1394	.1409	.1424	.1438
1.0050	.1453	.1467	.1481	.1495	.1509	.1523	.1537	.1550	.1564	.1577
1.0060	.1590	.1603	.1616	.1629	.1641	.1654	.1667	.1679	.1691	.1703
1.0070	.1716	.1728	.1740	.1751	.1763	.1775	.1786	.1798	.1809	.1821
1.0080	.1832	.1843	.1855	.1866	.1877	.1888	.1898	.1909	.1920	.1931
1.0090	.1941	.1952	.1962	.1973	.1983	.1993	.2004	.2014	.2024	.2034
1.0100	.2044	.2054	.2064	.2074	.2084	.2094	.2103	.2113	.2123	.2132
1.0110	.2142	.2151	.2161	.2170	.2179	.2189	.2198	.2207	.2216	.2226
1.0120	.2235	.2244	.2253	.2262	.2271	.2280	.2288	.2297	.2306	.2315
1.0130	.2324	.2332	.2341	.2350	.2358	.2367	.2375	.2384	.2392	.2400
1.0140	.2409	.2417	.2425	.2434	.2442	.2450	.2458	.2467	.2475	.2483
1.0150	.2491	.2499	.2507	.2515	.2523	.2531	.2539	.2546	.2554	.2562
1.0160	.2570	.2578	.2585	.2593	.2601	.2608	.2616	.2624	.2631	.2639
1.0170	.2646	.2654	.2661	.2669	.2676	.2684	.2691	.2698	.2705	.2713
1.0180	.2720	.2727	.2735	.2742	.2749	.2756	.2763	.2771	.2778	.2785
1.0190	.2792	.2799	.2806	.2813	.2820	.2827	.2834	.2841	.2848	.2855
1.0200	.2862	.2868	.2875	.2882	.2889	.2896	.2902	.2909	.2915	.2923
1.0210	.2929	.2936	.2943	.2949	.2956	.2962	.2969	.2976	.2982	.2989
1.0220	.2995	.3002	.3008	.3015	.3021	.3027	.3034	.3040	.3047	.3053
1.0230	.3059	.3066	.3072	.3078	.3085	.3091	.3097	.3103	.3110	.3116
1.0240	.3122	.3128	.3134	.3140	.3147	.3153	.3159	.3165	.3171	.3177
1.0250	.3183	.3189	.3195	.3201	.3207	.3213	.3219	.3225	.3231	.3237
1.0260	.3243	.3249	.3255	.3261	.3266	.3272	.3278	.3284	.3290	.3296
1.0270	.3301	.3307	.3313	.3319	.3324	.3330	.3336	.3341	.3347	.3353
1.0280	.3359	.3364	.3370	.3375	.3381	.3387	.3392	.3398	.3403	.3409
1.0290	.3415	.3420	.3426	.3431	.3437	.3442	.3448	.3453	.3458	.3464
1.0300	.3469	.3475	.3480	.3486	.3491	.3496	.3502	.3507	.3513	.3518
1.0310	.3523	.3529	.3534	.3539	.3544	.3550	.3555	.3560	.3565	.3571
1.0320	.3576	.3581	.3586	.3592	.3597	.3602	.3607	.3612	.3617	.3623

N TABLE FOR GAMMA = 1.400

P1/P2	0	1	2	3	4	5	6	7	8	9
1.0330	.3628	.3633	.3638	.3643	.3648	.3653	.3658	.3663	.3669	.3674
1.0340	.3679	.3684	.3689	.3694	.3699	.3704	.3709	.3714	.3719	.3724
1.0350	.3729	.3734	.3738	.3743	.3748	.3753	.3758	.3763	.3768	.3773
1.0360	.3778	.3783	.3787	.3792	.3797	.3802	.3807	.3812	.3816	.3821
1.0370	.3826	.3831	.3836	.3840	.3845	.3850	.3855	.3859	.3864	.3869
1.0380	.3873	.3878	.3883	.3888	.3892	.3897	.3902	.3906	.3911	.3916
1.0390	.3920	.3925	.3929	.3934	.3939	.3943	.3948	.3952	.3957	.3962
1.0400	.3966	.3971	.3975	.3980	.3984	.3989	.3993	.3998	.4002	.4007
1.0410	.4011	.4016	.4020	.4025	.4029	.4034	.4038	.4043	.4047	.4052
1.0420	.4056	.4060	.4065	.4069	.4074	.4078	.4082	.4087	.4091	.4096
1.0430	.4100	.4104	.4109	.4113	.4117	.4122	.4126	.4130	.4135	.4139
1.0440	.4143	.4148	.4152	.4156	.4160	.4165	.4169	.4173	.4177	.4182
1.0450	.4186	.4190	.4194	.4199	.4203	.4207	.4211	.4215	.4220	.4224
1.0460	.4228	.4232	.4236	.4240	.4245	.4249	.4253	.4257	.4261	.4265
1.0470	.4269	.4274	.4278	.4282	.4286	.4290	.4294	.4298	.4302	.4306
1.0480	.4310	.4314	.4318	.4322	.4327	.4331	.4335	.4339	.4343	.4347
1.0490	.4351	.4355	.4359	.4363	.4367	.4371	.4375	.4379	.4383	.4387
1.0500	.4390	.4430	.4469	.4507	.4545	.4582	.4619	.4656	.4692	.4727
1.0600	.4762	.4797	.4832	.4856	.4899	.4933	.4966	.4998	.5031	.5063
1.0700	.5094	.5125	.5156	.5187	.5217	.5247	.5277	.5307	.5336	.5365
1.0800	.5394	.5422	.5450	.5478	.5506	.5533	.5560	.5587	.5614	.5640
1.0900	.5666	.5692	.5718	.5743	.5769	.5794	.5819	.5843	.5868	.5892
1.1000	.5916	.5940	.5964	.5987	.6011	.6034	.6057	.6080	.6102	.6125
1.1100	.6147	.6169	.6191	.6213	.6234	.6256	.6277	.6298	.6319	.6340
1.1200	.6361	.6381	.6402	.6422	.6442	.6462	.6482	.6501	.6521	.6540
1.1300	.6559	.6579	.6598	.6616	.6635	.6654	.6672	.6691	.6709	.6727
1.1400	.6745	.6763	.6781	.6798	.6816	.6833	.6850	.6868	.6885	.6902
1.1500	.6919	.6935	.6952	.6968	.6985	.7001	.7017	.7034	.7050	.7055
1.1600	.7081	.7097	.7113	.7128	.7144	.7159	.7174	.7189	.7204	.7219
1.1700	.7234	.7249	.7264	.7278	.7293	.7307	.7322	.7336	.7350	.7364

N TABLE FOR GAMMA = 1.400

P1/P2	0	1	2	3	4	5	6	7	8	9
1.1800	.7378	.7392	.7406	.7420	.7434	.7447	.7461	.7474	.7488	.7501
1.1900	.7514	.7527	.7540	.7553	.7566	.7579	.7592	.7605	.7617	.7630
1.2000	.7642	.7655	.7667	.7679	.7692	.7704	.7716	.7728	.7740	.7752
1.2100	.7764	.7775	.7787	.7799	.7810	.7822	.7833	.7845	.7855	.7867
1.2200	.7878	.7889	.7901	.7912	.7923	.7933	.7944	.7955	.7966	.7976
1.2300	.7987	.7998	.8008	.8019	.8029	.8039	.8050	.8060	.8070	.8080
1.2400	.8090	.8100	.8110	.8120	.8130	.8140	.8150	.8159	.8169	.8178
1.2500	.8188	.8198	.8207	.8216	.8226	.8235	.8244	.8254	.8263	.8272
1.2600	.8281	.8290	.8299	.8308	.8317	.8326	.8335	.8343	.8352	.8351
1.2700	.8369	.8378	.8386	.8395	.8403	.8412	.8420	.8429	.8437	.8445
1.2800	.8453	.8462	.8470	.8478	.8486	.8494	.8502	.8510	.8518	.8525
1.2900	.8533	.8541	.8549	.8556	.8564	.8572	.8579	.8587	.8594	.8602
1.3000	.8609	.8617	.8624	.8631	.8639	.8646	.8653	.8660	.8668	.8675
1.3100	.8682	.8689	.8696	.8703	.8710	.8717	.8724	.8730	.8737	.8744
1.3200	.8751	.8758	.8764	.8771	.8778	.8784	.8791	.8797	.8804	.8810
1.3300	.8817	.8823	.8829	.8836	.8842	.8848	.8855	.8861	.8867	.8873
1.3400	.8879	.8885	.8891	.8898	.8904	.8910	.8916	.8921	.8927	.8933
1.3500	.8939	.8945	.8951	.8956	.8962	.8968	.8974	.8979	.8985	.8990
1.3600	.8996	.9002	.9007	.9013	.9018	.9024	.9029	.9034	.9040	.9045
1.3700	.9050	.9056	.9061	.9066	.9071	.9077	.9082	.9087	.9092	.9097
1.3800	.9102	.9107	.9112	.9117	.9122	.9127	.9132	.9137	.9142	.9147
1.3900	.9152	.9157	.9161	.9166	.9171	.9176	.9180	.9185	.9190	.9194
1.4000	.9199	.9204	.9208	.9213	.9217	.9222	.9226	.9231	.9235	.9240
1.4100	.9244	.9248	.9253	.9257	.9261	.9266	.9270	.9274	.9278	.9283
1.4200	.9287	.9291	.9295	.9299	.9304	.9308	.9312	.9316	.9320	.9324
1.4300	.9328	.9332	.9336	.9340	.9344	.9348	.9352	.9355	.9359	.9363
1.4400	.9367	.9371	.9375	.9378	.9382	.9386	.9390	.9393	.9397	.9401
1.4500	.9404	.9408	.9411	.9415	.9419	.9422	.9426	.9429	.9433	.9436
1.4600	.9440	.9443	.9447	.9450	.9454	.9457	.9460	.9464	.9467	.9470
1.4700	.9474	.9477	.9480	.9484	.9487	.9490	.9493	.9496	.9500	.9503

N TABLE FJR GAMMA = 1.400

PL/P2	0	1	2	3	4	5	6	7	8	9
1.4800	.9506	.9509	.9512	.9515	.9518	.9522	.9525	.9528	.9531	.9534
1.4900	.9537	.9540	.9543	.9546	.9549	.9552	.9555	.9557	.9560	.9563
1.5000	.9566	.9569	.9572	.9575	.9577	.9580	.9583	.9586	.9589	.9591
1.5100	.9594	.9597	.9599	.9602	.9605	.9608	.9610	.9613	.9615	.9618
1.5200	.9621	.9623	.9626	.9628	.9631	.9633	.9636	.9638	.9641	.9643
1.5300	.9646	.9648	.9651	.9653	.9656	.9658	.9661	.9663	.9665	.9668
1.5400	.9670	.9672	.9675	.9677	.9679	.9682	.9684	.9686	.9688	.9691
1.5500	.9693	.9695	.9697	.9700	.9702	.9704	.9706	.9708	.9710	.9713
1.5600	.9715	.9717	.9719	.9721	.9723	.9725	.9727	.9729	.9731	.9733
1.5700	.9735	.9737	.9739	.9741	.9743	.9745	.9747	.9749	.9751	.9753
1.5800	.9755	.9757	.9759	.9761	.9762	.9764	.9766	.9768	.9770	.9772
1.5900	.9773	.9775	.9777	.9779	.9781	.9782	.9784	.9786	.9788	.9789
1.6000	.9791	.9793	.9794	.9796	.9798	.9799	.9801	.9803	.9804	.9806
1.6100	.9808	.9809	.9811	.9813	.9814	.9816	.9817	.9819	.9820	.9822
1.6200	.9823	.9825	.9826	.9828	.9829	.9831	.9832	.9834	.9835	.9837
1.6300	.9838	.9840	.9841	.9843	.9844	.9845	.9847	.9848	.9850	.9851
1.6400	.9852	.9854	.9855	.9856	.9858	.9859	.9860	.9862	.9853	.9864
1.6500	.9866	.9867	.9868	.9869	.9871	.9872	.9873	.9874	.9876	.9877
1.6600	.9878	.9879	.9880	.9882	.9883	.9884	.9885	.9886	.9887	.9889
1.6700	.9890	.9891	.9892	.9893	.9894	.9895	.9896	.9897	.9898	.9900
1.6800	.9901	.9902	.9903	.9904	.9905	.9906	.9907	.9908	.9909	.9910
1.6900	.9911	.9912	.9913	.9914	.9915	.9916	.9917	.9918	.9919	.9920
1.7000	.9920	.9921	.9922	.9923	.9924	.9925	.9926	.9927	.9928	.9928
1.7100	.9929	.9930	.9931	.9932	.9933	.9934	.9934	.9935	.9936	.9937
1.7200	.9938	.9938	.9939	.9940	.9941	.9942	.9942	.9943	.9944	.9945
1.7300	.9945	.9946	.9947	.9948	.9948	.9949	.9950	.9950	.9951	.9952
1.7400	.9952	.9953	.9954	.9954	.9955	.9956	.9956	.9957	.9958	.9958
1.7500	.9959	.9960	.9960	.9961	.9961	.9962	.9963	.9963	.9964	.9964
1.7600	.9965	.9965	.9966	.9967	.9967	.9968	.9968	.9969	.9969	.9970
1.7700	.9970	.9971	.9971	.9972	.9972	.9973	.9973	.9974	.9974	.9975

N TABLE FJR GAMMA = 1.400

P1/P2	0	1	2	3	4	5	6	7	8	9
1.7800	.9975	.9976	.9976	.9977	.9977	.9978	.9978	.9978	.9979	.9979
1.7900	.9980	.9980	.9981	.9981	.9981	.9982	.9982	.9982	.9983	.9983
1.8000	.9984	.9984	.9984	.9985	.9985	.9985	.9986	.9986	.9986	.9987
1.8100	.9987	.9987	.9988	.9988	.9988	.9989	.9989	.9989	.9990	.9990
1.8200	.9990	.9990	.9991	.9991	.9991	.9991	.9992	.9992	.9992	.9993
1.8300	.9993	.9993	.9993	.9993	.9994	.9994	.9994	.9994	.9995	.9995
1.8400	.9995	.9995	.9995	.9995	.9996	.9996	.9996	.9996	.9996	.9997
1.8500	.9997	.9997	.9997	.9997	.9997	.9997	.9998	.9998	.9998	.9998
1.8600	.9998	.9998	.9998	.9998	.9999	.9999	.9999	.9999	.9999	.9999
1.8700	.9999	.9999	.9999	.9999	.9999	.9999	1.0000	1.0000	1.0000	1.0000
1.8800	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.8900	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.9000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.9100	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000
1.9200	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000	1.0000

SAEFORM.COM Click to view the full PDF of air4093a

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
10.0	-250.000	.0073	1.427	51.584	.044	.251
10.0	-240.000	.0069	1.438	54.097	.046	.251
10.0	-230.000	.0066	1.450	56.605	.048	.251
10.0	-220.000	.0063	1.460	59.111	.050	.250
10.0	-210.000	.0061	1.470	61.614	.052	.250
10.0	-200.000	.0058	1.480	64.114	.054	.250
10.0	-190.000	.0056	1.490	66.613	.056	.250
10.0	-180.000	.0054	1.499	69.110	.058	.250
10.0	-170.000	.0052	1.508	71.605	.060	.249
10.0	-160.000	.0051	1.516	74.100	.062	.249
10.0	-150.000	.0049	1.524	76.593	.063	.249
10.0	-140.000	.0047	1.532	79.086	.065	.249
10.0	-130.000	.0046	1.540	81.577	.067	.249
10.0	-120.000	.0045	1.547	84.068	.069	.249
10.0	-110.000	.0043	1.555	86.558	.071	.249
10.0	-100.000	.0042	1.562	89.048	.072	.249
10.0	-90.000	.0041	1.568	91.537	.074	.249
10.0	-80.000	.0040	1.575	94.026	.076	.249
10.0	-70.000	.0039	1.581	96.514	.077	.249
10.0	-60.000	.0038	1.588	99.002	.079	.249
10.0	-50.000	.0037	1.594	101.490	.081	.249
10.0	-40.000	.0036	1.600	103.977	.082	.249
10.0	-30.000	.0035	1.606	106.464	.084	.249
10.0	-20.000	.0034	1.611	108.950	.085	.249
10.0	-10.000	.0034	1.617	111.437	.087	.249
10.0	.000	.0033	1.623	113.923	.089	.249
10.0	10.000	.0032	1.628	116.409	.090	.249
10.0	20.000	.0032	1.633	118.895	.092	.249
10.0	30.000	.0031	1.638	121.381	.093	.249
10.0	40.000	.0030	1.643	123.867	.095	.249
10.0	50.000	.0030	1.648	126.353	.096	.249
10.0	60.000	.0029	1.653	128.839	.098	.249
10.0	70.000	.0029	1.658	131.324	.099	.249
10.0	80.000	.0028	1.662	133.810	.100	.249
10.0	90.000	.0027	1.667	136.296	.102	.249
10.0	100.000	.0027	1.671	138.782	.103	.249
10.0	110.000	.0027	1.676	141.268	.105	.249
10.0	120.000	.0026	1.680	143.755	.106	.249
10.0	130.000	.0026	1.684	146.241	.107	.249
10.0	140.000	.0025	1.689	148.728	.109	.249
10.0	150.000	.0025	1.693	151.215	.110	.249
10.0	160.000	.0024	1.697	153.703	.112	.249
10.0	170.000	.0024	1.701	156.191	.113	.249
10.0	180.000	.0024	1.705	158.679	.114	.249
10.0	190.000	.0023	1.709	161.168	.116	.249
10.0	200.000	.0023	1.712	163.658	.117	.249
10.0	210.000	.0023	1.716	166.148	.118	.249
10.0	220.000	.0022	1.720	168.638	.119	.249
10.0	230.000	.0022	1.723	171.130	.121	.249
10.0	240.000	.0022	1.727	173.622	.122	.249
10.0	250.000	.0021	1.731	176.115	.123	.249

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
14.7	-250.000	.0107	1.399	51.406	.044	.253
14.7	-240.000	.0102	1.411	53.933	.046	.252
14.7	-230.000	.0098	1.422	56.455	.048	.252
14.7	-220.000	.0093	1.433	58.971	.050	.251
14.7	-210.000	.0090	1.443	61.484	.052	.251
14.7	-200.000	.0086	1.453	63.993	.054	.251
14.7	-190.000	.0083	1.462	66.499	.056	.251
14.7	-180.000	.0080	1.471	69.003	.058	.250
14.7	-170.000	.0077	1.480	71.505	.060	.250
14.7	-160.000	.0074	1.489	74.006	.062	.250
14.7	-150.000	.0072	1.497	76.504	.063	.250
14.7	-140.000	.0070	1.505	79.001	.065	.250
14.7	-130.000	.0068	1.512	81.498	.067	.250
14.7	-120.000	.0066	1.520	83.993	.069	.249
14.7	-110.000	.0064	1.527	86.487	.071	.249
14.7	-100.000	.0062	1.534	88.980	.072	.249
14.7	-90.000	.0060	1.541	91.472	.074	.249
14.7	-80.000	.0059	1.548	93.964	.076	.249
14.7	-70.000	.0057	1.554	96.455	.077	.249
14.7	-60.000	.0056	1.560	98.946	.079	.249
14.7	-50.000	.0054	1.566	101.436	.081	.249
14.7	-40.000	.0053	1.572	103.925	.082	.249
14.7	-30.000	.0052	1.578	106.414	.084	.249
14.7	-20.000	.0051	1.584	108.903	.085	.249
14.7	-10.000	.0049	1.590	111.392	.087	.249
14.7	0.000	.0048	1.595	113.880	.089	.249
14.7	10.000	.0047	1.600	116.368	.090	.249
14.7	20.000	.0046	1.606	118.856	.092	.249
14.7	30.000	.0045	1.611	121.343	.093	.249
14.7	40.000	.0044	1.616	123.831	.095	.249
14.7	50.000	.0044	1.621	126.318	.096	.249
14.7	60.000	.0043	1.626	128.805	.098	.249
14.7	70.000	.0042	1.630	131.292	.099	.249
14.7	80.000	.0041	1.635	133.779	.100	.249
14.7	90.000	.0040	1.640	136.266	.102	.249
14.7	100.000	.0040	1.644	138.754	.103	.249
14.7	110.000	.0039	1.649	141.241	.105	.249
14.7	120.000	.0038	1.653	143.728	.106	.249
14.7	130.000	.0038	1.657	146.216	.108	.249
14.7	140.000	.0037	1.661	148.704	.109	.249
14.7	150.000	.0036	1.665	151.192	.110	.249
14.7	160.000	.0036	1.669	153.680	.112	.249
14.7	170.000	.0035	1.673	156.169	.113	.249
14.7	180.000	.0035	1.677	158.658	.114	.249
14.7	190.000	.0034	1.681	161.148	.116	.249
14.7	200.000	.0034	1.685	163.638	.117	.249
14.7	210.000	.0033	1.689	166.129	.118	.249
14.7	220.000	.0033	1.692	168.621	.119	.249
14.7	230.000	.0032	1.696	171.113	.121	.249
14.7	240.000	.0032	1.700	173.606	.122	.249
14.7	250.000	.0031	1.703	176.100	.123	.249

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
20.0	-250.000	.0147	1.376	51.204	.044	.255
20.0	-240.000	.0140	1.388	53.748	.046	.254
20.0	-230.000	.0133	1.399	56.284	.048	.253
20.0	-220.000	.0128	1.410	58.813	.050	.253
20.0	-210.000	.0122	1.421	61.337	.052	.252
20.0	-200.000	.0117	1.430	63.856	.054	.252
20.0	-190.000	.0113	1.440	66.371	.056	.251
20.0	-180.000	.0109	1.449	68.883	.058	.251
20.0	-170.000	.0105	1.458	71.392	.060	.251
20.0	-160.000	.0101	1.466	73.899	.062	.251
20.0	-150.000	.0098	1.475	76.404	.064	.250
20.0	-140.000	.0095	1.483	78.906	.065	.250
20.0	-130.000	.0092	1.490	81.408	.067	.250
20.0	-120.000	.0089	1.498	83.907	.069	.250
20.0	-110.000	.0087	1.505	86.406	.071	.250
20.0	-100.000	.0084	1.512	88.903	.072	.250
20.0	-90.000	.0082	1.519	91.399	.074	.250
20.0	-80.000	.0080	1.526	93.894	.076	.249
20.0	-70.000	.0078	1.532	96.388	.077	.249
20.0	-60.000	.0076	1.538	98.882	.079	.249
20.0	-50.000	.0074	1.545	101.375	.081	.249
20.0	-40.000	.0072	1.551	103.867	.082	.249
20.0	-30.000	.0070	1.556	106.359	.084	.249
20.0	-20.000	.0069	1.562	108.850	.086	.249
20.0	-10.000	.0067	1.568	111.341	.087	.249
20.0	.000	.0066	1.573	113.831	.089	.249
20.0	10.000	.0064	1.579	116.321	.090	.249
20.0	20.000	.0063	1.584	118.811	.092	.249
20.0	30.000	.0062	1.589	121.300	.093	.249
20.0	40.000	.0061	1.594	123.789	.095	.249
20.0	50.000	.0059	1.599	126.278	.096	.249
20.0	60.000	.0058	1.604	128.767	.098	.249
20.0	70.000	.0057	1.608	131.255	.099	.249
20.0	80.000	.0056	1.613	133.744	.101	.249
20.0	90.000	.0055	1.618	136.233	.102	.249
20.0	100.000	.0054	1.622	138.721	.103	.249
20.0	110.000	.0053	1.627	141.210	.105	.249
20.0	120.000	.0052	1.631	143.699	.106	.249
20.0	130.000	.0051	1.635	146.187	.108	.249
20.0	140.000	.0050	1.639	148.676	.109	.249
20.0	150.000	.0050	1.644	151.165	.110	.249
20.0	160.000	.0049	1.648	153.655	.112	.249
20.0	170.000	.0048	1.652	156.145	.113	.249
20.0	180.000	.0047	1.655	158.635	.114	.249
20.0	190.000	.0046	1.659	161.126	.116	.249
20.0	200.000	.0046	1.663	163.617	.117	.249
20.0	210.000	.0045	1.667	166.109	.118	.249
20.0	220.000	.0044	1.671	168.601	.119	.249
20.0	230.000	.0044	1.674	171.094	.121	.249
20.0	240.000	.0043	1.678	173.588	.122	.249
20.0	250.000	.0043	1.681	176.083	.123	.249

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
50.0	-250.000	.0377	1.308	50.025	.045	.266
50.0	-240.000	.0357	1.320	52.673	.047	.264
50.0	-230.000	.0340	1.332	55.297	.049	.261
50.0	-220.000	.0325	1.343	57.903	.051	.260
50.0	-210.000	.0311	1.353	60.493	.053	.258
50.0	-200.000	.0298	1.363	63.071	.055	.257
50.0	-190.000	.0286	1.373	65.639	.056	.256
50.0	-180.000	.0275	1.382	68.197	.058	.255
50.0	-170.000	.0265	1.391	70.748	.060	.255
50.0	-160.000	.0256	1.400	73.293	.062	.254
50.0	-150.000	.0247	1.408	75.832	.064	.254
50.0	-140.000	.0239	1.416	78.367	.066	.253
50.0	-130.000	.0231	1.424	80.897	.067	.253
50.0	-120.000	.0224	1.432	83.423	.069	.252
50.0	-110.000	.0218	1.439	85.946	.071	.252
50.0	-100.000	.0212	1.446	88.466	.073	.252
50.0	-90.000	.0206	1.453	90.983	.074	.252
50.0	-80.000	.0200	1.460	93.498	.076	.251
50.0	-70.000	.0195	1.466	96.011	.078	.251
50.0	-60.000	.0190	1.473	98.522	.079	.251
50.0	-50.000	.0185	1.479	101.031	.081	.251
50.0	-40.000	.0181	1.485	103.538	.083	.251
50.0	-30.000	.0176	1.491	106.045	.084	.251
50.0	-20.000	.0172	1.497	108.549	.086	.250
50.0	-10.000	.0168	1.502	111.053	.087	.250
50.0	.000	.0165	1.508	113.556	.089	.250
50.0	10.000	.0161	1.513	116.057	.090	.250
50.0	20.000	.0158	1.518	118.558	.092	.250
50.0	30.000	.0154	1.524	121.057	.093	.250
50.0	40.000	.0151	1.529	123.557	.095	.250
50.0	50.000	.0148	1.534	126.055	.096	.250
50.0	60.000	.0145	1.538	128.553	.098	.250
50.0	70.000	.0143	1.543	131.050	.099	.250
50.0	80.000	.0140	1.548	133.547	.101	.250
50.0	90.000	.0137	1.552	136.043	.102	.250
50.0	100.000	.0135	1.557	138.539	.104	.250
50.0	110.000	.0133	1.561	141.035	.105	.250
50.0	120.000	.0130	1.566	143.531	.106	.250
50.0	130.000	.0128	1.570	146.026	.108	.250
50.0	140.000	.0126	1.574	148.522	.109	.250
50.0	150.000	.0124	1.578	151.017	.110	.250
50.0	160.000	.0122	1.582	153.513	.112	.250
50.0	170.000	.0120	1.586	156.008	.113	.250
50.0	180.000	.0118	1.590	158.504	.114	.250
50.0	190.000	.0116	1.594	161.000	.116	.250
50.0	200.000	.0114	1.598	163.496	.117	.250
50.0	210.000	.0113	1.602	165.993	.118	.250
50.0	220.000	.0111	1.605	168.490	.120	.250
50.0	230.000	.0109	1.609	170.988	.121	.250
50.0	240.000	.0108	1.613	173.485	.122	.250
50.0	250.000	.0106	1.616	175.985	.123	.250

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
100.0	-250.000	.0793	1.251	47.909	.046	.290
100.0	-240.000	.0746	1.265	50.769	.048	.283
100.0	-230.000	.0706	1.277	53.569	.050	.277
100.0	-220.000	.0670	1.289	56.322	.051	.273
100.0	-210.000	.0638	1.300	59.038	.053	.270
100.0	-200.000	.0610	1.311	61.725	.055	.267
100.0	-190.000	.0584	1.321	64.388	.057	.265
100.0	-180.000	.0560	1.330	67.031	.059	.263
100.0	-170.000	.0539	1.340	69.657	.061	.262
100.0	-160.000	.0519	1.348	72.269	.063	.261
100.0	-150.000	.0501	1.357	74.868	.064	.259
100.0	-140.000	.0484	1.365	77.458	.066	.258
100.0	-130.000	.0468	1.373	80.038	.068	.258
100.0	-120.000	.0453	1.381	82.610	.070	.257
100.0	-110.000	.0439	1.388	85.175	.071	.256
100.0	-100.000	.0426	1.395	87.735	.073	.256
100.0	-90.000	.0414	1.402	90.288	.075	.255
100.0	-80.000	.0403	1.409	92.837	.076	.255
100.0	-70.000	.0392	1.416	95.381	.078	.254
100.0	-60.000	.0382	1.422	97.921	.080	.254
100.0	-50.000	.0372	1.429	100.458	.081	.253
100.0	-40.000	.0363	1.435	102.991	.083	.253
100.0	-30.000	.0354	1.441	105.522	.085	.253
100.0	-20.000	.0346	1.446	108.049	.086	.253
100.0	-10.000	.0338	1.452	110.574	.088	.252
100.0	.000	.0330	1.458	113.097	.089	.252
100.0	10.000	.0323	1.463	115.618	.091	.252
100.0	20.000	.0316	1.468	118.137	.092	.252
100.0	30.000	.0309	1.474	120.655	.094	.252
100.0	40.000	.0303	1.479	123.170	.095	.251
100.0	50.000	.0297	1.484	125.684	.097	.251
100.0	60.000	.0291	1.489	128.197	.098	.251
100.0	70.000	.0286	1.493	130.709	.100	.251
100.0	80.000	.0280	1.498	133.219	.101	.251
100.0	90.000	.0275	1.503	135.729	.102	.251
100.0	100.000	.0270	1.507	138.238	.104	.251
100.0	110.000	.0265	1.512	140.746	.105	.251
100.0	120.000	.0261	1.516	143.253	.107	.251
100.0	130.000	.0256	1.520	145.759	.108	.251
100.0	140.000	.0252	1.525	148.266	.109	.251
100.0	150.000	.0248	1.529	150.771	.111	.251
100.0	160.000	.0244	1.533	153.277	.112	.251
100.0	170.000	.0240	1.537	155.782	.113	.251
100.0	180.000	.0236	1.541	158.287	.115	.250
100.0	190.000	.0232	1.545	160.791	.116	.250
100.0	200.000	.0229	1.548	163.296	.117	.250
100.0	210.000	.0225	1.552	165.801	.119	.251
100.0	220.000	.0222	1.556	168.306	.120	.251
100.0	230.000	.0219	1.560	170.812	.121	.251
100.0	240.000	.0216	1.563	173.317	.122	.251
100.0	250.000	.0212	1.567	175.824	.124	.251

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
200.0	-250.000	.1807	1.185	42.842	.048	.371
200.0	-240.000	.1657	1.202	46.395	.050	.342
200.0	-230.000	.1538	1.216	49.711	.052	.323
200.0	-220.000	.1440	1.230	52.869	.053	.309
200.0	-210.000	.1357	1.242	55.912	.055	.300
200.0	-200.000	.1285	1.254	58.870	.057	.292
200.0	-190.000	.1222	1.265	61.762	.059	.286
200.0	-180.000	.1166	1.275	64.602	.060	.282
200.0	-170.000	.1115	1.285	67.399	.062	.278
200.0	-160.000	.1070	1.294	70.162	.064	.275
200.0	-150.000	.1028	1.303	72.896	.066	.272
200.0	-140.000	.0990	1.312	75.606	.067	.270
200.0	-130.000	.0955	1.320	78.295	.069	.268
200.0	-120.000	.0923	1.328	80.965	.071	.266
200.0	-110.000	.0893	1.336	83.621	.073	.265
200.0	-100.000	.0865	1.343	86.262	.074	.264
200.0	-90.000	.0839	1.350	88.891	.076	.262
200.0	-80.000	.0815	1.357	91.510	.077	.261
200.0	-70.000	.0792	1.364	94.119	.079	.260
200.0	-60.000	.0770	1.371	96.720	.081	.260
200.0	-50.000	.0750	1.377	99.313	.082	.259
200.0	-40.000	.0731	1.383	101.899	.084	.258
200.0	-30.000	.0713	1.390	104.479	.085	.258
200.0	-20.000	.0695	1.395	107.053	.087	.257
200.0	-10.000	.0679	1.401	109.622	.088	.257
200.0	.000	.0663	1.407	112.187	.090	.256
200.0	10.000	.0648	1.412	114.747	.092	.256
200.0	20.000	.0634	1.418	117.303	.093	.255
200.0	30.000	.0621	1.423	119.855	.094	.255
200.0	40.000	.0608	1.428	122.404	.096	.255
200.0	50.000	.0595	1.433	124.950	.097	.254
200.0	60.000	.0583	1.438	127.493	.099	.254
200.0	70.000	.0572	1.443	130.034	.100	.254
200.0	80.000	.0561	1.448	132.572	.102	.254
200.0	90.000	.0550	1.452	135.108	.103	.253
200.0	100.000	.0540	1.457	137.641	.104	.253
200.0	110.000	.0531	1.461	140.173	.106	.253
200.0	120.000	.0521	1.466	142.704	.107	.253
200.0	130.000	.0512	1.470	145.233	.109	.253
200.0	140.000	.0503	1.474	147.760	.110	.253
200.0	150.000	.0495	1.479	150.286	.111	.253
200.0	160.000	.0487	1.483	152.811	.113	.252
200.0	170.000	.0479	1.487	155.335	.114	.252
200.0	180.000	.0471	1.491	157.858	.115	.252
200.0	190.000	.0464	1.495	160.381	.117	.252
200.0	200.000	.0457	1.499	162.903	.118	.252
200.0	210.000	.0450	1.502	165.424	.119	.252
200.0	220.000	.0443	1.506	167.945	.120	.252
200.0	230.000	.0437	1.510	170.465	.122	.252
200.0	240.000	.0430	1.513	172.986	.123	.252
200.0	250.000	.0424	1.517	175.506	.124	.252

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
400.0	-250.000	2.0863	.893	-13.426	.250	.727
400.0	-240.000	.5175	1.095	30.702	.061	1.276
400.0	-230.000	.4026	1.131	38.799	.059	.601
400.0	-220.000	.3506	1.153	44.045	.060	.469
400.0	-210.000	.3165	1.171	48.399	.061	.408
400.0	-200.000	.2911	1.186	52.288	.062	.372
400.0	-190.000	.2710	1.200	55.888	.063	.349
400.0	-180.000	.2544	1.212	59.291	.064	.332
400.0	-170.000	.2403	1.224	62.551	.066	.320
400.0	-160.000	.2281	1.234	65.702	.067	.311
400.0	-150.000	.2174	1.244	68.768	.069	.303
400.0	-140.000	.2079	1.254	71.765	.070	.297
400.0	-130.000	.1994	1.263	74.708	.072	.292
400.0	-120.000	.1917	1.272	77.603	.074	.288
400.0	-110.000	.1847	1.280	80.460	.075	.284
400.0	-100.000	.1782	1.288	83.283	.077	.281
400.0	-90.000	.1722	1.296	86.078	.078	.278
400.0	-80.000	.1667	1.303	88.847	.080	.276
400.0	-70.000	.1616	1.310	91.595	.081	.274
400.0	-60.000	.1569	1.317	94.324	.083	.272
400.0	-50.000	.1524	1.324	97.035	.084	.270
400.0	-40.000	.1482	1.330	99.731	.086	.269
400.0	-30.000	.1443	1.336	102.414	.087	.268
400.0	-20.000	.1406	1.343	105.084	.089	.266
400.0	-10.000	.1371	1.349	107.742	.090	.265
400.0	.000	.1337	1.354	110.391	.092	.264
400.0	10.000	.1306	1.360	113.031	.093	.264
400.0	20.000	.1276	1.366	115.662	.095	.263
400.0	30.000	.1247	1.371	118.285	.096	.262
400.0	40.000	.1220	1.376	120.901	.097	.261
400.0	50.000	.1194	1.382	123.511	.099	.261
400.0	60.000	.1170	1.387	126.114	.100	.260
400.0	70.000	.1146	1.392	128.713	.102	.260
400.0	80.000	.1123	1.396	131.306	.103	.259
400.0	90.000	.1102	1.401	133.894	.104	.259
400.0	100.000	.1081	1.406	136.478	.106	.258
400.0	110.000	.1061	1.410	139.058	.107	.258
400.0	120.000	.1042	1.415	141.634	.108	.257
400.0	130.000	.1023	1.419	144.207	.110	.257
400.0	140.000	.1005	1.424	146.776	.111	.257
400.0	150.000	.0988	1.428	149.343	.112	.257
400.0	160.000	.0971	1.432	151.907	.114	.256
400.0	170.000	.0955	1.436	154.468	.115	.256
400.0	180.000	.0940	1.440	157.027	.116	.256
400.0	190.000	.0925	1.444	159.584	.118	.256
400.0	200.000	.0910	1.448	162.140	.119	.255
400.0	210.000	.0896	1.452	164.693	.120	.255
400.0	220.000	.0883	1.456	167.245	.121	.255
400.0	230.000	.0870	1.459	169.796	.123	.255
400.0	240.000	.0857	1.463	172.345	.124	.255
400.0	250.000	.0845	1.467	174.894	.125	.255

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
600.0	-250.000	2.1625	.884	-14.269	.273	.637
600.0	-240.000	1.9690	.916	-7.300	.222	.780
600.0	-230.000	1.6365	.961	2.836	.159	1.508
600.0	-220.000	.8103	1.065	27.228	.080	1.602
600.0	-210.000	.6038	1.108	37.584	.072	.742
600.0	-200.000	.5163	1.132	43.875	.070	.548
600.0	-190.000	.4616	1.151	48.877	.070	.462
600.0	-180.000	.4221	1.167	53.231	.070	.413
600.0	-170.000	.3914	1.181	57.190	.071	.381
600.0	-160.000	.3665	1.194	60.885	.072	.359
600.0	-150.000	.3456	1.205	64.390	.073	.343
600.0	-140.000	.3277	1.216	67.751	.074	.330
600.0	-130.000	.3121	1.226	71.001	.076	.320
600.0	-120.000	.2983	1.235	74.162	.077	.312
600.0	-110.000	.2860	1.244	77.250	.078	.306
600.0	-100.000	.2749	1.253	80.278	.080	.300
600.0	-90.000	.2647	1.261	83.255	.081	.295
600.0	-80.000	.2555	1.269	86.189	.082	.291
600.0	-70.000	.2470	1.276	89.086	.084	.288
600.0	-60.000	.2391	1.284	91.950	.085	.285
600.0	-50.000	.2319	1.291	94.786	.087	.282
600.0	-40.000	.2251	1.297	97.596	.088	.280
600.0	-30.000	.2187	1.304	100.385	.089	.278
600.0	-20.000	.2128	1.310	103.153	.091	.276
600.0	-10.000	.2072	1.316	105.904	.092	.274
600.0	.000	.2020	1.322	108.638	.094	.273
600.0	10.000	.1970	1.328	111.358	.095	.271
600.0	20.000	.1923	1.334	114.064	.096	.270
600.0	30.000	.1878	1.340	116.759	.098	.269
600.0	40.000	.1836	1.345	119.442	.099	.268
600.0	50.000	.1796	1.350	122.116	.101	.267
600.0	60.000	.1757	1.355	124.780	.102	.266
600.0	70.000	.1721	1.361	127.435	.103	.265
600.0	80.000	.1686	1.365	130.082	.105	.264
600.0	90.000	.1652	1.370	132.722	.106	.264
600.0	100.000	.1620	1.375	135.356	.107	.263
600.0	110.000	.1590	1.380	137.983	.109	.262
600.0	120.000	.1560	1.384	140.604	.110	.262
600.0	130.000	.1532	1.389	143.220	.111	.261
600.0	140.000	.1505	1.393	145.831	.112	.261
600.0	150.000	.1478	1.397	148.437	.114	.260
600.0	160.000	.1453	1.402	151.039	.115	.260
600.0	170.000	.1429	1.406	153.637	.116	.260
600.0	180.000	.1405	1.410	156.232	.118	.259
600.0	190.000	.1383	1.414	158.822	.119	.259
600.0	200.000	.1361	1.418	161.410	.120	.259
600.0	210.000	.1339	1.422	163.995	.121	.258
600.0	220.000	.1319	1.426	166.578	.123	.258
600.0	230.000	.1299	1.429	169.158	.124	.258
600.0	240.000	.1280	1.433	171.735	.125	.258
600.0	250.000	.1261	1.437	174.311	.126	.257

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
800.0	-250.000	2.2206	.877	-14.742	.292	.590
800.0	-240.000	2.0626	.906	-8.532	.246	.659
800.0	-230.000	1.8613	.938	-1.303	.200	.808
800.0	-220.000	1.5570	.979	8.414	.150	1.192
800.0	-210.000	1.1342	1.034	21.756	.105	1.307
800.0	-200.000	.8594	1.077	32.768	.088	.901
800.0	-190.000	.7169	1.106	40.418	.081	.658
800.0	-180.000	.6302	1.128	46.325	.079	.536
800.0	-170.000	.5700	1.145	51.308	.078	.467
800.0	-160.000	.5246	1.160	55.738	.078	.422
800.0	-150.000	.4885	1.173	59.800	.079	.392
800.0	-140.000	.4587	1.186	63.604	.079	.370
800.0	-130.000	.4336	1.197	67.215	.080	.353
800.0	-120.000	.4119	1.207	70.679	.081	.340
800.0	-110.000	.3929	1.217	74.025	.082	.330
800.0	-100.000	.3760	1.226	77.277	.083	.321
800.0	-90.000	.3609	1.235	80.451	.084	.314
800.0	-80.000	.3473	1.243	83.559	.086	.308
800.0	-70.000	.3348	1.251	86.612	.087	.303
800.0	-60.000	.3234	1.258	89.618	.088	.298
800.0	-50.000	.3130	1.266	92.582	.089	.295
800.0	-40.000	.3033	1.273	95.510	.091	.291
800.0	-30.000	.2943	1.280	98.406	.092	.288
800.0	-20.000	.2859	1.286	101.274	.093	.285
800.0	-10.000	.2780	1.293	104.117	.095	.283
800.0	.000	.2707	1.299	106.937	.096	.281
800.0	10.000	.2638	1.305	109.737	.097	.279
800.0	20.000	.2572	1.311	112.519	.098	.277
800.0	30.000	.2511	1.316	115.284	.100	.276
800.0	40.000	.2452	1.322	118.034	.101	.274
800.0	50.000	.2397	1.327	120.770	.102	.273
800.0	60.000	.2344	1.333	123.493	.104	.272
800.0	70.000	.2294	1.338	126.205	.105	.271
800.0	80.000	.2246	1.343	128.906	.106	.270
800.0	90.000	.2201	1.348	131.597	.108	.269
800.0	100.000	.2157	1.353	134.278	.109	.268
800.0	110.000	.2116	1.357	136.952	.110	.267
800.0	120.000	.2076	1.362	139.617	.111	.266
800.0	130.000	.2037	1.367	142.275	.113	.265
800.0	140.000	.2000	1.371	144.926	.114	.265
800.0	150.000	.1965	1.375	147.571	.115	.264
800.0	160.000	.1931	1.380	150.210	.116	.264
800.0	170.000	.1898	1.384	152.844	.118	.263
800.0	180.000	.1866	1.388	155.472	.119	.263
800.0	190.000	.1836	1.392	158.096	.120	.262
800.0	200.000	.1807	1.396	160.716	.121	.262
800.0	210.000	.1778	1.400	163.331	.122	.261
800.0	220.000	.1751	1.404	165.943	.124	.261
800.0	230.000	.1724	1.408	168.551	.125	.261
800.0	240.000	.1698	1.412	171.157	.126	.260
800.0	250.000	.1673	1.415	173.759	.127	.260

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
1000.0	-250.000	2.2684	.871	-15.006	.309	.559
1000.0	-240.000	2.1303	.898	-9.221	.265	.601
1000.0	-230.000	1.9697	.926	-2.892	.224	.671
1000.0	-220.000	1.7717	.957	4.363	.185	.791
1000.0	-210.000	1.5180	.993	13.090	.147	.949
1000.0	-200.000	1.2427	1.031	22.799	.117	.954
1000.0	-190.000	1.0250	1.064	31.681	.101	.812
1000.0	-180.000	.8766	1.091	39.046	.093	.667
1000.0	-170.000	.7748	1.113	45.161	.089	.563
1000.0	-160.000	.7010	1.131	50.427	.087	.494
1000.0	-150.000	.6446	1.146	55.121	.086	.447
1000.0	-140.000	.5996	1.160	59.417	.085	.414
1000.0	-130.000	.5626	1.172	63.424	.085	.389
1000.0	-120.000	.5313	1.183	67.214	.086	.370
1000.0	-110.000	.5043	1.194	70.835	.087	.355
1000.0	-100.000	.4807	1.204	74.322	.087	.343
1000.0	-90.000	.4599	1.213	77.700	.088	.333
1000.0	-80.000	.4412	1.222	80.988	.089	.325
1000.0	-70.000	.4244	1.230	84.200	.090	.318
1000.0	-60.000	.4091	1.238	87.349	.091	.312
1000.0	-50.000	.3952	1.246	90.442	.092	.307
1000.0	-40.000	.3823	1.254	93.487	.093	.302
1000.0	-30.000	.3705	1.260	96.491	.095	.298
1000.0	-20.000	.3594	1.267	99.458	.096	.295
1000.0	-10.000	.3492	1.274	102.392	.097	.292
1000.0	.000	.3396	1.280	105.298	.098	.289
1000.0	10.000	.3306	1.286	108.177	.099	.287
1000.0	20.000	.3222	1.292	111.032	.101	.284
1000.0	30.000	.3142	1.298	113.867	.102	.282
1000.0	40.000	.3067	1.304	116.682	.103	.281
1000.0	50.000	.2996	1.309	119.479	.104	.279
1000.0	60.000	.2929	1.315	122.260	.106	.277
1000.0	70.000	.2865	1.320	125.027	.107	.276
1000.0	80.000	.2804	1.325	127.780	.108	.275
1000.0	90.000	.2746	1.330	130.520	.109	.273
1000.0	100.000	.2691	1.335	133.249	.110	.272
1000.0	110.000	.2638	1.340	135.967	.112	.271
1000.0	120.000	.2587	1.345	138.675	.113	.270
1000.0	130.000	.2538	1.349	141.373	.114	.269
1000.0	140.000	.2492	1.354	144.064	.115	.269
1000.0	150.000	.2447	1.358	146.746	.117	.268
1000.0	160.000	.2404	1.362	149.421	.118	.267
1000.0	170.000	.2363	1.367	152.089	.119	.266
1000.0	180.000	.2323	1.371	154.751	.120	.266
1000.0	190.000	.2285	1.375	157.407	.121	.265
1000.0	200.000	.2248	1.379	160.057	.123	.265
1000.0	210.000	.2212	1.383	162.702	.124	.264
1000.0	220.000	.2177	1.387	165.342	.125	.264
1000.0	230.000	.2144	1.391	167.978	.126	.263
1000.0	240.000	.2112	1.395	170.610	.127	.263
1000.0	250.000	.2080	1.398	173.238	.128	.263

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
2000.0	-250.000	2.4348	.850	-14.886	.377	.487
2000.0	-240.000	2.3383	.873	-9.971	.336	.496
2000.0	-230.000	2.2379	.895	-4.955	.301	.507
2000.0	-220.000	2.1332	.917	.177	.269	.519
2000.0	-210.000	2.0242	.939	5.435	.242	.532
2000.0	-200.000	1.9111	.960	10.823	.217	.545
2000.0	-190.000	1.7950	.981	16.329	.196	.555
2000.0	-180.000	1.6781	1.001	21.909	.177	.559
2000.0	-170.000	1.5638	1.020	27.491	.162	.555
2000.0	-160.000	1.4555	1.039	32.991	.150	.543
2000.0	-150.000	1.3557	1.057	38.339	.140	.525
2000.0	-140.000	1.2658	1.073	43.490	.132	.504
2000.0	-130.000	1.1857	1.088	48.422	.126	.482
2000.0	-120.000	1.1149	1.102	53.135	.122	.461
2000.0	-110.000	1.0524	1.115	57.639	.119	.440
2000.0	-100.000	.9972	1.128	61.950	.116	.422
2000.0	-90.000	.9482	1.139	66.089	.115	.406
2000.0	-80.000	.9046	1.150	70.075	.113	.392
2000.0	-70.000	.8654	1.160	73.927	.113	.379
2000.0	-60.000	.8302	1.169	77.661	.112	.368
2000.0	-50.000	.7983	1.178	81.291	.112	.358
2000.0	-40.000	.7692	1.187	84.831	.112	.350
2000.0	-30.000	.7426	1.195	88.290	.112	.342
2000.0	-20.000	.7182	1.202	91.679	.112	.336
2000.0	-10.000	.6956	1.210	95.005	.112	.330
2000.0	.000	.6747	1.217	98.275	.113	.324
2000.0	10.000	.6553	1.224	101.495	.113	.320
2000.0	20.000	.6371	1.231	104.670	.114	.315
2000.0	30.000	.6202	1.237	107.804	.115	.312
2000.0	40.000	.6042	1.243	110.901	.115	.308
2000.0	50.000	.5892	1.250	113.965	.116	.305
2000.0	60.000	.5751	1.255	116.998	.117	.302
2000.0	70.000	.5618	1.261	120.003	.118	.299
2000.0	80.000	.5492	1.267	122.983	.119	.297
2000.0	90.000	.5372	1.272	125.938	.119	.294
2000.0	100.000	.5258	1.277	128.872	.120	.292
2000.0	110.000	.5149	1.283	131.786	.121	.290
2000.0	120.000	.5046	1.288	134.681	.122	.289
2000.0	130.000	.4948	1.293	137.559	.123	.287
2000.0	140.000	.4853	1.297	140.421	.124	.285
2000.0	150.000	.4763	1.302	143.267	.125	.284
2000.0	160.000	.4677	1.307	146.100	.126	.283
2000.0	170.000	.4594	1.311	148.920	.127	.281
2000.0	180.000	.4514	1.316	151.728	.128	.280
2000.0	190.000	.4437	1.320	154.524	.129	.279
2000.0	200.000	.4364	1.324	157.309	.130	.278
2000.0	210.000	.4293	1.328	160.085	.131	.277
2000.0	220.000	.4224	1.333	162.851	.132	.276
2000.0	230.000	.4158	1.337	165.609	.133	.275
2000.0	240.000	.4094	1.341	168.358	.134	.275
2000.0	250.000	.4033	1.344	171.100	.135	.274

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
3000.0	-250.000	2.5464	.835	-13.709	.432	.457
3000.0	-240.000	2.4664	.856	-9.126	.391	.460
3000.0	-230.000	2.3850	.877	-4.510	.355	.463
3000.0	-220.000	2.3026	.897	.138	.324	.466
3000.0	-210.000	2.2192	.916	4.817	.297	.469
3000.0	-200.000	2.1352	.934	9.522	.273	.472
3000.0	-190.000	2.0508	.952	14.248	.252	.473
3000.0	-180.000	1.9667	.969	18.986	.233	.474
3000.0	-170.000	1.8833	.986	23.724	.217	.473
3000.0	-160.000	1.8015	1.002	28.445	.203	.471
3000.0	-150.000	1.7220	1.018	33.132	.190	.466
3000.0	-140.000	1.6454	1.032	37.766	.180	.460
3000.0	-130.000	1.5724	1.046	42.331	.171	.452
3000.0	-120.000	1.5035	1.060	46.812	.163	.444
3000.0	-110.000	1.4388	1.072	51.201	.157	.434
3000.0	-100.000	1.3784	1.085	55.493	.152	.424
3000.0	-90.000	1.3223	1.096	59.686	.147	.414
3000.0	-80.000	1.2702	1.107	63.780	.144	.405
3000.0	-70.000	1.2219	1.117	67.779	.141	.395
3000.0	-60.000	1.1772	1.127	71.687	.138	.386
3000.0	-50.000	1.1358	1.137	75.508	.136	.378
3000.0	-40.000	1.0973	1.146	79.249	.134	.370
3000.0	-30.000	1.0616	1.154	82.915	.133	.363
3000.0	-20.000	1.0283	1.163	86.510	.132	.356
3000.0	-10.000	.9973	1.171	90.042	.131	.350
3000.0	.000	.9683	1.178	93.513	.131	.344
3000.0	10.000	.9412	1.186	96.930	.130	.339
3000.0	20.000	.9158	1.193	100.297	.130	.334
3000.0	30.000	.8919	1.200	103.615	.130	.330
3000.0	40.000	.8694	1.206	106.893	.130	.326
3000.0	50.000	.8482	1.213	110.130	.130	.322
3000.0	60.000	.8282	1.219	113.330	.130	.318
3000.0	70.000	.8092	1.225	116.497	.131	.315
3000.0	80.000	.7912	1.231	119.632	.131	.312
3000.0	90.000	.7741	1.236	122.737	.132	.309
3000.0	100.000	.7578	1.242	125.816	.132	.307
3000.0	110.000	.7423	1.247	128.869	.133	.304
3000.0	120.000	.7276	1.253	131.899	.133	.302
3000.0	130.000	.7135	1.258	134.907	.134	.300
3000.0	140.000	.7000	1.263	137.894	.134	.298
3000.0	150.000	.6871	1.268	140.862	.135	.296
3000.0	160.000	.6747	1.273	143.812	.136	.294
3000.0	170.000	.6628	1.277	146.746	.136	.293
3000.0	180.000	.6514	1.282	149.663	.137	.291
3000.0	190.000	.6404	1.286	152.566	.138	.290
3000.0	200.000	.6299	1.291	155.455	.139	.288
3000.0	210.000	.6197	1.295	158.330	.139	.287
3000.0	220.000	.6099	1.299	161.194	.140	.286
3000.0	230.000	.6005	1.303	164.045	.141	.285
3000.0	240.000	.5914	1.308	166.886	.142	.284
3000.0	250.000	.5825	1.312	169.717	.143	.283

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
4000.0	-250.000	2.6324	.823	-12.065	.480	.439
4000.0	-240.000	2.5620	.844	-7.669	.438	.440
4000.0	-230.000	2.4912	.863	-3.264	.402	.441
4000.0	-220.000	2.4201	.882	1.149	.370	.442
4000.0	-210.000	2.3489	.900	5.565	.342	.442
4000.0	-200.000	2.2779	.917	9.982	.318	.441
4000.0	-190.000	2.2073	.934	14.393	.296	.441
4000.0	-180.000	2.1373	.950	18.795	.277	.440
4000.0	-170.000	2.0681	.966	23.183	.260	.438
4000.0	-160.000	2.0001	.980	27.550	.245	.435
4000.0	-150.000	1.9335	.995	31.890	.231	.432
4000.0	-140.000	1.8686	1.008	36.196	.219	.429
4000.0	-130.000	1.8057	1.021	40.462	.209	.424
4000.0	-120.000	1.7449	1.034	44.683	.200	.420
4000.0	-110.000	1.6865	1.046	48.852	.192	.414
4000.0	-100.000	1.6307	1.058	52.964	.185	.408
4000.0	-90.000	1.5774	1.069	57.018	.179	.402
4000.0	-80.000	1.5267	1.080	61.012	.173	.396
4000.0	-70.000	1.4786	1.090	64.943	.169	.390
4000.0	-60.000	1.4330	1.100	68.813	.165	.384
4000.0	-50.000	1.3899	1.109	72.623	.162	.378
4000.0	-40.000	1.3492	1.118	76.373	.159	.372
4000.0	-30.000	1.3106	1.127	80.066	.156	.367
4000.0	-20.000	1.2742	1.135	83.704	.154	.361
4000.0	-10.000	1.2398	1.143	87.289	.152	.356
4000.0	.000	1.2072	1.151	90.825	.150	.351
4000.0	10.000	1.1764	1.158	94.313	.149	.347
4000.0	20.000	1.1472	1.166	97.756	.148	.342
4000.0	30.000	1.1195	1.173	101.157	.147	.338
4000.0	40.000	1.0932	1.180	104.518	.147	.334
4000.0	50.000	1.0683	1.186	107.841	.146	.331
4000.0	60.000	1.0445	1.193	111.129	.146	.327
4000.0	70.000	1.0219	1.199	114.383	.145	.324
4000.0	80.000	1.0004	1.205	117.606	.145	.321
4000.0	90.000	.9798	1.211	120.800	.145	.318
4000.0	100.000	.9602	1.216	123.965	.145	.315
4000.0	110.000	.9415	1.222	127.105	.145	.313
4000.0	120.000	.9235	1.227	130.220	.145	.310
4000.0	130.000	.9063	1.233	133.311	.145	.308
4000.0	140.000	.8898	1.238	136.381	.146	.306
4000.0	150.000	.8740	1.243	139.430	.146	.304
4000.0	160.000	.8588	1.248	142.460	.146	.302
4000.0	170.000	.8442	1.253	145.471	.147	.300
4000.0	180.000	.8302	1.257	148.465	.147	.299
4000.0	190.000	.8166	1.262	151.442	.148	.297
4000.0	200.000	.8036	1.266	154.405	.148	.295
4000.0	210.000	.7910	1.271	157.352	.149	.294
4000.0	220.000	.7789	1.275	160.286	.149	.293
4000.0	230.000	.7671	1.279	163.205	.150	.291
4000.0	240.000	.7558	1.284	166.114	.150	.290
4000.0	250.000	.7448	1.288	169.011	.151	.289

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
5000.0	-250.000	2.7032	.813	-10.158	.524	.427
5000.0	-240.000	2.6393	.833	-5.884	.481	.427
5000.0	-230.000	2.5754	.852	-1.612	.444	.427
5000.0	-220.000	2.5116	.870	2.656	.411	.427
5000.0	-210.000	2.4481	.888	6.917	.382	.426
5000.0	-200.000	2.3850	.904	11.168	.357	.424
5000.0	-190.000	2.3224	.920	15.405	.335	.423
5000.0	-180.000	2.2606	.936	19.625	.314	.421
5000.0	-170.000	2.1997	.950	23.824	.297	.419
5000.0	-160.000	2.1398	.965	27.999	.281	.416
5000.0	-150.000	2.0811	.978	32.146	.266	.413
5000.0	-140.000	2.0237	.991	36.264	.254	.410
5000.0	-130.000	1.9678	1.004	40.348	.242	.407
5000.0	-120.000	1.9134	1.016	44.397	.232	.403
5000.0	-110.000	1.8606	1.028	48.406	.223	.399
5000.0	-100.000	1.8096	1.039	52.378	.215	.395
5000.0	-90.000	1.7604	1.050	56.303	.208	.391
5000.0	-80.000	1.7130	1.060	60.186	.201	.386
5000.0	-70.000	1.6675	1.070	64.025	.196	.382
5000.0	-60.000	1.6238	1.080	67.819	.191	.377
5000.0	-50.000	1.5819	1.089	71.567	.186	.373
5000.0	-40.000	1.5418	1.098	75.272	.182	.368
5000.0	-30.000	1.5035	1.106	78.932	.179	.364
5000.0	-20.000	1.4668	1.115	82.550	.175	.360
5000.0	-10.000	1.4318	1.123	86.125	.173	.356
5000.0	.000	1.3983	1.131	89.661	.170	.352
5000.0	10.000	1.3663	1.138	93.157	.168	.348
5000.0	20.000	1.3357	1.145	96.615	.166	.344
5000.0	30.000	1.3065	1.152	100.038	.165	.340
5000.0	40.000	1.2785	1.159	103.426	.163	.337
5000.0	50.000	1.2518	1.166	106.780	.162	.334
5000.0	60.000	1.2262	1.172	110.104	.161	.331
5000.0	70.000	1.2016	1.179	113.397	.160	.328
5000.0	80.000	1.1781	1.185	116.661	.160	.325
5000.0	90.000	1.1556	1.191	119.898	.159	.322
5000.0	100.000	1.1340	1.196	123.109	.159	.320
5000.0	110.000	1.1132	1.202	126.295	.158	.317
5000.0	120.000	1.0932	1.208	129.458	.158	.315
5000.0	130.000	1.0740	1.213	132.598	.158	.313
5000.0	140.000	1.0556	1.218	135.717	.158	.311
5000.0	150.000	1.0378	1.223	138.816	.157	.309
5000.0	160.000	1.0206	1.228	141.895	.157	.307
5000.0	170.000	1.0041	1.233	144.956	.158	.305
5000.0	180.000	.9882	1.238	148.000	.158	.304
5000.0	190.000	.9728	1.243	151.027	.158	.302
5000.0	200.000	.9580	1.247	154.039	.158	.300
5000.0	210.000	.9436	1.252	157.035	.158	.299
5000.0	220.000	.9297	1.256	160.018	.159	.298
5000.0	230.000	.9163	1.261	162.986	.159	.296
5000.0	240.000	.9032	1.265	165.942	.159	.295
5000.0	250.000	.8906	1.269	168.886	.160	.294

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
6000.0	-250.000	2.7637	.804	-8.084	.565	.419
6000.0	-240.000	2.7046	.824	-3.898	.521	.418
6000.0	-230.000	2.6457	.842	.282	.483	.418
6000.0	-220.000	2.5872	.860	4.452	.449	.416
6000.0	-210.000	2.5290	.877	8.609	.419	.415
6000.0	-200.000	2.4714	.893	12.752	.393	.413
6000.0	-190.000	2.4144	.909	16.876	.369	.411
6000.0	-180.000	2.3582	.924	20.980	.349	.409
6000.0	-170.000	2.3028	.938	25.060	.330	.407
6000.0	-160.000	2.2484	.952	29.115	.313	.404
6000.0	-150.000	2.1950	.965	33.143	.296	.401
6000.0	-140.000	2.1428	.978	37.141	.284	.398
6000.0	-130.000	2.0918	.990	41.109	.272	.395
6000.0	-120.000	2.0420	1.002	45.044	.261	.392
6000.0	-110.000	1.9936	1.013	48.946	.251	.388
6000.0	-100.000	1.9465	1.024	52.813	.242	.385
6000.0	-90.000	1.9008	1.035	56.646	.234	.381
6000.0	-80.000	1.8566	1.045	60.443	.227	.378
6000.0	-70.000	1.8137	1.055	64.203	.220	.374
6000.0	-60.000	1.7723	1.064	67.928	.215	.371
6000.0	-50.000	1.7324	1.073	71.616	.209	.367
6000.0	-40.000	1.6938	1.082	75.268	.205	.363
6000.0	-30.000	1.6567	1.091	78.884	.200	.360
6000.0	-20.000	1.6209	1.099	82.466	.196	.356
6000.0	-10.000	1.5864	1.107	86.013	.193	.353
6000.0	.000	1.5533	1.114	89.526	.190	.350
6000.0	10.000	1.5214	1.122	93.007	.187	.346
6000.0	20.000	1.4907	1.129	96.456	.185	.343
6000.0	30.000	1.4611	1.136	99.874	.182	.340
6000.0	40.000	1.4327	1.143	103.262	.180	.337
6000.0	50.000	1.4053	1.150	106.622	.179	.335
6000.0	60.000	1.3790	1.156	109.954	.177	.332
6000.0	70.000	1.3536	1.163	113.259	.176	.329
6000.0	80.000	1.3292	1.169	116.538	.174	.327
6000.0	90.000	1.3056	1.175	119.793	.173	.324
6000.0	100.000	1.2829	1.180	123.024	.172	.322
6000.0	110.000	1.2611	1.186	126.233	.172	.320
6000.0	120.000	1.2400	1.192	129.420	.171	.318
6000.0	130.000	1.2196	1.197	132.586	.170	.316
6000.0	140.000	1.1999	1.202	135.732	.170	.314
6000.0	150.000	1.1809	1.208	138.859	.169	.312
6000.0	160.000	1.1625	1.213	141.968	.169	.310
6000.0	170.000	1.1448	1.218	145.059	.169	.308
6000.0	180.000	1.1276	1.222	148.133	.169	.307
6000.0	190.000	1.1110	1.227	151.192	.169	.305
6000.0	200.000	1.0948	1.232	154.235	.169	.304
6000.0	210.000	1.0792	1.236	157.264	.169	.302
6000.0	220.000	1.0641	1.241	160.279	.169	.301
6000.0	230.000	1.0494	1.245	163.280	.169	.299
6000.0	240.000	1.0352	1.250	166.269	.169	.298
6000.0	250.000	1.0214	1.254	169.245	.169	.297

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
7000.0	-250.000	2.8169	.796	-5.896	.605	.413
7000.0	-240.000	2.7616	.816	-1.775	.559	.412
7000.0	-230.000	2.7065	.834	2.336	.519	.410
7000.0	-220.000	2.6519	.851	6.434	.484	.409
7000.0	-210.000	2.5977	.868	10.517	.453	.407
7000.0	-200.000	2.5442	.884	14.583	.426	.406
7000.0	-190.000	2.4913	.899	18.628	.402	.403
7000.0	-180.000	2.4393	.914	22.651	.380	.401
7000.0	-170.000	2.3880	.928	26.650	.361	.399
7000.0	-160.000	2.3376	.942	30.623	.343	.396
7000.0	-150.000	2.2882	.954	34.569	.327	.393
7000.0	-140.000	2.2398	.967	38.486	.313	.390
7000.0	-130.000	2.1925	.979	42.374	.300	.387
7000.0	-120.000	2.1462	.990	46.231	.288	.384
7000.0	-110.000	2.1011	1.002	50.058	.278	.381
7000.0	-100.000	2.0571	1.012	53.853	.268	.378
7000.0	-90.000	2.0143	1.023	57.617	.259	.375
7000.0	-80.000	1.9727	1.033	61.349	.251	.372
7000.0	-70.000	1.9323	1.042	65.049	.244	.368
7000.0	-60.000	1.8930	1.051	68.718	.237	.365
7000.0	-50.000	1.8550	1.060	72.355	.231	.362
7000.0	-40.000	1.8181	1.069	75.962	.226	.359
7000.0	-30.000	1.7824	1.078	79.538	.221	.356
7000.0	-20.000	1.7478	1.086	83.083	.216	.353
7000.0	-10.000	1.7143	1.094	86.599	.212	.350
7000.0	.000	1.6820	1.101	90.087	.209	.347
7000.0	10.000	1.6506	1.109	93.545	.205	.344
7000.0	20.000	1.6204	1.116	96.976	.202	.342
7000.0	30.000	1.5911	1.123	100.381	.199	.339
7000.0	40.000	1.5628	1.130	103.759	.197	.337
7000.0	50.000	1.5355	1.136	107.112	.195	.334
7000.0	60.000	1.5090	1.143	110.440	.193	.332
7000.0	70.000	1.4834	1.149	113.744	.191	.329
7000.0	80.000	1.4587	1.155	117.026	.189	.327
7000.0	90.000	1.4348	1.161	120.285	.188	.325
7000.0	100.000	1.4116	1.167	123.523	.186	.323
7000.0	110.000	1.3892	1.173	126.740	.185	.321
7000.0	120.000	1.3675	1.178	129.937	.184	.319
7000.0	130.000	1.3465	1.184	133.115	.183	.317
7000.0	140.000	1.3262	1.189	136.275	.182	.315
7000.0	150.000	1.3065	1.194	139.417	.181	.313
7000.0	160.000	1.2874	1.199	142.542	.181	.312
7000.0	170.000	1.2689	1.204	145.651	.180	.310
7000.0	180.000	1.2509	1.209	148.743	.180	.309
7000.0	190.000	1.2334	1.214	151.821	.179	.307
7000.0	200.000	1.2165	1.219	154.884	.179	.306
7000.0	210.000	1.2001	1.223	157.933	.179	.304
7000.0	220.000	1.1841	1.228	160.969	.179	.303
7000.0	230.000	1.1686	1.232	163.992	.179	.302
7000.0	240.000	1.1535	1.237	167.003	.179	.300
7000.0	250.000	1.1389	1.241	170.002	.178	.299

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
8000.0	-250.000	2.8645	.789	-3.626	.642	.407
8000.0	-240.000	2.8121	.808	.443	.595	.406
8000.0	-230.000	2.7602	.826	4.501	.554	.405
8000.0	-220.000	2.7087	.844	8.545	.518	.404
8000.0	-210.000	2.6577	.860	12.573	.486	.402
8000.0	-200.000	2.6074	.876	16.581	.458	.400
8000.0	-190.000	2.5578	.891	20.568	.432	.398
8000.0	-180.000	2.5089	.905	24.532	.410	.395
8000.0	-170.000	2.4608	.919	28.472	.390	.393
8000.0	-160.000	2.4136	.932	32.386	.371	.390
8000.0	-150.000	2.3673	.945	36.272	.355	.387
8000.0	-140.000	2.3218	.957	40.131	.340	.384
8000.0	-130.000	2.2774	.969	43.961	.326	.382
8000.0	-120.000	2.2339	.981	47.762	.314	.379
8000.0	-110.000	2.1914	.991	51.534	.302	.376
8000.0	-100.000	2.1500	1.002	55.276	.292	.373
8000.0	-90.000	2.1095	1.012	58.989	.283	.370
8000.0	-80.000	2.0701	1.022	62.673	.274	.367
8000.0	-70.000	2.0317	1.032	66.327	.266	.364
8000.0	-60.000	1.9944	1.041	69.953	.259	.361
8000.0	-50.000	1.9580	1.050	73.550	.252	.358
8000.0	-40.000	1.9227	1.058	77.119	.246	.356
8000.0	-30.000	1.8884	1.067	80.661	.241	.353
8000.0	-20.000	1.8550	1.075	84.176	.236	.350
8000.0	-10.000	1.8226	1.083	87.664	.231	.348
8000.0	.000	1.7912	1.090	91.126	.227	.345
8000.0	10.000	1.7607	1.098	94.563	.223	.342
8000.0	20.000	1.7311	1.105	97.975	.220	.340
8000.0	30.000	1.7024	1.112	101.363	.216	.338
8000.0	40.000	1.6745	1.119	104.728	.213	.335
8000.0	50.000	1.6475	1.125	108.070	.211	.333
8000.0	60.000	1.6213	1.132	111.389	.208	.331
8000.0	70.000	1.5958	1.138	114.687	.206	.329
8000.0	80.000	1.5711	1.144	117.964	.204	.327
8000.0	90.000	1.5472	1.150	121.222	.202	.325
8000.0	100.000	1.5239	1.156	124.459	.200	.323
8000.0	110.000	1.5014	1.162	127.678	.199	.321
8000.0	120.000	1.4795	1.167	130.878	.197	.319
8000.0	130.000	1.4582	1.173	134.061	.196	.317
8000.0	140.000	1.4375	1.178	137.226	.195	.316
8000.0	150.000	1.4175	1.183	140.375	.194	.314
8000.0	160.000	1.3980	1.188	143.509	.193	.313
8000.0	170.000	1.3790	1.193	146.627	.192	.311
8000.0	180.000	1.3606	1.198	149.730	.191	.310
8000.0	190.000	1.3427	1.203	152.819	.190	.308
8000.0	200.000	1.3252	1.208	155.894	.190	.307
8000.0	210.000	1.3083	1.212	158.956	.189	.306
8000.0	220.000	1.2917	1.217	162.005	.189	.304
8000.0	230.000	1.2757	1.221	165.042	.189	.303
8000.0	240.000	1.2600	1.225	168.068	.188	.302
8000.0	250.000	1.2448	1.230	171.082	.188	.301

PROPERTIES OF NITROGEN GAS

P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
9000.0	-250.000	2.9077	.783	-1.294	.679	.403
9000.0	-240.000	2.8578	.801	2.732	.630	.402
9000.0	-230.000	2.8084	.819	6.748	.587	.401
9000.0	-220.000	2.7594	.836	10.750	.550	.399
9000.0	-210.000	2.7111	.853	14.734	.517	.397
9000.0	-200.000	2.6634	.868	18.698	.488	.395
9000.0	-190.000	2.6163	.883	22.641	.462	.393
9000.0	-180.000	2.5701	.897	26.561	.438	.391
9000.0	-170.000	2.5246	.911	30.456	.417	.388
9000.0	-160.000	2.4799	.924	34.325	.398	.386
9000.0	-150.000	2.4360	.937	38.167	.381	.383
9000.0	-140.000	2.3930	.949	41.982	.365	.380
9000.0	-130.000	2.3509	.961	45.769	.351	.377
9000.0	-120.000	2.3097	.972	49.528	.338	.374
9000.0	-110.000	2.2694	.983	53.258	.326	.372
9000.0	-100.000	2.2300	.993	56.961	.315	.369
9000.0	-90.000	2.1915	1.003	60.635	.305	.366
9000.0	-80.000	2.1540	1.013	64.282	.296	.363
9000.0	-70.000	2.1173	1.022	67.901	.287	.361
9000.0	-60.000	2.0816	1.031	71.493	.280	.358
9000.0	-50.000	2.0468	1.040	75.059	.273	.355
9000.0	-40.000	2.0129	1.049	78.599	.266	.353
9000.0	-30.000	1.9798	1.057	82.113	.260	.350
9000.0	-20.000	1.9476	1.065	85.602	.254	.348
9000.0	-10.000	1.9163	1.073	89.066	.249	.345
9000.0	.000	1.8858	1.080	92.507	.245	.343
9000.0	10.000	1.8562	1.088	95.924	.240	.341
9000.0	20.000	1.8273	1.095	99.319	.236	.338
9000.0	30.000	1.7992	1.102	102.691	.233	.336
9000.0	40.000	1.7719	1.109	106.042	.229	.334
9000.0	50.000	1.7454	1.115	109.372	.226	.332
9000.0	60.000	1.7195	1.122	112.682	.223	.330
9000.0	70.000	1.6944	1.128	115.971	.221	.328
9000.0	80.000	1.6700	1.134	119.242	.218	.326
9000.0	90.000	1.6462	1.140	122.494	.216	.324
9000.0	100.000	1.6231	1.146	125.728	.214	.323
9000.0	110.000	1.6006	1.152	128.944	.212	.321
9000.0	120.000	1.5786	1.157	132.144	.210	.319
9000.0	130.000	1.5573	1.163	135.327	.209	.317
9000.0	140.000	1.5366	1.168	138.494	.207	.316
9000.0	150.000	1.5164	1.173	141.646	.206	.314
9000.0	160.000	1.4967	1.178	144.782	.205	.313
9000.0	170.000	1.4775	1.183	147.905	.203	.312
9000.0	180.000	1.4589	1.188	151.014	.202	.310
9000.0	190.000	1.4407	1.193	154.109	.201	.309
9000.0	200.000	1.4229	1.198	157.191	.201	.308
9000.0	210.000	1.4057	1.202	160.261	.200	.306
9000.0	220.000	1.3888	1.207	163.319	.199	.305
9000.0	230.000	1.3724	1.211	166.365	.199	.304
9000.0	240.000	1.3564	1.216	169.400	.198	.303
9000.0	250.000	1.3407	1.220	172.424	.198	.302

PROPERTIES OF NITROGEN GAS

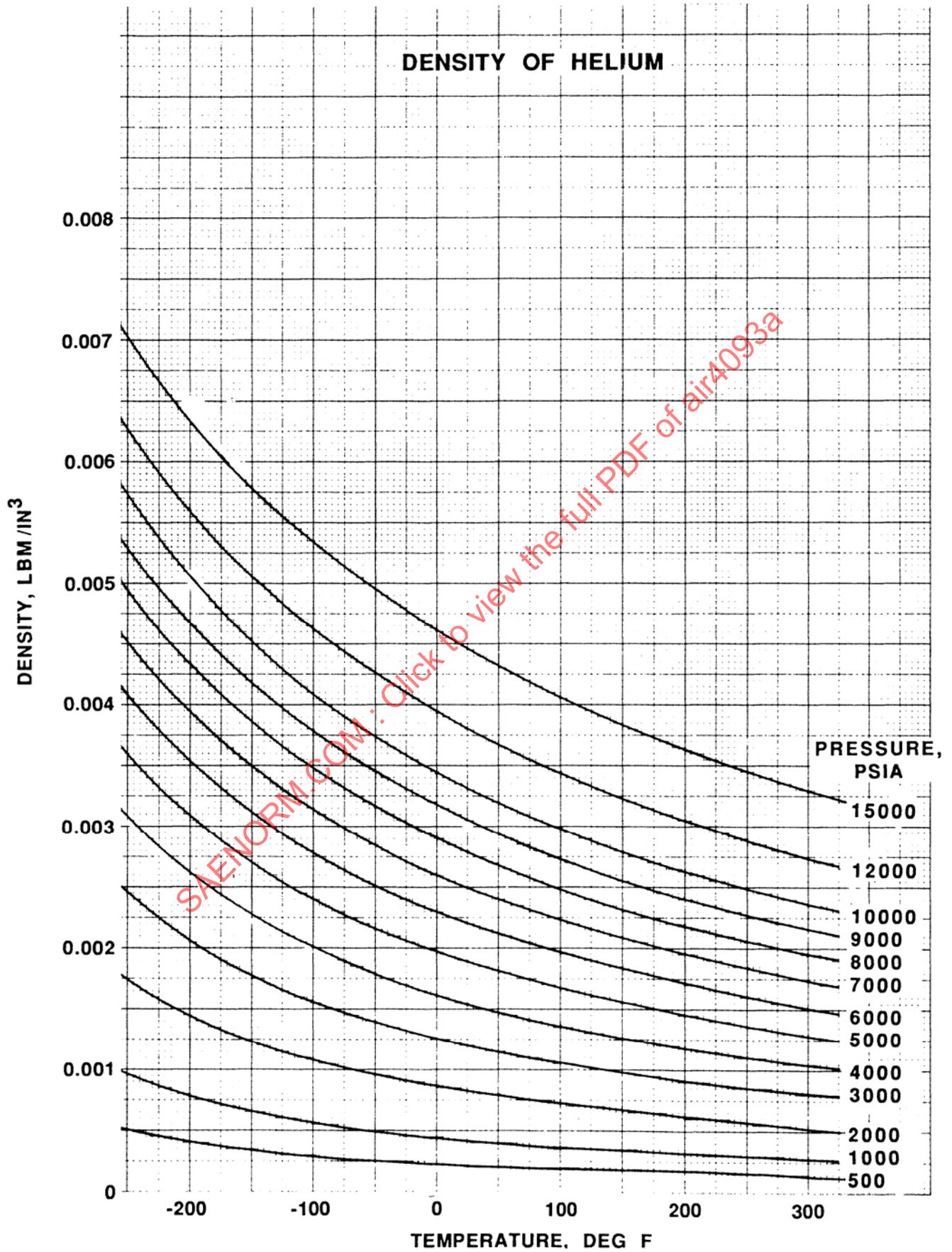
P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
10000.0	-250.000	2.9472	.777	1.084	.714	.399
10000.0	-240.000	2.8995	.795	5.075	.663	.399
10000.0	-230.000	2.8522	.813	9.056	.619	.397
10000.0	-220.000	2.8054	.830	13.023	.581	.396
10000.0	-210.000	2.7592	.846	16.973	.547	.394
10000.0	-200.000	2.7137	.861	20.903	.517	.392
10000.0	-190.000	2.6689	.876	24.812	.490	.390
10000.0	-180.000	2.6247	.890	28.697	.465	.387
10000.0	-170.000	2.5814	.904	32.557	.444	.385
10000.0	-160.000	2.5388	.917	36.391	.424	.382
10000.0	-150.000	2.4970	.929	40.199	.406	.379
10000.0	-140.000	2.4560	.941	43.981	.390	.377
10000.0	-130.000	2.4159	.953	47.735	.375	.374
10000.0	-120.000	2.3766	.964	51.461	.361	.371
10000.0	-110.000	2.3381	.975	55.160	.349	.369
10000.0	-100.000	2.3004	.985	58.832	.337	.366
10000.0	-90.000	2.2636	.995	62.477	.327	.363
10000.0	-80.000	2.2277	1.005	66.095	.317	.360
10000.0	-70.000	2.1925	1.014	69.687	.308	.358
10000.0	-60.000	2.1582	1.023	73.253	.300	.355
10000.0	-50.000	2.1247	1.032	76.794	.292	.353
10000.0	-40.000	2.0920	1.040	80.310	.285	.350
10000.0	-30.000	2.0602	1.049	83.801	.279	.348
10000.0	-20.000	2.0291	1.057	87.269	.273	.346
10000.0	-10.000	1.9987	1.064	90.714	.267	.343
10000.0	.000	1.9691	1.072	94.137	.262	.341
10000.0	10.000	1.9403	1.079	97.538	.257	.339
10000.0	20.000	1.9122	1.086	100.917	.253	.337
10000.0	30.000	1.8848	1.093	104.275	.249	.335
10000.0	40.000	1.8581	1.100	107.614	.245	.333
10000.0	50.000	1.8321	1.107	110.933	.241	.331
10000.0	60.000	1.8067	1.113	114.232	.238	.329
10000.0	70.000	1.7820	1.119	117.514	.235	.327
10000.0	80.000	1.7579	1.125	120.777	.232	.325
10000.0	90.000	1.7344	1.131	124.023	.230	.324
10000.0	100.000	1.7115	1.137	127.252	.227	.322
10000.0	110.000	1.6891	1.143	130.464	.225	.320
10000.0	120.000	1.6674	1.148	133.661	.223	.319
10000.0	130.000	1.6461	1.154	136.842	.221	.317
10000.0	140.000	1.6254	1.159	140.008	.219	.316
10000.0	150.000	1.6052	1.164	143.160	.218	.314
10000.0	160.000	1.5855	1.169	146.298	.216	.313
10000.0	170.000	1.5663	1.174	149.422	.215	.312
10000.0	180.000	1.5476	1.179	152.534	.214	.310
10000.0	190.000	1.5293	1.184	155.632	.213	.309
10000.0	200.000	1.5114	1.189	158.718	.211	.308
10000.0	210.000	1.4939	1.194	161.793	.210	.307
10000.0	220.000	1.4769	1.198	164.856	.210	.306
10000.0	230.000	1.4603	1.203	167.908	.209	.305
10000.0	240.000	1.4440	1.207	170.949	.208	.304
10000.0	250.000	1.4281	1.211	173.980	.207	.303

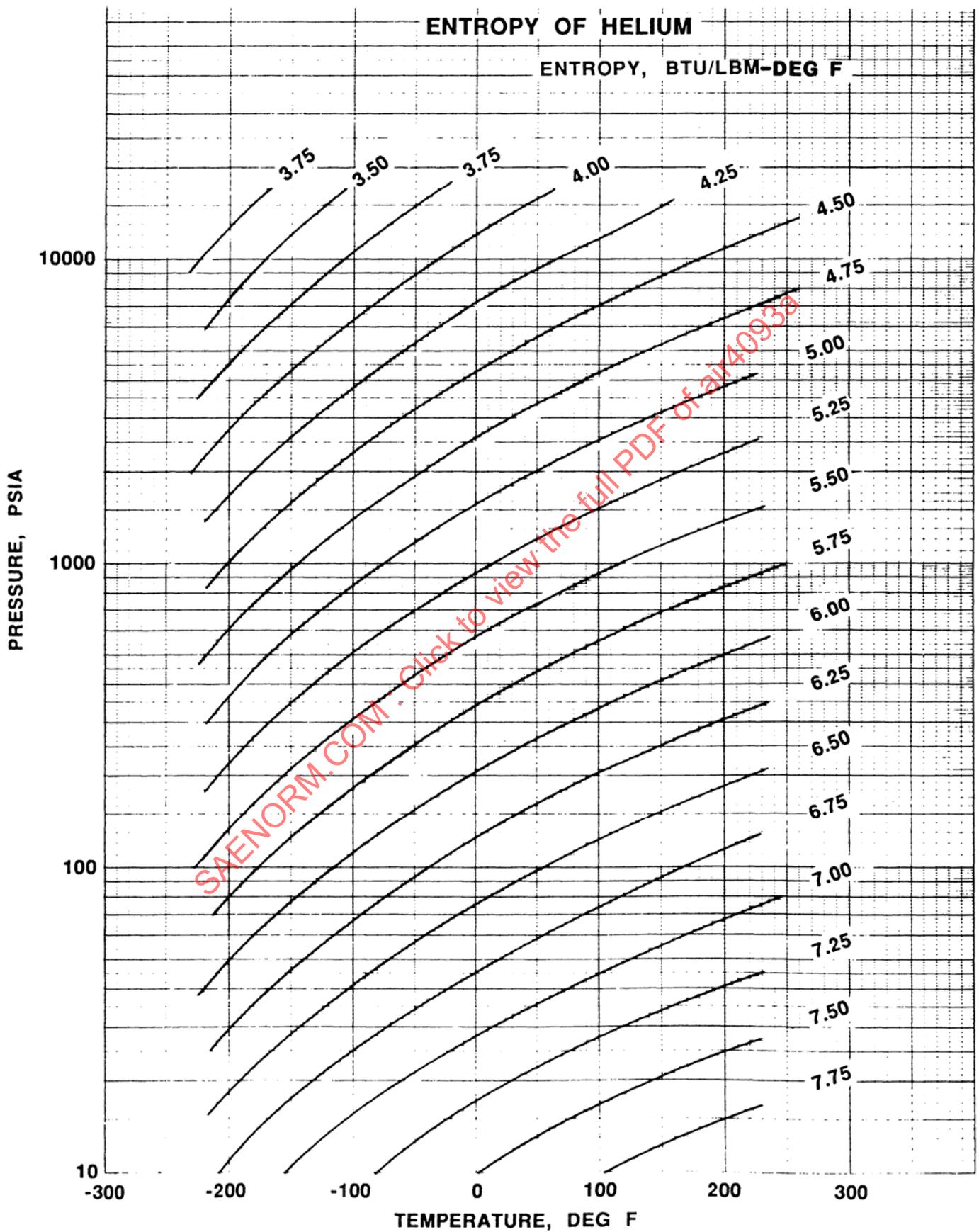
PROPERTIES OF NITROGEN GAS

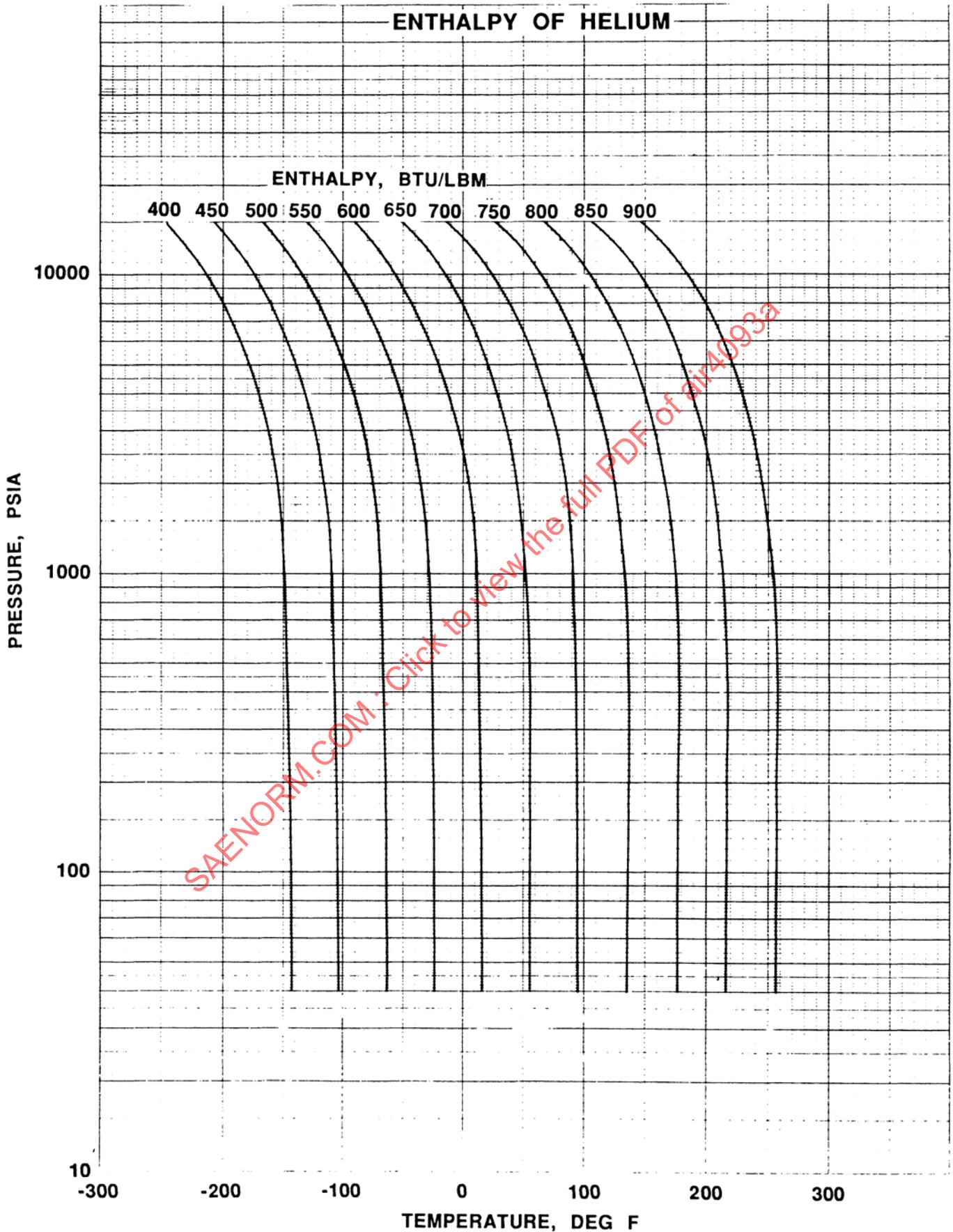
P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
12000.0	-250.000	3.0179	.765	5.942	.782	.393
12000.0	-240.000	2.9737	.784	9.875	.728	.393
12000.0	-230.000	2.9298	.801	13.802	.681	.392
12000.0	-220.000	2.8865	.818	17.718	.640	.391
12000.0	-210.000	2.8437	.834	21.617	.604	.389
12000.0	-200.000	2.8016	.849	25.498	.572	.387
12000.0	-190.000	2.7602	.864	29.357	.543	.385
12000.0	-180.000	2.7195	.878	33.193	.517	.382
12000.0	-170.000	2.6795	.891	37.004	.494	.380
12000.0	-160.000	2.6403	.904	40.790	.473	.377
12000.0	-150.000	2.6018	.916	44.550	.453	.375
12000.0	-140.000	2.5640	.928	48.284	.436	.372
12000.0	-130.000	2.5269	.940	51.992	.420	.369
12000.0	-120.000	2.4906	.951	55.673	.405	.367
12000.0	-110.000	2.4551	.961	59.328	.392	.364
12000.0	-100.000	2.4202	.971	62.957	.379	.362
12000.0	-90.000	2.3861	.981	66.560	.368	.359
12000.0	-80.000	2.3527	.991	70.138	.357	.357
12000.0	-70.000	2.3201	1.000	73.692	.347	.354
12000.0	-60.000	2.2881	1.009	77.220	.338	.352
12000.0	-50.000	2.2568	1.018	80.725	.329	.349
12000.0	-40.000	2.2263	1.026	84.207	.321	.347
12000.0	-30.000	2.1964	1.034	87.667	.314	.345
12000.0	-20.000	2.1671	1.042	91.104	.307	.343
12000.0	-10.000	2.1385	1.050	94.520	.301	.341
12000.0	.000	2.1106	1.057	97.916	.295	.339
12000.0	10.000	2.0833	1.065	101.291	.290	.337
12000.0	20.000	2.0566	1.072	104.646	.284	.335
12000.0	30.000	2.0305	1.079	107.983	.280	.333
12000.0	40.000	2.0049	1.085	111.301	.275	.331
12000.0	50.000	1.9800	1.092	114.601	.271	.329
12000.0	60.000	1.9556	1.098	117.884	.267	.327
12000.0	70.000	1.9318	1.104	121.150	.263	.326
12000.0	80.000	1.9085	1.110	124.400	.260	.324
12000.0	90.000	1.8857	1.116	127.634	.257	.323
12000.0	100.000	1.8634	1.122	130.853	.254	.321
12000.0	110.000	1.8416	1.128	134.056	.251	.320
12000.0	120.000	1.8203	1.133	137.246	.248	.318
12000.0	130.000	1.7995	1.139	140.421	.246	.317
12000.0	140.000	1.7791	1.144	143.583	.244	.316
12000.0	150.000	1.7592	1.149	146.732	.242	.314
12000.0	160.000	1.7397	1.154	149.868	.240	.313
12000.0	170.000	1.7206	1.159	152.992	.238	.312
12000.0	180.000	1.7019	1.164	156.103	.236	.311
12000.0	190.000	1.6837	1.169	159.204	.234	.309
12000.0	200.000	1.6658	1.174	162.293	.233	.308
12000.0	210.000	1.6483	1.179	165.371	.232	.307
12000.0	220.000	1.6312	1.183	168.439	.230	.306
12000.0	230.000	1.6144	1.188	171.497	.229	.305
12000.0	240.000	1.5980	1.192	174.545	.228	.304
12000.0	250.000	1.5819	1.196	177.584	.227	.303

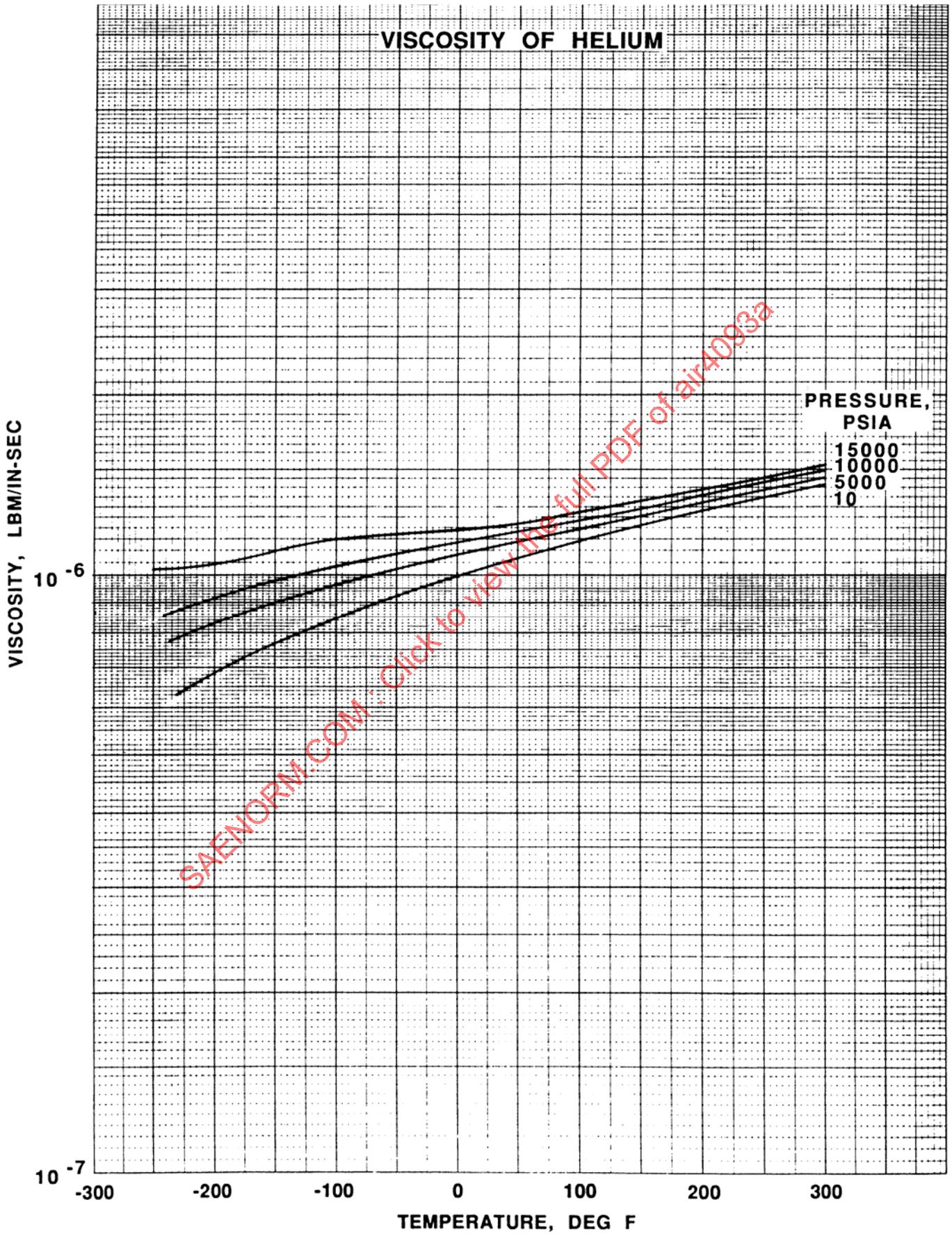
PROPERTIES OF NITROGEN GAS

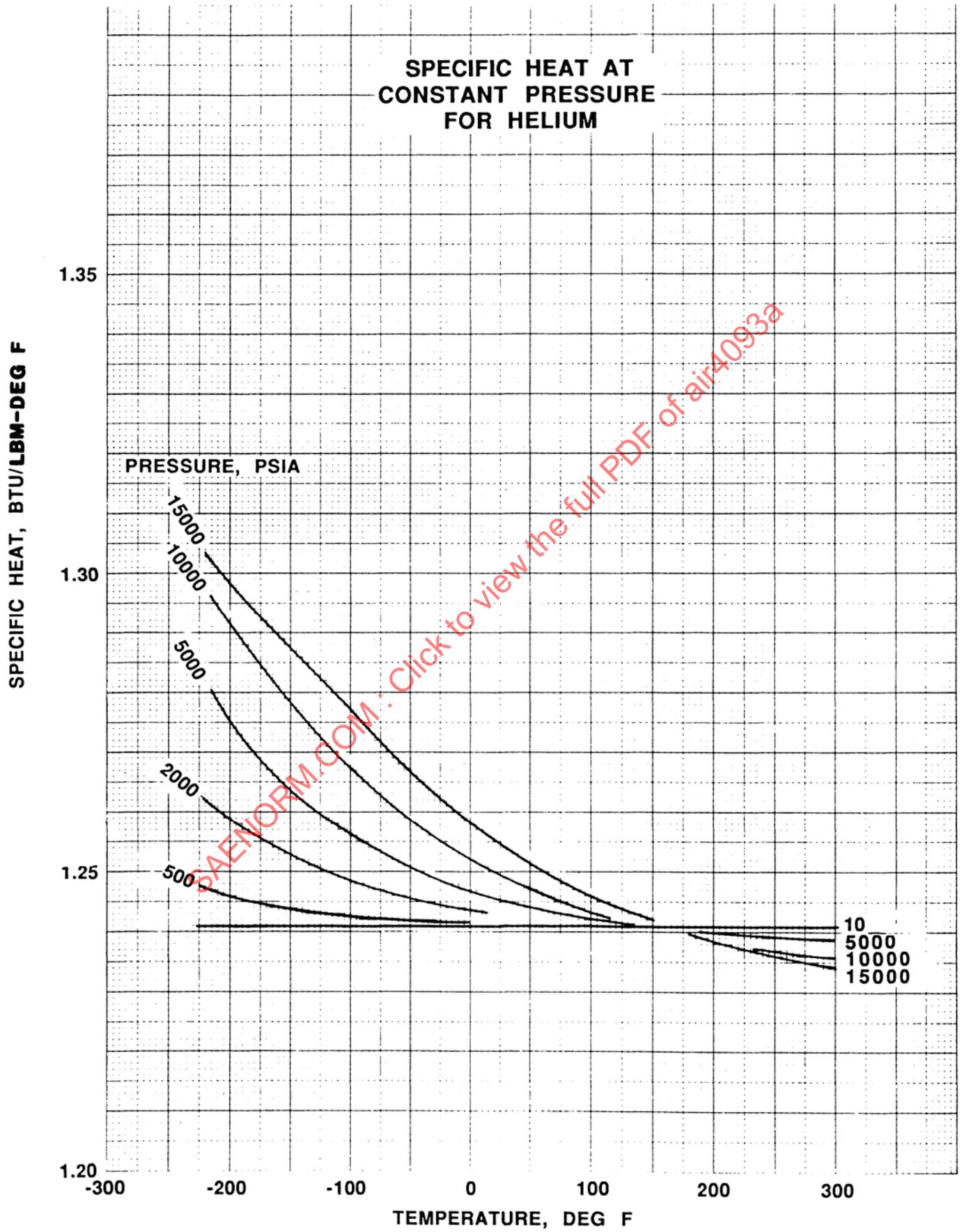
P PSIA	TEMP F	DENS LB/ CU IN E+2	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
14000.0	-250.000	3.0798	.756	10.898	.848	.388
14000.0	-240.000	3.0384	.774	14.782	.791	.389
14000.0	-230.000	2.9973	.791	18.667	.741	.388
14000.0	-220.000	2.9566	.808	22.545	.697	.387
14000.0	-210.000	2.9165	.823	26.409	.659	.386
14000.0	-200.000	2.8771	.838	30.256	.624	.384
14000.0	-190.000	2.8383	.853	34.083	.594	.382
14000.0	-180.000	2.8001	.867	37.887	.566	.379
14000.0	-170.000	2.7627	.880	41.668	.541	.377
14000.0	-160.000	2.7260	.893	45.423	.519	.374
14000.0	-150.000	2.6900	.905	49.153	.498	.372
14000.0	-140.000	2.6546	.917	52.858	.480	.369
14000.0	-130.000	2.6200	.928	56.536	.463	.367
14000.0	-120.000	2.5860	.939	60.189	.447	.364
14000.0	-110.000	2.5527	.950	63.816	.432	.361
14000.0	-100.000	2.5200	.960	67.418	.419	.359
14000.0	-90.000	2.4880	.970	70.994	.406	.356
14000.0	-80.000	2.4567	.979	74.547	.395	.354
14000.0	-70.000	2.4260	.988	78.075	.384	.352
14000.0	-60.000	2.3959	.997	81.580	.374	.349
14000.0	-50.000	2.3664	1.006	85.062	.365	.347
14000.0	-40.000	2.3375	1.014	88.522	.356	.345
14000.0	-30.000	2.3093	1.022	91.961	.348	.343
14000.0	-20.000	2.2816	1.030	95.378	.341	.341
14000.0	-10.000	2.2544	1.038	98.775	.333	.339
14000.0	.000	2.2279	1.045	102.152	.327	.337
14000.0	10.000	2.2019	1.052	105.510	.321	.335
14000.0	20.000	2.1764	1.059	108.849	.315	.333
14000.0	30.000	2.1514	1.066	112.171	.309	.331
14000.0	40.000	2.1270	1.073	115.474	.304	.330
14000.0	50.000	2.1031	1.079	118.761	.300	.328
14000.0	60.000	2.0796	1.086	122.032	.295	.326
14000.0	70.000	2.0567	1.092	125.287	.291	.325
14000.0	80.000	2.0342	1.098	128.526	.287	.323
14000.0	90.000	2.0121	1.104	131.750	.283	.322
14000.0	100.000	1.9905	1.110	134.961	.280	.320
14000.0	110.000	1.9694	1.115	138.157	.276	.319
14000.0	120.000	1.9486	1.121	141.339	.273	.318
14000.0	130.000	1.9283	1.126	144.509	.270	.316
14000.0	140.000	1.9084	1.132	147.666	.268	.315
14000.0	150.000	1.8889	1.137	150.811	.265	.314
14000.0	160.000	1.8698	1.142	153.943	.263	.313
14000.0	170.000	1.8510	1.147	157.065	.260	.312
14000.0	180.000	1.8326	1.152	160.175	.258	.310
14000.0	190.000	1.8146	1.157	163.274	.256	.309
14000.0	200.000	1.7969	1.161	166.363	.254	.308
14000.0	210.000	1.7796	1.166	169.443	.252	.307
14000.0	220.000	1.7626	1.170	172.512	.251	.306
14000.0	230.000	1.7459	1.175	175.572	.249	.306
14000.0	240.000	1.7295	1.179	178.622	.248	.305
14000.0	250.000	1.7135	1.184	181.664	.246	.304











N TABLE FOR GAMMA = 1.667

PL/P2	0	1	2	3	4	5	6	7	8	9
1.0000	0.0000	.0052	.0087	.0107	.0123	.0138	.0151	.0163	.0174	.0185
1.0001	.0195	.0204	.0213	.0222	.0230	.0238	.0246	.0254	.0261	.0268
1.0002	.0275	.0282	.0289	.0295	.0302	.0308	.0314	.0320	.0325	.0332
1.0003	.0337	.0343	.0348	.0354	.0359	.0364	.0369	.0374	.0379	.0384
1.0004	.0389	.0394	.0399	.0404	.0408	.0413	.0417	.0422	.0425	.0431
1.0005	.0435	.0440	.0444	.0448	.0452	.0456	.0461	.0465	.0469	.0473
1.0006	.0477	.0481	.0485	.0488	.0492	.0496	.0500	.0504	.0507	.0511
1.0007	.0515	.0519	.0522	.0525	.0529	.0533	.0536	.0540	.0543	.0547
1.0008	.0550	.0554	.0557	.0561	.0564	.0567	.0571	.0574	.0577	.0580
1.0009	.0584	.0597	.0590	.0593	.0597	.0600	.0603	.0606	.0609	.0612
1.0010	.0615	.0618	.0621	.0624	.0627	.0630	.0633	.0636	.0639	.0642
1.0011	.0645	.0648	.0651	.0654	.0657	.0660	.0663	.0665	.0668	.0671
1.0012	.0674	.0677	.0679	.0682	.0685	.0688	.0690	.0693	.0695	.0699
1.0013	.0701	.0704	.0707	.0709	.0712	.0715	.0717	.0720	.0722	.0725
1.0014	.0728	.0730	.0733	.0735	.0738	.0741	.0743	.0746	.0748	.0751
1.0015	.0753	.0756	.0758	.0761	.0763	.0766	.0768	.0770	.0773	.0775
1.0016	.0778	.0790	.0783	.0785	.0787	.0790	.0792	.0795	.0797	.0799
1.0017	.0802	.0804	.0806	.0809	.0811	.0813	.0816	.0818	.0820	.0822
1.0018	.0825	.0827	.0829	.0832	.0834	.0836	.0838	.0841	.0843	.0845
1.0019	.0847	.0850	.0852	.0854	.0856	.0858	.0861	.0863	.0865	.0867
1.0020	.0869	.0871	.0874	.0876	.0878	.0880	.0882	.0884	.0885	.0888
1.0021	.0891	.0893	.0895	.0897	.0899	.0901	.0903	.0905	.0907	.0909
1.0022	.0911	.0914	.0916	.0918	.0920	.0922	.0924	.0926	.0928	.0930
1.0023	.0932	.0934	.0936	.0938	.0940	.0942	.0944	.0946	.0948	.0950
1.0024	.0952	.0954	.0956	.0958	.0960	.0962	.0964	.0966	.0967	.0969
1.0025	.0971	.0973	.0975	.0977	.0979	.0981	.0983	.0985	.0987	.0989
1.0026	.0991	.0992	.0994	.0996	.0998	.1000	.1002	.1004	.1005	.1007
1.0027	.1009	.1011	.1013	.1015	.1017	.1019	.1020	.1022	.1024	.1025
1.0028	.1028	.1030	.1031	.1033	.1035	.1037	.1039	.1040	.1042	.1044
1.0029	.1046	.1048	.1049	.1051	.1053	.1055	.1056	.1058	.1060	.1062

N TABLE FJR GAMMA = 1.667

PI/P2	0	1	2	3	4	5	6	7	8	9
1.0030	.1064	.1081	.1098	.1115	.1132	.1148	.1164	.1180	.1196	.1212
1.0040	.1227	.1242	.1257	.1272	.1286	.1301	.1315	.1329	.1343	.1357
1.0050	.1370	.1384	.1397	.1411	.1424	.1437	.1450	.1462	.1475	.1487
1.0060	.1500	.1512	.1524	.1536	.1548	.1560	.1572	.1584	.1595	.1607
1.0070	.1618	.1630	.1641	.1652	.1663	.1675	.1685	.1696	.1707	.1718
1.0080	.1729	.1739	.1750	.1760	.1771	.1781	.1791	.1801	.1812	.1822
1.0090	.1832	.1842	.1852	.1851	.1871	.1881	.1891	.1900	.1910	.1920
1.0100	.1929	.1938	.1948	.1957	.1966	.1976	.1985	.1994	.2003	.2012
1.0110	.2021	.2030	.2039	.2048	.2057	.2066	.2074	.2083	.2092	.2101
1.0120	.2109	.2118	.2126	.2135	.2143	.2152	.2160	.2168	.2177	.2185
1.0130	.2193	.2201	.2210	.2218	.2226	.2234	.2242	.2250	.2258	.2265
1.0140	.2274	.2282	.2290	.2297	.2305	.2313	.2321	.2329	.2336	.2344
1.0150	.2351	.2359	.2367	.2374	.2382	.2389	.2397	.2404	.2412	.2419
1.0160	.2426	.2434	.2441	.2448	.2456	.2463	.2470	.2477	.2484	.2492
1.0170	.2499	.2506	.2513	.2520	.2527	.2534	.2541	.2548	.2555	.2562
1.0180	.2569	.2576	.2582	.2589	.2596	.2603	.2610	.2616	.2623	.2630
1.0190	.2637	.2643	.2650	.2657	.2663	.2670	.2676	.2683	.2690	.2696
1.0200	.2703	.2709	.2716	.2722	.2728	.2735	.2741	.2748	.2754	.2760
1.0210	.2767	.2773	.2779	.2786	.2792	.2798	.2804	.2811	.2817	.2823
1.0220	.2829	.2835	.2842	.2848	.2854	.2860	.2866	.2872	.2878	.2884
1.0230	.2890	.2896	.2902	.2908	.2914	.2920	.2926	.2932	.2938	.2944
1.0240	.2950	.2955	.2961	.2967	.2973	.2979	.2985	.2990	.2995	.3002
1.0250	.3008	.3013	.3019	.3025	.3030	.3036	.3042	.3047	.3053	.3059
1.0260	.3064	.3070	.3075	.3081	.3087	.3092	.3098	.3103	.3109	.3114
1.0270	.3120	.3125	.3131	.3136	.3142	.3147	.3153	.3158	.3163	.3169
1.0280	.3174	.3179	.3185	.3190	.3196	.3201	.3206	.3211	.3217	.3222
1.0290	.3227	.3233	.3238	.3243	.3248	.3253	.3259	.3264	.3269	.3274
1.0300	.3279	.3285	.3290	.3295	.3300	.3305	.3310	.3315	.3320	.3325
1.0310	.3331	.3336	.3341	.3346	.3351	.3356	.3361	.3366	.3371	.3376
1.0320	.3381	.3386	.3391	.3396	.3401	.3405	.3410	.3415	.3420	.3425

N TABLE FJR GAMMA = 1.667

P1/P2	0	1	2	3	4	5	6	7	8	9
1.0330	.3430	.3435	.3440	.3445	.3449	.3454	.3459	.3464	.3469	.3474
1.0340	.3478	.3483	.3488	.3493	.3497	.3502	.3507	.3512	.3515	.3521
1.0350	.3526	.3531	.3535	.3540	.3545	.3549	.3554	.3559	.3563	.3568
1.0360	.3573	.3577	.3582	.3587	.3591	.3596	.3600	.3605	.3609	.3614
1.0370	.3619	.3623	.3628	.3632	.3637	.3641	.3646	.3650	.3655	.3659
1.0380	.3664	.3668	.3673	.3677	.3682	.3686	.3691	.3695	.3699	.3704
1.0390	.3708	.3713	.3717	.3722	.3726	.3730	.3735	.3739	.3743	.3748
1.0400	.3752	.3756	.3761	.3765	.3769	.3774	.3778	.3782	.3787	.3791
1.0410	.3795	.3800	.3804	.3808	.3812	.3817	.3821	.3825	.3829	.3834
1.0420	.3838	.3842	.3846	.3850	.3855	.3859	.3863	.3867	.3871	.3875
1.0430	.3880	.3884	.3888	.3892	.3896	.3900	.3904	.3909	.3913	.3917
1.0440	.3921	.3925	.3929	.3933	.3937	.3941	.3945	.3949	.3954	.3958
1.0450	.3962	.3966	.3970	.3974	.3978	.3982	.3986	.3990	.3994	.3998
1.0460	.4002	.4006	.4010	.4014	.4018	.4022	.4026	.4030	.4033	.4037
1.0470	.4041	.4045	.4049	.4053	.4057	.4061	.4065	.4069	.4073	.4077
1.0480	.4080	.4084	.4088	.4092	.4096	.4100	.4104	.4107	.4111	.4115
1.0490	.4119	.4123	.4127	.4130	.4134	.4138	.4142	.4146	.4149	.4153
1.0500	.4157	.4195	.4232	.4268	.4304	.4340	.4376	.4410	.4445	.4479
1.0600	.4513	.4546	.4579	.4612	.4644	.4676	.4708	.4739	.4770	.4801
1.0700	.4831	.4861	.4891	.4920	.4950	.4978	.5007	.5035	.5064	.5091
1.0800	.5119	.5146	.5174	.5200	.5227	.5253	.5280	.5306	.5331	.5357
1.0900	.5382	.5407	.5432	.5457	.5481	.5506	.5530	.5554	.5577	.5601
1.1000	.5624	.5647	.5670	.5693	.5716	.5738	.5760	.5783	.5804	.5825
1.1100	.5848	.5869	.5891	.5912	.5933	.5954	.5974	.5995	.6015	.6036
1.1200	.6056	.6076	.6096	.6116	.6135	.6155	.6174	.6193	.6212	.6231
1.1300	.6250	.6269	.6287	.6306	.6324	.6342	.6360	.6378	.6395	.6414
1.1400	.6432	.6449	.6467	.6484	.6501	.6518	.6535	.6552	.6569	.6585
1.1500	.6602	.6619	.6635	.6651	.6667	.6683	.6699	.6715	.6731	.6747
1.1600	.6762	.6778	.6793	.6809	.6824	.6839	.6854	.6869	.6884	.6899
1.1700	.6914	.6928	.6943	.6957	.6972	.6986	.7000	.7014	.7029	.7043

N TABLE FJR GAMMA = 1.667

PL/PZ	0	1	2	3	4	5	6	7	8	9
1.1800	.7056	.7070	.7084	.7098	.7111	.7125	.7138	.7152	.7165	.7178
1.1900	.7192	.7205	.7218	.7231	.7244	.7256	.7269	.7282	.7295	.7307
1.2000	.7320	.7332	.7344	.7357	.7369	.7381	.7393	.7405	.7417	.7429
1.2100	.7441	.7453	.7465	.7476	.7488	.7499	.7511	.7522	.7534	.7545
1.2200	.7556	.7568	.7579	.7590	.7601	.7612	.7623	.7634	.7645	.7655
1.2300	.7666	.7677	.7687	.7698	.7709	.7719	.7729	.7740	.7750	.7750
1.2400	.7771	.7781	.7791	.7801	.7811	.7821	.7831	.7841	.7851	.7850
1.2500	.7870	.7880	.7889	.7899	.7908	.7918	.7927	.7937	.7945	.7956
1.2600	.7965	.7974	.7983	.7992	.8002	.8011	.8020	.8029	.8038	.8046
1.2700	.8055	.8064	.8073	.8082	.8090	.8099	.8108	.8116	.8125	.8133
1.2800	.8142	.8150	.8159	.8167	.8175	.8183	.8192	.8200	.8208	.8215
1.2900	.8224	.8232	.8240	.8248	.8256	.8264	.8272	.8280	.8288	.8295
1.3000	.8303	.8311	.8318	.8326	.8334	.8341	.8349	.8356	.8364	.8371
1.3100	.8379	.8386	.8393	.8401	.8408	.8415	.8422	.8429	.8437	.8444
1.3200	.8451	.8458	.8465	.8472	.8479	.8486	.8493	.8499	.8506	.8513
1.3300	.8520	.8527	.8533	.8540	.8547	.8553	.8560	.8566	.8573	.8580
1.3400	.8586	.8592	.8599	.8605	.8612	.8618	.8624	.8631	.8637	.8643
1.3500	.8649	.8656	.8662	.8668	.8674	.8680	.8686	.8692	.8698	.8704
1.3600	.8710	.8716	.8722	.8728	.8734	.8740	.8745	.8751	.8757	.8753
1.3700	.8768	.8774	.8780	.8785	.8791	.8797	.8802	.8808	.8813	.8819
1.3800	.8824	.8830	.8835	.8840	.8846	.8851	.8856	.8862	.8867	.8872
1.3900	.8878	.8883	.8888	.8893	.8898	.8904	.8909	.8914	.8919	.8924
1.4000	.8929	.8934	.8939	.8944	.8949	.8954	.8959	.8964	.8969	.8973
1.4100	.8978	.8983	.8988	.8993	.8997	.9002	.9007	.9012	.9015	.9021
1.4200	.9025	.9030	.9035	.9039	.9044	.9048	.9053	.9057	.9062	.9065
1.4300	.9071	.9075	.9080	.9084	.9088	.9093	.9097	.9101	.9106	.9110
1.4400	.9114	.9119	.9123	.9127	.9131	.9135	.9140	.9144	.9148	.9152
1.4500	.9156	.9160	.9164	.9168	.9172	.9176	.9180	.9184	.9188	.9192
1.4600	.9196	.9200	.9204	.9208	.9212	.9216	.9220	.9223	.9227	.9231
1.4700	.9235	.9239	.9242	.9246	.9250	.9253	.9257	.9261	.9264	.9268

N TABLE FOR GAMMA = 1.667

P1/P2	0	1	2	3	4	5	6	7	8	9
1.4800	.9272	.9275	.9279	.9283	.9286	.9290	.9293	.9297	.9300	.9304
1.4900	.9307	.9311	.9314	.9318	.9321	.9324	.9328	.9331	.9335	.9338
1.5000	.9341	.9345	.9348	.9351	.9355	.9358	.9361	.9364	.9368	.9371
1.5100	.9374	.9377	.9380	.9384	.9387	.9390	.9393	.9396	.9399	.9402
1.5200	.9405	.9408	.9412	.9415	.9418	.9421	.9424	.9427	.9430	.9433
1.5300	.9436	.9438	.9441	.9444	.9447	.9450	.9453	.9456	.9459	.9462
1.5400	.9464	.9467	.9470	.9473	.9476	.9478	.9481	.9484	.9487	.9489
1.5500	.9492	.9495	.9498	.9500	.9503	.9506	.9508	.9511	.9514	.9516
1.5600	.9519	.9521	.9524	.9527	.9529	.9532	.9534	.9537	.9539	.9542
1.5700	.9544	.9547	.9549	.9552	.9554	.9557	.9559	.9562	.9564	.9566
1.5800	.9569	.9571	.9574	.9576	.9578	.9581	.9583	.9585	.9588	.9590
1.5900	.9592	.9595	.9597	.9599	.9601	.9604	.9606	.9608	.9610	.9613
1.6000	.9615	.9617	.9619	.9621	.9624	.9626	.9628	.9630	.9632	.9634
1.6100	.9636	.9639	.9641	.9643	.9645	.9647	.9649	.9651	.9653	.9655
1.6200	.9657	.9659	.9661	.9663	.9665	.9667	.9669	.9671	.9673	.9675
1.6300	.9677	.9679	.9681	.9683	.9685	.9687	.9688	.9690	.9692	.9694
1.6400	.9696	.9698	.9700	.9702	.9703	.9705	.9707	.9709	.9711	.9712
1.6500	.9714	.9716	.9718	.9719	.9721	.9723	.9725	.9726	.9728	.9730
1.6600	.9732	.9733	.9735	.9737	.9738	.9740	.9742	.9743	.9745	.9747
1.6700	.9748	.9750	.9751	.9753	.9755	.9756	.9758	.9759	.9761	.9763
1.6800	.9764	.9766	.9767	.9769	.9770	.9772	.9773	.9775	.9776	.9778
1.6900	.9779	.9781	.9782	.9784	.9785	.9787	.9788	.9789	.9791	.9792
1.7000	.9794	.9795	.9797	.9798	.9799	.9801	.9802	.9804	.9805	.9806
1.7100	.9808	.9809	.9810	.9812	.9813	.9814	.9816	.9817	.9818	.9819
1.7200	.9821	.9822	.9823	.9825	.9826	.9827	.9828	.9830	.9831	.9832
1.7300	.9833	.9835	.9836	.9837	.9838	.9839	.9841	.9842	.9843	.9844
1.7400	.9845	.9847	.9848	.9849	.9850	.9851	.9852	.9853	.9855	.9856
1.7500	.9857	.9858	.9859	.9860	.9861	.9862	.9863	.9864	.9865	.9867
1.7600	.9868	.9869	.9870	.9871	.9872	.9873	.9874	.9875	.9876	.9877
1.7700	.9878	.9879	.9880	.9881	.9882	.9883	.9884	.9885	.9886	.9887

PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
10.0	-250.000	.0103	6.524	266.631	.059	1.241
10.0	-240.000	.0098	6.582	279.044	.061	1.241
10.0	-230.000	.0094	6.637	291.458	.063	1.241
10.0	-220.000	.0090	6.690	303.871	.065	1.241
10.0	-210.000	.0086	6.741	316.283	.066	1.241
10.0	-200.000	.0083	6.790	328.696	.068	1.241
10.0	-190.000	.0080	6.837	341.109	.070	1.241
10.0	-180.000	.0077	6.882	353.521	.072	1.241
10.0	-170.000	.0074	6.925	365.934	.073	1.241
10.0	-160.000	.0072	6.968	378.346	.075	1.241
10.0	-150.000	.0070	7.008	390.759	.077	1.241
10.0	-140.000	.0067	7.048	403.171	.078	1.241
10.0	-130.000	.0065	7.086	415.583	.080	1.241
10.0	-120.000	.0064	7.123	427.995	.082	1.241
10.0	-110.000	.0062	7.159	440.407	.083	1.241
10.0	-100.000	.0060	7.194	452.819	.085	1.241
10.0	-90.000	.0058	7.228	465.231	.086	1.241
10.0	-80.000	.0057	7.261	477.643	.088	1.241
10.0	-70.000	.0055	7.294	490.055	.089	1.241
10.0	-60.000	.0054	7.325	502.467	.091	1.241
10.0	-50.000	.0053	7.356	514.879	.092	1.241
10.0	-40.000	.0051	7.386	527.291	.094	1.241
10.0	-30.000	.0050	7.415	539.703	.096	1.241
10.0	-20.000	.0049	7.443	552.115	.097	1.241
10.0	-10.000	.0048	7.471	564.527	.099	1.241
10.0	0.000	.0047	7.499	576.939	.100	1.241
10.0	10.000	.0046	7.525	589.350	.101	1.241
10.0	20.000	.0045	7.551	601.762	.103	1.241
10.0	30.000	.0044	7.577	614.174	.104	1.241
10.0	40.000	.0043	7.602	626.586	.106	1.241
10.0	50.000	.0042	7.627	638.998	.107	1.241
10.0	60.000	.0042	7.651	651.409	.109	1.241
10.0	70.000	.0041	7.675	663.821	.110	1.241
10.0	80.000	.0040	7.698	676.233	.112	1.241
10.0	90.000	.0039	7.721	688.645	.113	1.241
10.0	100.000	.0039	7.743	701.056	.114	1.241
10.0	110.000	.0038	7.765	713.468	.116	1.241
10.0	120.000	.0037	7.786	725.880	.117	1.241
10.0	130.000	.0037	7.808	738.292	.119	1.241
10.0	140.000	.0036	7.829	750.703	.120	1.241
10.0	150.000	.0035	7.849	763.115	.121	1.241
10.0	160.000	.0035	7.869	775.527	.123	1.241
10.0	170.000	.0034	7.889	787.938	.124	1.241
10.0	180.000	.0034	7.909	800.350	.125	1.241
10.0	190.000	.0033	7.928	812.762	.127	1.241
10.0	200.000	.0033	7.947	825.173	.128	1.241
10.0	210.000	.0032	7.966	837.585	.129	1.241
10.0	220.000	.0032	7.984	849.997	.131	1.241
10.0	230.000	.0031	8.002	862.408	.132	1.241
10.0	240.000	.0031	8.020	874.820	.133	1.241
10.0	250.000	.0030	8.038	887.232	.135	1.241

PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
14.7	-250.000	.0151	6.333	266.670	.059	1.241
14.7	-240.000	.0144	6.391	279.084	.061	1.241
14.7	-230.000	.0138	6.446	291.498	.063	1.241
14.7	-220.000	.0132	6.499	303.911	.065	1.241
14.7	-210.000	.0127	6.550	316.325	.066	1.241
14.7	-200.000	.0122	6.598	328.738	.068	1.241
14.7	-190.000	.0118	6.645	341.151	.070	1.241
14.7	-180.000	.0113	6.691	353.564	.072	1.241
14.7	-170.000	.0109	6.734	365.977	.073	1.241
14.7	-160.000	.0106	6.776	378.390	.075	1.241
14.7	-150.000	.0102	6.817	390.802	.077	1.241
14.7	-140.000	.0099	6.856	403.215	.078	1.241
14.7	-130.000	.0096	6.895	415.627	.080	1.241
14.7	-120.000	.0093	6.932	428.040	.082	1.241
14.7	-110.000	.0091	6.968	440.452	.083	1.241
14.7	-100.000	.0088	7.003	452.864	.085	1.241
14.7	-90.000	.0086	7.037	465.276	.086	1.241
14.7	-80.000	.0084	7.070	477.689	.088	1.241
14.7	-70.000	.0081	7.102	490.101	.089	1.241
14.7	-60.000	.0079	7.134	502.513	.091	1.241
14.7	-50.000	.0077	7.164	514.925	.093	1.241
14.7	-40.000	.0076	7.194	527.337	.094	1.241
14.7	-30.000	.0074	7.224	539.749	.096	1.241
14.7	-20.000	.0072	7.252	552.161	.097	1.241
14.7	-10.000	.0071	7.280	564.573	.099	1.241
14.7	0.000	.0069	7.307	576.985	.100	1.241
14.7	10.000	.0068	7.334	589.396	.101	1.241
14.7	20.000	.0066	7.360	601.808	.103	1.241
14.7	30.000	.0065	7.386	614.220	.104	1.241
14.7	40.000	.0063	7.411	626.632	.106	1.241
14.7	50.000	.0062	7.435	639.044	.107	1.241
14.7	60.000	.0061	7.460	651.456	.109	1.241
14.7	70.000	.0060	7.483	663.867	.110	1.241
14.7	80.000	.0059	7.506	676.279	.112	1.241
14.7	90.000	.0058	7.529	688.691	.113	1.241
14.7	100.000	.0057	7.552	701.103	.114	1.241
14.7	110.000	.0056	7.574	713.514	.116	1.241
14.7	120.000	.0055	7.595	725.926	.117	1.241
14.7	130.000	.0054	7.616	738.338	.119	1.241
14.7	140.000	.0053	7.637	750.749	.120	1.241
14.7	150.000	.0052	7.658	763.161	.121	1.241
14.7	160.000	.0051	7.678	775.573	.123	1.241
14.7	170.000	.0050	7.698	787.985	.124	1.241
14.7	180.000	.0050	7.717	800.396	.125	1.241
14.7	190.000	.0049	7.737	812.808	.127	1.241
14.7	200.000	.0048	7.756	825.220	.128	1.241
14.7	210.000	.0047	7.774	837.631	.129	1.241
14.7	220.000	.0047	7.793	850.043	.131	1.241
14.7	230.000	.0046	7.811	862.455	.132	1.241
14.7	240.000	.0045	7.829	874.866	.133	1.241
14.7	250.000	.0045	7.846	887.278	.135	1.241

PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/· CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
20.0	-250.000	.0206	6.180	266.713	.059	1.242
20.0	-240.000	.0196	6.238	279.128	.061	1.241
20.0	-230.000	.0188	6.293	291.543	.063	1.241
20.0	-220.000	.0180	6.346	303.957	.065	1.241
20.0	-210.000	.0173	6.397	316.371	.066	1.241
20.0	-200.000	.0166	6.446	328.785	.068	1.241
20.0	-190.000	.0160	6.492	341.199	.070	1.241
20.0	-180.000	.0154	6.538	353.612	.072	1.241
20.0	-170.000	.0149	6.581	366.026	.073	1.241
20.0	-160.000	.0144	6.623	378.439	.075	1.241
20.0	-150.000	.0139	6.664	390.852	.077	1.241
20.0	-140.000	.0135	6.704	403.264	.078	1.241
20.0	-130.000	.0131	6.742	415.677	.080	1.241
20.0	-120.000	.0127	6.779	428.090	.082	1.241
20.0	-110.000	.0123	6.815	440.502	.083	1.241
20.0	-100.000	.0120	6.850	452.915	.085	1.241
20.0	-90.000	.0117	6.884	465.327	.086	1.241
20.0	-80.000	.0114	6.917	477.739	.088	1.241
20.0	-70.000	.0111	6.949	490.152	.089	1.241
20.0	-60.000	.0108	6.981	502.564	.091	1.241
20.0	-50.000	.0105	7.012	514.976	.093	1.241
20.0	-40.000	.0103	7.041	527.388	.094	1.241
20.0	-30.000	.0100	7.071	539.800	.096	1.241
20.0	-20.000	.0098	7.099	552.212	.097	1.241
20.0	-10.000	.0096	7.127	564.624	.099	1.241
20.0	.000	.0094	7.154	577.036	.100	1.241
20.0	10.000	.0092	7.181	589.448	.101	1.241
20.0	20.000	.0090	7.207	601.860	.103	1.241
20.0	30.000	.0088	7.233	614.272	.104	1.241
20.0	40.000	.0086	7.258	626.684	.106	1.241
20.0	50.000	.0085	7.283	639.096	.107	1.241
20.0	60.000	.0083	7.307	651.507	.109	1.241
20.0	70.000	.0081	7.330	663.919	.110	1.241
20.0	80.000	.0080	7.354	676.331	.112	1.241
20.0	90.000	.0078	7.376	688.743	.113	1.241
20.0	100.000	.0077	7.399	701.155	.114	1.241
20.0	110.000	.0076	7.421	713.566	.116	1.241
20.0	120.000	.0074	7.442	725.978	.117	1.241
20.0	130.000	.0073	7.464	738.390	.119	1.241
20.0	140.000	.0072	7.484	750.802	.120	1.241
20.0	150.000	.0071	7.505	763.213	.121	1.241
20.0	160.000	.0070	7.525	775.625	.123	1.241
20.0	170.000	.0069	7.545	788.037	.124	1.241
20.0	180.000	.0067	7.565	800.448	.125	1.241
20.0	190.000	.0066	7.584	812.860	.127	1.241
20.0	200.000	.0065	7.603	825.272	.128	1.241
20.0	210.000	.0064	7.621	837.683	.129	1.241
20.0	220.000	.0063	7.640	850.095	.131	1.241
20.0	230.000	.0063	7.658	862.507	.132	1.241
20.0	240.000	.0062	7.676	874.918	.133	1.241
20.0	250.000	.0061	7.693	887.330	.135	1.241

PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
50.0	-250.000	.0513	5.725	266.960	.059	1.242
50.0	-240.000	.0489	5.783	279.380	.061	1.242
50.0	-230.000	.0468	5.838	291.800	.063	1.242
50.0	-220.000	.0449	5.891	304.218	.065	1.242
50.0	-210.000	.0431	5.942	316.635	.067	1.242
50.0	-200.000	.0414	5.991	329.052	.068	1.242
50.0	-190.000	.0399	6.038	341.469	.070	1.242
50.0	-180.000	.0385	6.083	353.885	.072	1.242
50.0	-170.000	.0371	6.126	366.300	.073	1.242
50.0	-160.000	.0359	6.169	378.716	.075	1.242
50.0	-150.000	.0347	6.209	391.130	.077	1.241
50.0	-140.000	.0337	6.249	403.545	.078	1.241
50.0	-130.000	.0326	6.287	415.959	.080	1.241
50.0	-120.000	.0317	6.324	428.373	.082	1.241
50.0	-110.000	.0308	6.360	440.787	.083	1.241
50.0	-100.000	.0299	6.395	453.200	.085	1.241
50.0	-90.000	.0291	6.429	465.614	.086	1.241
50.0	-80.000	.0284	6.462	478.027	.088	1.241
50.0	-70.000	.0276	6.495	490.440	.090	1.241
50.0	-60.000	.0269	6.526	502.853	.091	1.241
50.0	-50.000	.0263	6.557	515.266	.093	1.241
50.0	-40.000	.0257	6.587	527.679	.094	1.241
50.0	-30.000	.0251	6.616	540.091	.096	1.241
50.0	-20.000	.0245	6.644	552.504	.097	1.241
50.0	-10.000	.0240	6.672	564.916	.099	1.241
50.0	.000	.0234	6.700	577.329	.100	1.241
50.0	10.000	.0229	6.726	589.741	.102	1.241
50.0	20.000	.0225	6.752	602.153	.103	1.241
50.0	30.000	.0220	6.778	614.565	.104	1.241
50.0	40.000	.0216	6.803	626.978	.106	1.241
50.0	50.000	.0211	6.828	639.390	.107	1.241
50.0	60.000	.0207	6.852	651.802	.109	1.241
50.0	70.000	.0203	6.876	664.214	.110	1.241
50.0	80.000	.0200	6.899	676.626	.112	1.241
50.0	90.000	.0196	6.922	689.037	.113	1.241
50.0	100.000	.0193	6.944	701.449	.114	1.241
50.0	110.000	.0189	6.966	713.861	.116	1.241
50.0	120.000	.0186	6.988	726.273	.117	1.241
50.0	130.000	.0183	7.009	738.685	.119	1.241
50.0	140.000	.0180	7.030	751.096	.120	1.241
50.0	150.000	.0177	7.050	763.508	.121	1.241
50.0	160.000	.0174	7.070	775.920	.123	1.241
50.0	170.000	.0171	7.090	788.331	.124	1.241
50.0	180.000	.0168	7.110	800.743	.125	1.241
50.0	190.000	.0166	7.129	813.155	.127	1.241
50.0	200.000	.0163	7.148	825.566	.128	1.241
50.0	210.000	.0161	7.167	837.978	.129	1.241
50.0	220.000	.0159	7.185	850.389	.131	1.241
50.0	230.000	.0156	7.203	862.801	.132	1.241
50.0	240.000	.0154	7.221	875.213	.133	1.241
50.0	250.000	.0152	7.239	887.624	.135	1.241

PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
100.0	-250.000	.1021	5.381	267.371	.060	1.243
100.0	-240.000	.0974	5.439	279.800	.061	1.243
100.0	-230.000	.0932	5.494	292.226	.063	1.243
100.0	-220.000	.0894	5.547	304.651	.065	1.242
100.0	-210.000	.0858	5.598	317.075	.067	1.242
100.0	-200.000	.0825	5.646	329.497	.069	1.242
100.0	-190.000	.0795	5.693	341.918	.070	1.242
100.0	-180.000	.0767	5.739	354.339	.072	1.242
100.0	-170.000	.0740	5.782	366.758	.074	1.242
100.0	-160.000	.0716	5.824	379.177	.075	1.242
100.0	-150.000	.0693	5.865	391.594	.077	1.242
100.0	-140.000	.0671	5.905	404.012	.079	1.242
100.0	-130.000	.0651	5.943	416.429	.080	1.242
100.0	-120.000	.0632	5.980	428.845	.082	1.242
100.0	-110.000	.0614	6.016	441.261	.083	1.242
100.0	-100.000	.0597	6.051	453.675	.085	1.242
100.0	-90.000	.0581	6.085	466.091	.087	1.242
100.0	-80.000	.0566	6.118	478.506	.088	1.241
100.0	-70.000	.0551	6.150	490.921	.090	1.241
100.0	-60.000	.0538	6.182	503.335	.091	1.241
100.0	-50.000	.0525	6.213	515.749	.093	1.241
100.0	-40.000	.0512	6.243	528.163	.094	1.241
100.0	-30.000	.0500	6.272	540.576	.096	1.241
100.0	-20.000	.0489	6.300	552.990	.097	1.241
100.0	-10.000	.0478	6.328	565.403	.099	1.241
100.0	.000	.0468	6.356	577.816	.100	1.241
100.0	10.000	.0458	6.382	590.229	.102	1.241
100.0	20.000	.0448	6.408	602.642	.103	1.241
100.0	30.000	.0439	6.434	615.054	.105	1.241
100.0	40.000	.0430	6.459	627.467	.106	1.241
100.0	50.000	.0422	6.484	639.879	.107	1.241
100.0	60.000	.0414	6.508	652.292	.109	1.241
100.0	70.000	.0406	6.532	664.704	.110	1.241
100.0	80.000	.0399	6.555	677.116	.112	1.241
100.0	90.000	.0391	6.578	689.528	.113	1.241
100.0	100.000	.0384	6.600	701.940	.114	1.241
100.0	110.000	.0378	6.622	714.352	.116	1.241
100.0	120.000	.0371	6.643	726.764	.117	1.241
100.0	130.000	.0365	6.665	739.176	.119	1.241
100.0	140.000	.0359	6.686	751.587	.120	1.241
100.0	150.000	.0353	6.706	763.999	.121	1.241
100.0	160.000	.0347	6.726	776.411	.123	1.241
100.0	170.000	.0342	6.746	788.822	.124	1.241
100.0	180.000	.0337	6.766	801.234	.125	1.241
100.0	190.000	.0331	6.785	813.646	.127	1.241
100.0	200.000	.0326	6.804	826.057	.128	1.241
100.0	210.000	.0321	6.823	838.468	.129	1.241
100.0	220.000	.0317	6.841	850.880	.131	1.241
100.0	230.000	.0312	6.859	863.291	.132	1.241
100.0	240.000	.0308	6.877	875.703	.133	1.241
100.0	250.000	.0303	6.895	888.114	.135	1.241

PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
200.0	-250.000	.2024	5.036	268.190	.060	1.245
200.0	-240.000	.1933	5.094	280.636	.062	1.244
200.0	-230.000	.1850	5.150	293.077	.064	1.244
200.0	-220.000	.1774	5.203	305.516	.065	1.244
200.0	-210.000	.1704	5.253	317.951	.067	1.243
200.0	-200.000	.1639	5.302	330.384	.069	1.243
200.0	-190.000	.1579	5.349	342.815	.071	1.243
200.0	-180.000	.1523	5.394	355.244	.072	1.243
200.0	-170.000	.1472	5.438	367.671	.074	1.243
200.0	-160.000	.1423	5.480	380.097	.076	1.243
200.0	-150.000	.1378	5.521	392.521	.077	1.242
200.0	-140.000	.1335	5.561	404.944	.079	1.242
200.0	-130.000	.1295	5.599	417.366	.081	1.242
200.0	-120.000	.1257	5.636	429.787	.082	1.242
200.0	-110.000	.1222	5.672	442.207	.084	1.242
200.0	-100.000	.1188	5.707	454.626	.085	1.242
200.0	-90.000	.1156	5.741	467.045	.087	1.242
200.0	-80.000	.1126	5.774	479.463	.088	1.242
200.0	-70.000	.1098	5.806	491.880	.090	1.242
200.0	-60.000	.1070	5.838	504.297	.091	1.242
200.0	-50.000	.1044	5.869	516.713	.093	1.242
200.0	-40.000	.1020	5.899	529.129	.094	1.242
200.0	-30.000	.0996	5.928	541.545	.096	1.242
200.0	-20.000	.0974	5.956	553.960	.097	1.242
200.0	-10.000	.0952	5.984	566.375	.099	1.241
200.0	.000	.0932	6.012	578.789	.100	1.241
200.0	10.000	.0912	6.038	591.203	.102	1.241
200.0	20.000	.0893	6.064	603.617	.103	1.241
200.0	30.000	.0875	6.090	616.031	.105	1.241
200.0	40.000	.0858	6.115	628.444	.106	1.241
200.0	50.000	.0841	6.140	640.857	.108	1.241
200.0	60.000	.0825	6.164	653.270	.109	1.241
200.0	70.000	.0810	6.188	665.683	.110	1.241
200.0	80.000	.0795	6.211	678.096	.112	1.241
200.0	90.000	.0780	6.234	690.508	.113	1.241
200.0	100.000	.0766	6.256	702.920	.115	1.241
200.0	110.000	.0753	6.278	715.333	.116	1.241
200.0	120.000	.0740	6.300	727.745	.117	1.241
200.0	130.000	.0728	6.321	740.157	.119	1.241
200.0	140.000	.0716	6.342	752.568	.120	1.241
200.0	150.000	.0704	6.362	764.980	.122	1.241
200.0	160.000	.0693	6.382	777.392	.123	1.241
200.0	170.000	.0682	6.402	789.803	.124	1.241
200.0	180.000	.0671	6.422	802.215	.126	1.241
200.0	190.000	.0661	6.441	814.626	.127	1.241
200.0	200.000	.0651	6.460	827.037	.128	1.241
200.0	210.000	.0641	6.479	839.449	.130	1.241
200.0	220.000	.0632	6.497	851.860	.131	1.241
200.0	230.000	.0623	6.515	864.271	.132	1.241
200.0	240.000	.0614	6.533	876.682	.134	1.241
200.0	250.000	.0605	6.551	889.093	.135	1.241

PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
400.0	-250.000	.3980	4.691	269.823	.061	1.248
400.0	-240.000	.3804	4.749	282.302	.063	1.248
400.0	-230.000	.3644	4.805	294.773	.065	1.247
400.0	-220.000	.3496	4.858	307.239	.066	1.246
400.0	-210.000	.3360	4.909	319.698	.068	1.246
400.0	-200.000	.3234	4.958	332.152	.070	1.245
400.0	-190.000	.3117	5.005	344.602	.071	1.245
400.0	-180.000	.3008	5.050	357.049	.073	1.244
400.0	-170.000	.2907	5.094	369.491	.075	1.244
400.0	-160.000	.2812	5.136	381.931	.076	1.244
400.0	-150.000	.2723	5.177	394.368	.078	1.244
400.0	-140.000	.2640	5.217	406.803	.080	1.243
400.0	-130.000	.2562	5.255	419.235	.081	1.243
400.0	-120.000	.2488	5.292	431.665	.083	1.243
400.0	-110.000	.2418	5.328	444.094	.084	1.243
400.0	-100.000	.2353	5.363	456.521	.086	1.243
400.0	-90.000	.2290	5.397	468.947	.087	1.243
400.0	-80.000	.2231	5.430	481.371	.089	1.242
400.0	-70.000	.2175	5.463	493.794	.090	1.242
400.0	-60.000	.2122	5.494	506.216	.092	1.242
400.0	-50.000	.2071	5.525	518.637	.093	1.242
400.0	-40.000	.2022	5.555	531.058	.095	1.242
400.0	-30.000	.1976	5.584	543.477	.096	1.242
400.0	-20.000	.1932	5.613	555.895	.098	1.242
400.0	-10.000	.1890	5.640	568.313	.099	1.242
400.0	.000	.1849	5.668	580.731	.101	1.242
400.0	10.000	.1811	5.695	593.147	.102	1.242
400.0	20.000	.1773	5.721	605.563	.104	1.242
400.0	30.000	.1738	5.746	617.979	.105	1.242
400.0	40.000	.1704	5.771	630.394	.106	1.242
400.0	50.000	.1671	5.796	642.809	.108	1.241
400.0	60.000	.1639	5.820	655.223	.109	1.241
400.0	70.000	.1608	5.844	667.637	.111	1.241
400.0	80.000	.1579	5.867	680.051	.112	1.241
400.0	90.000	.1551	5.890	692.464	.113	1.241
400.0	100.000	.1523	5.912	704.877	.115	1.241
400.0	110.000	.1497	5.934	717.290	.116	1.241
400.0	120.000	.1472	5.956	729.702	.116	1.241
400.0	130.000	.1447	5.977	742.114	.119	1.241
400.0	140.000	.1423	5.998	754.526	.120	1.241
400.0	150.000	.1400	6.018	766.938	.122	1.241
400.0	160.000	.1378	6.039	779.350	.123	1.241
400.0	170.000	.1356	6.058	791.761	.124	1.241
400.0	180.000	.1335	6.078	804.172	.126	1.241
400.0	190.000	.1315	6.097	816.583	.127	1.241
400.0	200.000	.1295	6.116	828.994	.128	1.241
400.0	210.000	.1276	6.135	841.405	.130	1.241
400.0	220.000	.1258	6.153	853.816	.131	1.241
400.0	230.000	.1240	6.171	866.226	.132	1.241
400.0	240.000	.1222	6.189	878.637	.134	1.241
400.0	250.000	.1205	6.207	891.047	.135	1.241

PROPERTIES OF HELIUM GAS

P PSIA	TEMP °F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
600.0	-250.000	.5873	4.489	271.452	.062	1.252
600.0	-240.000	.5617	4.547	283.964	.064	1.251
600.0	-230.000	.5383	4.603	296.464	.065	1.250
600.0	-220.000	.5168	4.656	308.956	.067	1.249
600.0	-210.000	.4969	4.707	321.439	.069	1.248
600.0	-200.000	.4785	4.756	333.914	.070	1.247
600.0	-190.000	.4614	4.804	346.383	.072	1.247
600.0	-180.000	.4456	4.849	358.847	.074	1.246
600.0	-170.000	.4307	4.893	371.305	.075	1.246
600.0	-160.000	.4169	4.935	383.759	.077	1.245
600.0	-150.000	.4039	4.976	396.208	.079	1.245
600.0	-140.000	.3917	5.015	408.654	.080	1.244
600.0	-130.000	.3802	5.054	421.097	.082	1.244
600.0	-120.000	.3693	5.091	433.537	.083	1.244
600.0	-110.000	.3591	5.127	445.975	.085	1.244
600.0	-100.000	.3494	5.162	458.410	.086	1.243
600.0	-90.000	.3403	5.196	470.842	.088	1.243
600.0	-80.000	.3316	5.229	483.273	.089	1.243
600.0	-70.000	.3233	5.262	495.702	.091	1.243
600.0	-60.000	.3154	5.293	508.129	.092	1.243
600.0	-50.000	.3079	5.324	520.555	.094	1.243
600.0	-40.000	.3008	5.354	532.980	.095	1.242
600.0	-30.000	.2940	5.383	545.403	.097	1.242
600.0	-20.000	.2875	5.412	557.825	.098	1.242
600.0	-10.000	.2812	5.440	570.246	.100	1.242
600.0	.000	.2753	5.467	582.666	.101	1.242
600.0	10.000	.2696	5.494	595.086	.103	1.242
600.0	20.000	.2641	5.520	607.504	.104	1.242
600.0	30.000	.2588	5.545	619.922	.105	1.242
600.0	40.000	.2537	5.570	632.339	.107	1.242
600.0	50.000	.2489	5.595	644.755	.108	1.242
600.0	60.000	.2442	5.619	657.170	.110	1.242
600.0	70.000	.2397	5.643	669.586	.111	1.241
600.0	80.000	.2353	5.666	682.000	.112	1.241
600.0	90.000	.2312	5.689	694.414	.114	1.241
500.0	100.000	.2271	5.711	706.828	.115	1.241
600.0	110.000	.2232	5.733	719.241	.116	1.241
600.0	120.000	.2194	5.755	731.654	.118	1.241
600.0	130.000	.2158	5.776	744.067	.119	1.241
500.0	140.000	.2122	5.797	756.479	.121	1.241
600.0	150.000	.2088	5.817	768.891	.122	1.241
600.0	160.000	.2055	5.838	781.302	.123	1.241
600.0	170.000	.2023	5.858	793.714	.125	1.241
600.0	180.000	.1992	5.877	806.125	.126	1.241
500.0	190.000	.1962	5.896	818.535	.127	1.241
600.0	200.000	.1933	5.915	830.946	.129	1.241
600.0	210.000	.1904	5.934	843.356	.130	1.241
600.0	220.000	.1877	5.952	855.767	.131	1.241
600.0	230.000	.1850	5.970	868.177	.133	1.241
600.0	240.000	.1824	5.988	880.586	.134	1.241
500.0	250.000	.1799	6.006	892.996	.135	1.241

PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
800.0	-250.000	.7706	4.346	273.082	.063	1.255
800.0	-240.000	.7375	4.404	285.625	.064	1.254
800.0	-230.000	.7071	4.460	298.154	.066	1.252
800.0	-220.000	.6792	4.513	310.670	.068	1.251
800.0	-210.000	.6535	4.564	323.176	.069	1.250
800.0	-200.000	.6296	4.613	335.572	.071	1.249
800.0	-190.000	.6074	4.661	348.160	.073	1.248
800.0	-180.000	.5868	4.706	360.640	.074	1.248
800.0	-170.000	.5675	4.750	373.114	.076	1.247
800.0	-160.000	.5494	4.792	385.582	.078	1.246
800.0	-150.000	.5325	4.833	398.044	.079	1.246
800.0	-140.000	.5166	4.873	410.501	.081	1.246
800.0	-130.000	.5016	4.911	422.955	.082	1.245
800.0	-120.000	.4874	4.948	435.404	.084	1.245
800.0	-110.000	.4741	4.984	447.850	.085	1.244
800.0	-100.000	.4614	5.019	460.293	.087	1.244
800.0	-90.000	.4494	5.053	472.732	.088	1.244
800.0	-80.000	.4380	5.087	485.170	.090	1.244
800.0	-70.000	.4272	5.119	497.605	.091	1.243
800.0	-60.000	.4169	5.151	510.037	.093	1.243
800.0	-50.000	.4071	5.181	522.468	.094	1.243
800.0	-40.000	.3978	5.211	534.897	.096	1.243
800.0	-30.000	.3888	5.240	547.324	.097	1.243
800.0	-20.000	.3803	5.269	559.750	.099	1.243
800.0	-10.000	.3721	5.297	572.174	.100	1.242
800.0	.000	.3643	5.324	584.597	.102	1.242
800.0	10.000	.3568	5.351	597.019	.103	1.242
800.0	20.000	.3496	5.377	609.440	.104	1.242
800.0	30.000	.3427	5.403	621.859	.106	1.242
800.0	40.000	.3360	5.428	634.278	.107	1.242
800.0	50.000	.3296	5.453	646.696	.108	1.242
800.0	60.000	.3235	5.477	659.113	.110	1.242
800.0	70.000	.3175	5.500	671.529	.111	1.242
800.0	80.000	.3118	5.524	683.945	.113	1.242
800.0	90.000	.3063	5.546	696.360	.114	1.241
800.0	100.000	.3010	5.569	708.774	.115	1.241
800.0	110.000	.2958	5.591	721.188	.117	1.241
800.0	120.000	.2909	5.612	733.601	.118	1.241
800.0	130.000	.2860	5.634	746.014	.119	1.241
800.0	140.000	.2814	5.654	758.427	.121	1.241
800.0	150.000	.2769	5.675	770.838	.122	1.241
800.0	160.000	.2725	5.695	783.250	.124	1.241
800.0	170.000	.2683	5.715	795.661	.125	1.241
800.0	180.000	.2642	5.735	808.072	.126	1.241
800.0	190.000	.2603	5.754	820.483	.128	1.241
800.0	200.000	.2564	5.773	832.893	.129	1.241
800.0	210.000	.2527	5.791	845.303	.130	1.241
800.0	220.000	.2490	5.810	857.713	.132	1.241
800.0	230.000	.2455	5.828	870.122	.133	1.241
800.0	240.000	.2421	5.846	882.531	.134	1.241
800.0	250.000	.2387	5.863	894.940	.135	1.241

PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
1000.0	-250.000	.9481	4.234	274.716	.063	1.258
1000.0	-240.000	.9079	4.293	287.289	.065	1.256
1000.0	-230.000	.8711	4.349	299.844	.067	1.255
1000.0	-220.000	.8372	4.402	312.385	.069	1.253
1000.0	-210.000	.8058	4.453	324.913	.070	1.252
1000.0	-200.000	.7768	4.502	337.429	.072	1.251
1000.0	-190.000	.7497	4.550	349.935	.073	1.250
1000.0	-180.000	.7245	4.595	362.431	.075	1.249
1000.0	-170.000	.7010	4.639	374.920	.077	1.248
1000.0	-160.000	.6789	4.681	387.401	.078	1.248
1000.0	-150.000	.6582	4.722	399.876	.080	1.247
1000.0	-140.000	.6388	4.762	412.344	.081	1.247
1000.0	-130.000	.6204	4.800	424.808	.083	1.246
1000.0	-120.000	.6031	4.838	437.257	.084	1.246
1000.0	-110.000	.5868	4.874	449.721	.086	1.245
1000.0	-100.000	.5713	4.909	462.171	.087	1.245
1000.0	-90.000	.5566	4.943	474.618	.089	1.245
1000.0	-80.000	.5426	4.976	487.062	.090	1.244
1000.0	-70.000	.5293	5.008	499.503	.092	1.244
1000.0	-60.000	.5167	5.040	511.941	.093	1.244
1000.0	-50.000	.5046	5.071	524.376	.095	1.243
1000.0	-40.000	.4931	5.101	536.809	.096	1.243
1000.0	-30.000	.4822	5.130	549.240	.098	1.243
1000.0	-20.000	.4717	5.159	561.670	.099	1.243
1000.0	-10.000	.4616	5.187	574.097	.100	1.243
1000.0	.000	.4520	5.214	586.523	.102	1.243
1000.0	10.000	.4427	5.241	598.947	.103	1.242
1000.0	20.000	.4339	5.267	611.370	.105	1.242
1000.0	30.000	.4253	5.292	623.792	.106	1.242
1000.0	40.000	.4171	5.318	636.213	.107	1.242
1000.0	50.000	.4093	5.342	648.632	.109	1.242
1000.0	60.000	.4017	5.366	661.051	.110	1.242
1000.0	70.000	.3944	5.390	673.468	.111	1.242
1000.0	80.000	.3873	5.413	685.885	.113	1.242
1000.0	90.000	.3805	5.436	698.301	.114	1.242
1000.0	100.000	.3739	5.458	710.716	.116	1.241
1000.0	110.000	.3676	5.480	723.130	.117	1.241
1000.0	120.000	.3615	5.502	735.544	.118	1.241
1000.0	130.000	.3555	5.523	747.957	.120	1.241
1000.0	140.000	.3498	5.544	760.370	.121	1.241
1000.0	150.000	.3442	5.565	772.782	.122	1.241
1000.0	160.000	.3388	5.585	785.193	.124	1.241
1000.0	170.000	.3336	5.605	797.604	.125	1.241
1000.0	180.000	.3286	5.624	810.015	.126	1.241
1000.0	190.000	.3237	5.643	822.425	.128	1.241
1000.0	200.000	.3189	5.662	834.835	.129	1.241
1000.0	210.000	.3143	5.681	847.245	.130	1.241
1000.0	220.000	.3098	5.699	859.654	.132	1.241
1000.0	230.000	.3054	5.718	872.063	.133	1.241
1000.0	240.000	.3012	5.735	884.472	.134	1.241
1000.0	250.000	.2970	5.753	896.880	.136	1.241

PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
2000.0	-250.000	1.7581	3.887	282.999	.067	1.271
2000.0	-240.000	1.6887	3.946	295.693	.069	1.268
2000.0	-230.000	1.6247	4.002	308.360	.070	1.265
2000.0	-220.000	1.5655	4.056	321.003	.072	1.263
2000.0	-210.000	1.5105	4.108	333.625	.074	1.261
2000.0	-200.000	1.4593	4.157	346.227	.075	1.259
2000.0	-190.000	1.4115	4.205	358.812	.077	1.258
2000.0	-180.000	1.3667	4.251	371.381	.078	1.256
2000.0	-170.000	1.3248	4.295	383.936	.080	1.255
2000.0	-160.000	1.2854	4.337	396.479	.081	1.254
2000.0	-150.000	1.2483	4.379	409.009	.083	1.253
2000.0	-140.000	1.2133	4.418	421.529	.084	1.252
2000.0	-130.000	1.1802	4.457	434.040	.086	1.251
2000.0	-120.000	1.1489	4.494	446.541	.087	1.250
2000.0	-110.000	1.1192	4.530	459.035	.088	1.249
2000.0	-100.000	1.0911	4.566	471.522	.090	1.248
2000.0	-90.000	1.0643	4.600	484.001	.091	1.248
2000.0	-80.000	1.0388	4.633	496.475	.093	1.247
2000.0	-70.000	1.0145	4.666	508.943	.094	1.247
2000.0	-60.000	.9913	4.697	521.406	.095	1.246
2000.0	-50.000	.9692	4.728	533.854	.097	1.246
2000.0	-40.000	.9480	4.758	546.318	.098	1.245
2000.0	-30.000	.9278	4.787	558.768	.100	1.245
2000.0	-20.000	.9084	4.816	571.215	.101	1.244
2000.0	-10.000	.8898	4.844	583.657	.102	1.244
2000.0	.000	.8719	4.871	596.097	.104	1.244
2000.0	10.000	.8548	4.898	608.534	.105	1.244
2000.0	20.000	.8383	4.924	620.968	.106	1.243
2000.0	30.000	.8224	4.950	633.399	.108	1.243
2000.0	40.000	.8072	4.975	645.829	.109	1.243
2000.0	50.000	.7924	5.000	658.256	.110	1.243
2000.0	60.000	.7782	5.024	670.681	.111	1.242
2000.0	70.000	.7646	5.048	683.104	.113	1.242
2000.0	80.000	.7513	5.071	695.526	.114	1.242
2000.0	90.000	.7386	5.094	707.946	.115	1.242
2000.0	100.000	.7262	5.116	720.354	.117	1.242
2000.0	110.000	.7143	5.138	732.781	.118	1.242
2000.0	120.000	.7028	5.160	745.197	.119	1.242
2000.0	130.000	.6916	5.181	757.612	.121	1.241
2000.0	140.000	.6808	5.202	770.025	.122	1.241
2000.0	150.000	.6703	5.222	782.438	.123	1.241
2000.0	160.000	.6601	5.242	794.849	.125	1.241
2000.0	170.000	.6502	5.262	807.260	.126	1.241
2000.0	180.000	.6406	5.282	819.669	.127	1.241
2000.0	190.000	.6313	5.301	832.078	.129	1.241
2000.0	200.000	.6223	5.320	844.486	.130	1.241
2000.0	210.000	.6135	5.339	856.894	.131	1.241
2000.0	220.000	.6050	5.357	869.300	.133	1.241
2000.0	230.000	.5967	5.375	881.707	.134	1.241
2000.0	240.000	.5886	5.393	894.112	.135	1.241
2000.0	250.000	.5807	5.411	906.517	.137	1.240

PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
3000.0	-250.000	2.4586	3.684	291.480	.071	1.279
3000.0	-240.000	2.3660	3.743	304.258	.072	1.276
3000.0	-230.000	2.2839	3.800	317.005	.074	1.273
3000.0	-220.000	2.2057	3.854	329.723	.075	1.271
3000.0	-210.000	2.1329	3.906	342.415	.077	1.268
3000.0	-200.000	2.0647	3.956	355.084	.078	1.266
3000.0	-190.000	2.0009	4.004	367.730	.079	1.264
3000.0	-180.000	1.9410	4.050	380.357	.081	1.262
3000.0	-170.000	1.8846	4.094	392.966	.082	1.260
3000.0	-160.000	1.8314	4.137	405.558	.084	1.258
3000.0	-150.000	1.7813	4.178	418.135	.085	1.257
3000.0	-140.000	1.7338	4.218	430.697	.087	1.256
3000.0	-130.000	1.6888	4.256	443.247	.088	1.254
3000.0	-120.000	1.6461	4.294	455.785	.089	1.253
3000.0	-110.000	1.6056	4.330	468.313	.091	1.252
3000.0	-100.000	1.5670	4.366	480.830	.092	1.251
3000.0	-90.000	1.5302	4.400	493.338	.093	1.250
3000.0	-80.000	1.4952	4.433	505.838	.095	1.250
3000.0	-70.000	1.4617	4.466	518.330	.096	1.249
3000.0	-60.000	1.4297	4.497	530.815	.097	1.248
3000.0	-50.000	1.3991	4.528	543.293	.099	1.248
3000.0	-40.000	1.3698	4.558	555.755	.100	1.247
3000.0	-30.000	1.3416	4.588	568.232	.101	1.246
3000.0	-20.000	1.3147	4.616	580.693	.103	1.246
3000.0	-10.000	1.2887	4.644	593.149	.104	1.245
3000.0	.000	1.2638	4.672	605.601	.105	1.245
3000.0	10.000	1.2399	4.698	618.049	.106	1.245
3000.0	20.000	1.2168	4.725	630.493	.108	1.244
3000.0	30.000	1.1946	4.750	642.933	.109	1.244
3000.0	40.000	1.1732	4.775	655.370	.110	1.244
3000.0	50.000	1.1525	4.800	667.804	.111	1.243
3000.0	60.000	1.1326	4.824	680.234	.113	1.243
3000.0	70.000	1.1133	4.848	692.653	.114	1.243
3000.0	80.000	1.0947	4.871	705.088	.115	1.242
3000.0	90.000	1.0767	4.894	717.512	.116	1.242
3000.0	100.000	1.0593	4.916	729.933	.118	1.242
3000.0	110.000	1.0424	4.938	742.352	.119	1.242
3000.0	120.000	1.0260	4.960	754.769	.121	1.242
3000.0	130.000	1.0102	4.981	767.185	.122	1.241
3000.0	140.000	.9949	5.002	779.598	.123	1.241
3000.0	150.000	.9800	5.023	792.011	.124	1.241
3000.0	160.000	.9655	5.043	804.422	.126	1.241
3000.0	170.000	.9515	5.063	816.831	.127	1.241
3000.0	180.000	.9378	5.082	829.239	.128	1.241
3000.0	190.000	.9246	5.102	841.646	.130	1.241
3000.0	200.000	.9117	5.120	854.052	.131	1.241
3000.0	210.000	.8992	5.139	866.457	.132	1.240
3000.0	220.000	.8870	5.157	878.861	.134	1.240
3000.0	230.000	.8751	5.176	891.264	.135	1.240
3000.0	240.000	.8636	5.193	903.666	.136	1.240
3000.0	250.000	.8523	5.211	916.067	.137	1.240

PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
4000.0	-250.000	3.0719	3.540	300.090	.074	1.286
4000.0	-240.000	2.9657	3.599	312.931	.075	1.282
4000.0	-230.000	2.8667	3.656	325.738	.076	1.279
4000.0	-220.000	2.7743	3.711	338.515	.078	1.276
4000.0	-210.000	2.6878	3.763	351.262	.079	1.273
4000.0	-200.000	2.6066	3.813	363.984	.081	1.271
4000.0	-190.000	2.5304	3.861	376.680	.082	1.269
4000.0	-180.000	2.4585	3.907	389.354	.083	1.266
4000.0	-170.000	2.3907	3.952	402.007	.085	1.264
4000.0	-160.000	2.3266	3.994	414.640	.086	1.262
4000.0	-150.000	2.2660	4.036	427.256	.088	1.261
4000.0	-140.000	2.2084	4.076	439.855	.089	1.259
4000.0	-130.000	2.1538	4.115	452.438	.090	1.258
4000.0	-120.000	2.1018	4.152	465.007	.091	1.256
4000.0	-110.000	2.0523	4.189	477.564	.093	1.255
4000.0	-100.000	2.0051	4.224	490.108	.094	1.254
4000.0	-90.000	1.9601	4.258	502.641	.095	1.253
4000.0	-80.000	1.9170	4.292	515.163	.097	1.252
4000.0	-70.000	1.8759	4.324	527.676	.098	1.251
4000.0	-60.000	1.8364	4.356	540.180	.099	1.250
4000.0	-50.000	1.7986	4.387	552.676	.100	1.249
4000.0	-40.000	1.7624	4.417	565.164	.102	1.248
4000.0	-30.000	1.7276	4.446	577.645	.103	1.248
4000.0	-20.000	1.6941	4.475	590.120	.104	1.247
4000.0	-10.000	1.6619	4.503	602.588	.105	1.247
4000.0	.000	1.6310	4.531	615.050	.107	1.246
4000.0	10.000	1.6011	4.557	627.508	.108	1.245
4000.0	20.000	1.5724	4.584	639.950	.109	1.245
4000.0	30.000	1.5446	4.609	652.408	.110	1.245
4000.0	40.000	1.5179	4.634	664.851	.111	1.244
4000.0	50.000	1.4920	4.659	677.290	.113	1.244
4000.0	60.000	1.4670	4.683	689.726	.114	1.243
4000.0	70.000	1.4428	4.707	702.158	.115	1.243
4000.0	80.000	1.4195	4.730	714.587	.116	1.243
4000.0	90.000	1.3968	4.753	727.013	.118	1.242
4000.0	100.000	1.3749	4.775	739.436	.119	1.242
4000.0	110.000	1.3537	4.797	751.857	.120	1.242
4000.0	120.000	1.3331	4.819	764.275	.121	1.242
4000.0	130.000	1.3131	4.840	776.690	.123	1.241
4000.0	140.000	1.2937	4.861	789.104	.124	1.241
4000.0	150.000	1.2748	4.882	801.515	.125	1.241
4000.0	160.000	1.2566	4.902	813.925	.127	1.241
4000.0	170.000	1.2388	4.922	826.333	.128	1.241
4000.0	180.000	1.2215	4.941	838.739	.129	1.241
4000.0	190.000	1.2047	4.960	851.144	.131	1.240
4000.0	200.000	1.1884	4.979	863.547	.132	1.240
4000.0	210.000	1.1725	4.998	875.949	.133	1.240
4000.0	220.000	1.1570	5.016	888.350	.134	1.240
4000.0	230.000	1.1419	5.035	900.749	.136	1.240
4000.0	240.000	1.1272	5.052	913.147	.137	1.240
4000.0	250.000	1.1129	5.070	925.545	.138	1.240

PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
5000.0	-250.000	3.6156	3.428	308.755	.077	1.291
5000.0	-240.000	3.4977	3.488	321.646	.078	1.287
5000.0	-230.000	3.3875	3.545	334.503	.079	1.284
5000.0	-220.000	3.2842	3.600	347.328	.081	1.281
5000.0	-210.000	3.1873	3.652	360.123	.082	1.278
5000.0	-200.000	3.0960	3.702	372.889	.083	1.275
5000.0	-190.000	3.0099	3.750	385.529	.085	1.273
5000.0	-180.000	2.9287	3.797	398.344	.086	1.270
5000.0	-170.000	2.8517	3.841	411.035	.087	1.268
5000.0	-160.000	2.7789	3.884	423.705	.088	1.266
5000.0	-150.000	2.7097	3.926	436.355	.090	1.264
5000.0	-140.000	2.6440	3.966	448.986	.091	1.262
5000.0	-130.000	2.5814	4.005	461.600	.092	1.261
5000.0	-120.000	2.5218	4.043	474.197	.094	1.259
5000.0	-110.000	2.4649	4.079	486.780	.095	1.258
5000.0	-100.000	2.4105	4.114	499.348	.096	1.256
5000.0	-90.000	2.3586	4.149	511.903	.097	1.255
5000.0	-80.000	2.3088	4.182	524.447	.098	1.254
5000.0	-70.000	2.2612	4.215	536.979	.100	1.253
5000.0	-60.000	2.2155	4.247	549.500	.101	1.252
5000.0	-50.000	2.1716	4.278	562.012	.102	1.251
5000.0	-40.000	2.1294	4.308	574.515	.103	1.250
5000.0	-30.000	2.0889	4.337	587.009	.105	1.249
5000.0	-20.000	2.0498	4.366	599.496	.106	1.248
5000.0	-10.000	2.0123	4.394	611.975	.107	1.248
5000.0	.000	1.9761	4.421	624.447	.108	1.247
5000.0	10.000	1.9411	4.448	636.913	.109	1.246
5000.0	20.000	1.9074	4.474	649.373	.110	1.246
5000.0	30.000	1.8749	4.500	661.828	.112	1.245
5000.0	40.000	1.8434	4.525	674.277	.113	1.245
5000.0	50.000	1.8130	4.550	686.721	.114	1.244
5000.0	60.000	1.7836	4.574	699.161	.115	1.244
5000.0	70.000	1.7551	4.598	711.597	.116	1.243
5000.0	80.000	1.7275	4.621	724.028	.117	1.243
5000.0	90.000	1.7008	4.644	736.456	.118	1.243
5000.0	100.000	1.6748	4.666	748.881	.120	1.242
5000.0	110.000	1.6497	4.688	761.302	.121	1.242
5000.0	120.000	1.6253	4.710	773.721	.122	1.242
5000.0	130.000	1.6016	4.731	786.136	.124	1.241
5000.0	140.000	1.5786	4.752	798.549	.125	1.241
5000.0	150.000	1.5563	4.773	810.959	.126	1.241
5000.0	160.000	1.5345	4.793	823.368	.128	1.241
5000.0	170.000	1.5134	4.813	835.773	.129	1.240
5000.0	180.000	1.4929	4.832	848.177	.130	1.240
5000.0	190.000	1.4728	4.851	860.579	.131	1.240
5000.0	200.000	1.4534	4.870	872.979	.133	1.240
5000.0	210.000	1.4344	4.889	885.378	.134	1.240
5000.0	220.000	1.4159	4.907	897.775	.135	1.240
5000.0	230.000	1.3979	4.926	910.170	.137	1.239
5000.0	240.000	1.3803	4.943	922.565	.138	1.239
5000.0	250.000	1.3632	4.961	934.957	.139	1.239

PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
6000.0	-250.000	4.1031	3.337	317.426	.079	1.295
6000.0	-240.000	3.9764	3.397	330.359	.081	1.292
6000.0	-230.000	3.8577	3.455	343.258	.082	1.288
6000.0	-220.000	3.7460	3.509	356.125	.083	1.285
6000.0	-210.000	3.6408	3.562	368.961	.084	1.282
6000.0	-200.000	3.5415	3.612	381.768	.086	1.279
6000.0	-190.000	3.4477	3.660	394.546	.087	1.277
6000.0	-180.000	3.3589	3.707	407.298	.088	1.274
6000.0	-170.000	3.2746	3.752	420.026	.089	1.272
6000.0	-160.000	3.1946	3.795	432.730	.091	1.269
6000.0	-150.000	3.1185	3.836	445.412	.092	1.267
6000.0	-140.000	3.0460	3.877	458.073	.093	1.265
6000.0	-130.000	2.9769	3.915	470.715	.094	1.263
6000.0	-120.000	2.9109	3.953	483.339	.095	1.262
6000.0	-110.000	2.8479	3.990	495.947	.097	1.260
6000.0	-100.000	2.7876	4.025	508.538	.098	1.258
6000.0	-90.000	2.7298	4.060	521.115	.099	1.257
6000.0	-80.000	2.6744	4.093	533.678	.100	1.256
6000.0	-70.000	2.6212	4.126	546.229	.101	1.254
6000.0	-60.000	2.5701	4.158	558.767	.102	1.253
6000.0	-50.000	2.5210	4.189	571.295	.104	1.252
6000.0	-40.000	2.4738	4.219	583.812	.105	1.251
6000.0	-30.000	2.4283	4.248	596.319	.106	1.250
6000.0	-20.000	2.3845	4.277	608.817	.107	1.249
6000.0	-10.000	2.3423	4.305	621.307	.108	1.249
6000.0	.000	2.3015	4.333	633.788	.109	1.248
6000.0	10.000	2.2621	4.359	646.263	.110	1.247
6000.0	20.000	2.2241	4.386	658.730	.112	1.246
6000.0	30.000	2.1873	4.411	671.191	.113	1.246
6000.0	40.000	2.1517	4.437	683.646	.114	1.245
6000.0	50.000	2.1173	4.461	696.095	.115	1.245
6000.0	60.000	2.0840	4.485	708.539	.116	1.244
6000.0	70.000	2.0517	4.509	720.978	.117	1.244
6000.0	80.000	2.0204	4.532	733.413	.118	1.243
6000.0	90.000	1.9900	4.555	745.843	.119	1.243
6000.0	100.000	1.9605	4.578	758.269	.121	1.242
6000.0	110.000	1.9319	4.600	770.691	.122	1.242
6000.0	120.000	1.9041	4.621	783.109	.123	1.242
6000.0	130.000	1.8771	4.642	795.524	.125	1.241
6000.0	140.000	1.8509	4.663	807.936	.126	1.241
6000.0	150.000	1.8254	4.684	820.346	.127	1.241
6000.0	160.000	1.8006	4.704	832.752	.128	1.241
6000.0	170.000	1.7764	4.724	845.156	.130	1.240
6000.0	180.000	1.7529	4.743	857.557	.131	1.240
6000.0	190.000	1.7300	4.763	869.956	.132	1.240
6000.0	200.000	1.7076	4.782	882.353	.134	1.240
6000.0	210.000	1.6859	4.800	894.748	.135	1.239
6000.0	220.000	1.6647	4.819	907.141	.136	1.239
6000.0	230.000	1.6440	4.837	919.533	.137	1.239
6000.0	240.000	1.6238	4.855	931.922	.139	1.239
6000.0	250.000	1.6041	4.872	944.311	.140	1.239

PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
7000.0	-250.000	4.5444	3.260	326.076	.082	1.298
7000.0	-240.000	4.4112	3.320	339.042	.083	1.295
7000.0	-230.000	4.2858	3.378	351.977	.084	1.292
7000.0	-220.000	4.1676	3.433	364.881	.086	1.289
7000.0	-210.000	4.0560	3.485	377.754	.087	1.286
7000.0	-200.000	3.9503	3.536	390.598	.088	1.283
7000.0	-190.000	3.8503	3.584	403.412	.089	1.280
7000.0	-180.000	3.7553	3.631	416.199	.090	1.277
7000.0	-170.000	3.6651	3.675	428.950	.091	1.275
7000.0	-160.000	3.5792	3.719	441.696	.093	1.272
7000.0	-150.000	3.4974	3.761	454.409	.094	1.270
7000.0	-140.000	3.4193	3.801	467.100	.095	1.268
7000.0	-130.000	3.3447	3.840	479.770	.096	1.266
7000.0	-120.000	3.2734	3.878	492.420	.097	1.264
7000.0	-110.000	3.2052	3.915	505.051	.098	1.262
7000.0	-100.000	3.1398	3.950	517.666	.099	1.261
7000.0	-90.000	3.0771	3.985	530.254	.101	1.259
7000.0	-80.000	3.0168	4.018	542.847	.102	1.258
7000.0	-70.000	2.9590	4.051	555.416	.103	1.256
7000.0	-60.000	2.9033	4.083	567.972	.104	1.255
7000.0	-50.000	2.8497	4.114	580.515	.105	1.254
7000.0	-40.000	2.7981	4.144	593.046	.106	1.253
7000.0	-30.000	2.7484	4.173	605.566	.107	1.252
7000.0	-20.000	2.7004	4.202	618.077	.108	1.251
7000.0	-10.000	2.6541	4.230	630.577	.109	1.250
7000.0	0.000	2.6093	4.258	643.069	.111	1.249
7000.0	10.000	2.5661	4.285	655.552	.112	1.248
7000.0	20.000	2.5243	4.311	668.027	.113	1.247
7000.0	30.000	2.4838	4.337	680.495	.114	1.246
7000.0	40.000	2.4446	4.362	692.955	.115	1.246
7000.0	50.000	2.4066	4.387	705.410	.116	1.245
7000.0	60.000	2.3698	4.411	717.858	.117	1.245
7000.0	70.000	2.3341	4.434	730.301	.118	1.244
7000.0	80.000	2.2995	4.458	742.738	.119	1.243
7000.0	90.000	2.2659	4.481	755.170	.120	1.243
7000.0	100.000	2.2333	4.503	767.597	.122	1.243
7000.0	110.000	2.2015	4.525	780.020	.123	1.242
7000.0	120.000	2.1707	4.547	792.439	.124	1.242
7000.0	130.000	2.1407	4.568	804.854	.125	1.241
7000.0	140.000	2.1116	4.589	817.266	.127	1.241
7000.0	150.000	2.0832	4.609	829.674	.128	1.241
7000.0	160.000	2.0556	4.629	842.079	.129	1.240
7000.0	170.000	2.0287	4.649	854.480	.131	1.240
7000.0	180.000	2.0025	4.669	866.879	.132	1.240
7000.0	190.000	1.9769	4.688	879.276	.133	1.240
7000.0	200.000	1.9520	4.707	891.670	.134	1.239
7000.0	210.000	1.9278	4.726	904.061	.136	1.239
7000.0	220.000	1.9041	4.744	916.450	.137	1.239
7000.0	230.000	1.8810	4.762	928.838	.138	1.239
7000.0	240.000	1.8584	4.780	941.223	.139	1.238
7000.0	250.000	1.8364	4.797	953.607	.141	1.238

PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
8000.0	-250.000	4.9474	3.193	334.693	.085	1.301
8000.0	-240.000	4.8092	3.254	347.686	.086	1.298
8000.0	-230.000	4.6788	3.312	360.651	.087	1.295
8000.0	-220.000	4.5554	3.367	373.586	.088	1.292
8000.0	-210.000	4.4387	3.419	386.491	.089	1.289
8000.0	-200.000	4.3279	3.470	399.358	.090	1.286
8000.0	-190.000	4.2228	3.519	412.215	.091	1.283
8000.0	-180.000	4.1228	3.565	425.035	.092	1.281
8000.0	-170.000	4.0277	3.610	437.828	.093	1.278
8000.0	-160.000	3.9370	3.653	450.595	.095	1.275
8000.0	-150.000	3.8504	3.695	463.337	.096	1.273
8000.0	-140.000	3.7676	3.736	476.056	.097	1.271
8000.0	-130.000	3.6885	3.775	488.753	.098	1.269
8000.0	-120.000	3.6127	3.813	501.429	.099	1.267
8000.0	-110.000	3.5400	3.849	514.085	.100	1.265
8000.0	-100.000	3.4703	3.885	526.722	.101	1.263
8000.0	-90.000	3.4034	3.920	539.342	.102	1.261
8000.0	-80.000	3.3390	3.953	551.945	.103	1.260
8000.0	-70.000	3.2771	3.986	564.533	.104	1.258
8000.0	-60.000	3.2175	4.018	577.106	.105	1.257
8000.0	-50.000	3.1600	4.049	589.665	.106	1.255
8000.0	-40.000	3.1046	4.079	602.211	.108	1.254
8000.0	-30.000	3.0511	4.109	614.745	.109	1.253
8000.0	-20.000	2.9995	4.138	627.268	.110	1.252
8000.0	-10.000	2.9496	4.166	639.780	.111	1.251
8000.0	.000	2.9014	4.193	652.282	.112	1.250
8000.0	10.000	2.8547	4.220	664.774	.113	1.249
8000.0	20.000	2.8096	4.246	677.258	.114	1.248
8000.0	30.000	2.7658	4.272	689.733	.115	1.247
8000.0	40.000	2.7234	4.297	702.200	.116	1.246
8000.0	50.000	2.6823	4.322	714.660	.117	1.246
8000.0	60.000	2.6424	4.346	727.113	.118	1.245
8000.0	70.000	2.6037	4.370	739.550	.119	1.244
8000.0	80.000	2.5661	4.393	752.001	.120	1.244
8000.0	90.000	2.5296	4.416	764.435	.121	1.243
8000.0	100.000	2.4941	4.438	776.865	.122	1.243
8000.0	110.000	2.4596	4.460	789.289	.124	1.242
8000.0	120.000	2.4261	4.482	801.709	.125	1.242
8000.0	130.000	2.3934	4.503	814.125	.126	1.241
8000.0	140.000	2.3616	4.524	826.536	.128	1.241
8000.0	150.000	2.3307	4.545	838.943	.129	1.241
8000.0	160.000	2.3005	4.565	851.346	.130	1.240
8000.0	170.000	2.2712	4.585	863.747	.131	1.240
8000.0	180.000	2.2425	4.604	876.143	.133	1.240
8000.0	190.000	2.2146	4.623	888.537	.134	1.239
8000.0	200.000	2.1873	4.642	900.928	.135	1.239
8000.0	210.000	2.1608	4.661	913.317	.136	1.239
8000.0	220.000	2.1348	4.679	925.702	.138	1.238
8000.0	230.000	2.1095	4.697	938.086	.139	1.238
8000.0	240.000	2.0847	4.715	950.457	.140	1.238
8000.0	250.000	2.0606	4.733	962.846	.141	1.238

PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
9000.0	-250.000	5.3179	3.135	343.274	.087	1.302
9000.0	-240.000	5.1760	3.195	356.286	.088	1.300
9000.0	-230.000	5.0417	3.253	369.274	.089	1.297
9000.0	-220.000	4.9144	3.308	382.235	.090	1.295
9000.0	-210.000	4.7936	3.361	395.168	.091	1.292
9000.0	-200.000	4.6787	3.412	408.074	.092	1.289
9000.0	-190.000	4.5695	3.461	420.951	.093	1.286
9000.0	-180.000	4.4655	3.507	433.800	.094	1.284
9000.0	-170.000	4.3662	3.552	446.623	.095	1.281
9000.0	-160.000	4.2715	3.596	459.419	.096	1.278
9000.0	-150.000	4.1809	3.638	472.190	.097	1.276
9000.0	-140.000	4.0942	3.678	484.936	.099	1.273
9000.0	-130.000	4.0112	3.717	497.659	.100	1.271
9000.0	-120.000	3.9316	3.755	510.361	.101	1.269
9000.0	-110.000	3.8552	3.792	523.041	.102	1.267
9000.0	-100.000	3.7817	3.828	535.701	.103	1.265
9000.0	-90.000	3.7111	3.863	548.343	.104	1.263
9000.0	-80.000	3.6432	3.896	560.966	.105	1.262
9000.0	-70.000	3.5778	3.929	573.573	.106	1.260
9000.0	-60.000	3.5147	3.961	586.164	.107	1.258
9000.0	-50.000	3.4539	3.992	598.740	.108	1.257
9000.0	-40.000	3.3952	4.022	611.302	.109	1.256
9000.0	-30.000	3.3385	4.052	623.850	.110	1.254
9000.0	-20.000	3.2836	4.081	636.386	.111	1.253
9000.0	-10.000	3.2306	4.109	648.910	.112	1.252
9000.0	.000	3.1793	4.136	661.423	.113	1.251
9000.0	10.000	3.1296	4.163	673.926	.114	1.250
9000.0	20.000	3.0815	4.190	686.418	.115	1.249
9000.0	30.000	3.0348	4.215	698.902	.116	1.248
9000.0	40.000	2.9896	4.241	711.376	.117	1.247
9000.0	50.000	2.9457	4.265	723.843	.118	1.246
9000.0	60.000	2.9030	4.289	736.302	.119	1.246
9000.0	70.000	2.8616	4.313	748.753	.120	1.245
9000.0	80.000	2.8214	4.336	761.198	.121	1.244
9000.0	90.000	2.7823	4.359	773.636	.122	1.244
9000.0	100.000	2.7442	4.382	786.068	.123	1.243
9000.0	110.000	2.7072	4.404	798.495	.124	1.242
9000.0	120.000	2.6712	4.425	810.916	.126	1.242
9000.0	130.000	2.6361	4.447	823.332	.127	1.241
9000.0	140.000	2.6020	4.467	835.744	.128	1.241
9000.0	150.000	2.5687	4.488	848.151	.130	1.241
9000.0	160.000	2.5362	4.508	860.554	.131	1.240
9000.0	170.000	2.5046	4.528	872.953	.132	1.240
9000.0	180.000	2.4737	4.548	885.348	.133	1.239
9000.0	190.000	2.4436	4.567	897.740	.135	1.239
9000.0	200.000	2.4142	4.586	910.128	.136	1.239
9000.0	210.000	2.3855	4.604	922.514	.137	1.238
9000.0	220.000	2.3575	4.623	934.897	.138	1.238
9000.0	230.000	2.3301	4.641	947.277	.140	1.238
9000.0	240.000	2.3034	4.659	959.654	.141	1.238
9000.0	250.000	2.2772	4.676	972.029	.142	1.237

PROPERTIES OF HELIUM GAS

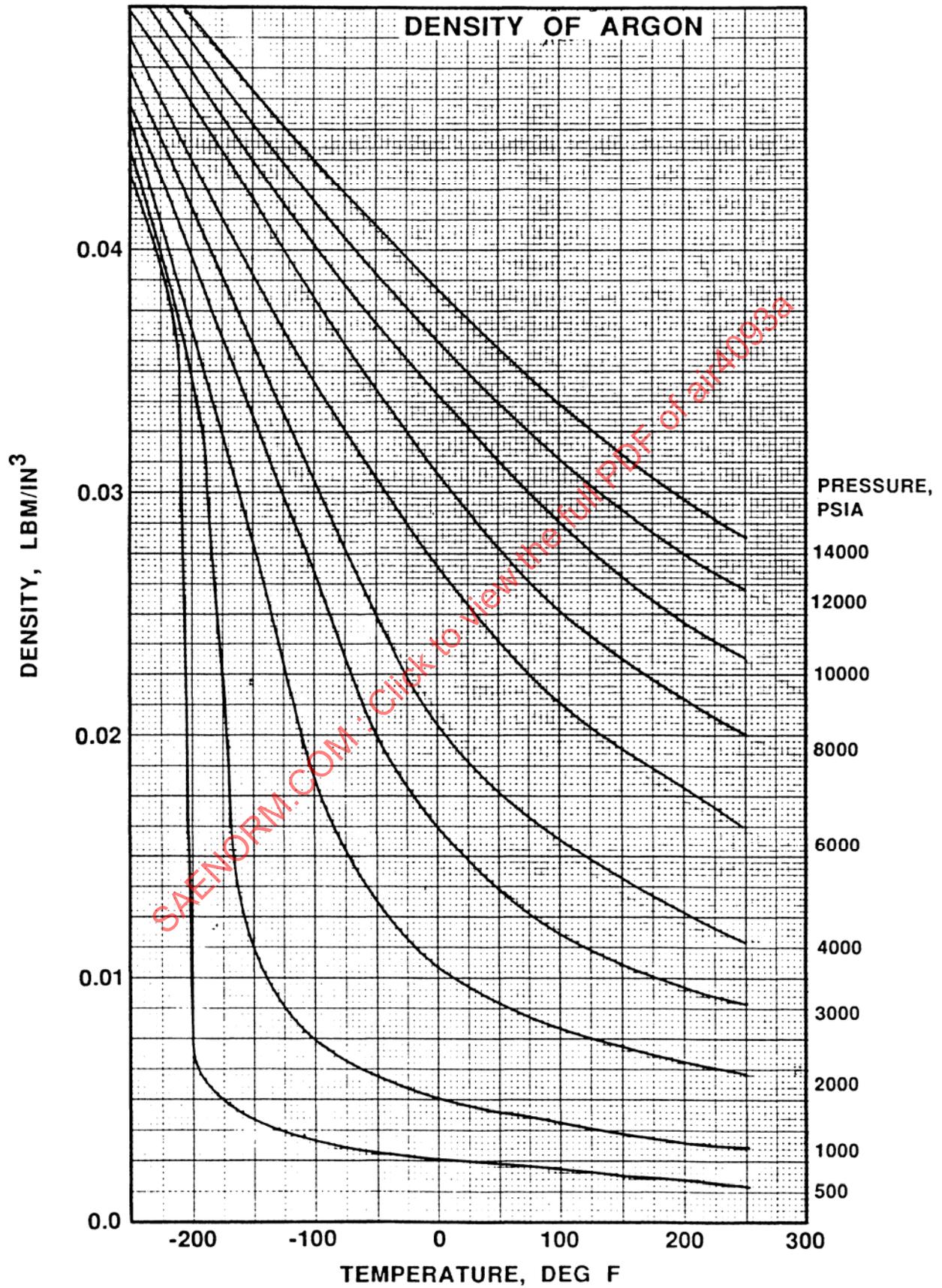
P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
10000.0	-250.000	5.6604	3.082	351.818	.090	1.303
10000.0	-240.000	5.5159	3.143	364.843	.091	1.302
10000.0	-230.000	5.3767	3.201	377.847	.091	1.299
10000.0	-220.000	5.2484	3.256	390.829	.092	1.297
10000.0	-210.000	5.1244	3.309	403.785	.093	1.294
10000.0	-200.000	5.0063	3.360	416.715	.094	1.292
10000.0	-190.000	4.8938	3.409	429.619	.095	1.289
10000.0	-180.000	4.7864	3.456	442.495	.096	1.286
10000.0	-170.000	4.6838	3.501	455.345	.097	1.284
10000.0	-160.000	4.5857	3.544	468.168	.098	1.281
10000.0	-150.000	4.4917	3.586	480.965	.099	1.279
10000.0	-140.000	4.4017	3.627	493.738	.100	1.276
10000.0	-130.000	4.3154	3.666	506.487	.101	1.274
10000.0	-120.000	4.2325	3.704	519.213	.102	1.271
10000.0	-110.000	4.1528	3.741	531.917	.103	1.269
10000.0	-100.000	4.0762	3.777	544.600	.104	1.267
10000.0	-90.000	4.0025	3.811	557.263	.105	1.265
10000.0	-80.000	3.9315	3.845	569.907	.106	1.264
10000.0	-70.000	3.8630	3.878	582.534	.107	1.262
10000.0	-60.000	3.7969	3.910	595.143	.108	1.260
10000.0	-50.000	3.7331	3.941	607.736	.109	1.259
10000.0	-40.000	3.6715	3.971	620.314	.110	1.257
10000.0	-30.000	3.6119	4.001	632.878	.111	1.256
10000.0	-20.000	3.5542	4.030	645.428	.112	1.254
10000.0	-10.000	3.4985	4.058	657.965	.113	1.253
10000.0	.000	3.4444	4.086	670.489	.114	1.252
10000.0	10.000	3.3920	4.113	683.003	.115	1.251
10000.0	20.000	3.3413	4.139	695.506	.116	1.250
10000.0	30.000	3.2920	4.165	707.998	.117	1.249
10000.0	40.000	3.2442	4.190	720.481	.118	1.248
10000.0	50.000	3.1978	4.215	732.955	.119	1.247
10000.0	60.000	3.1527	4.239	745.420	.120	1.246
10000.0	70.000	3.1089	4.263	757.877	.120	1.245
10000.0	80.000	3.0662	4.286	770.327	.121	1.245
10000.0	90.000	3.0248	4.309	782.769	.123	1.244
10000.0	100.000	2.9844	4.331	795.205	.124	1.243
10000.0	110.000	2.9451	4.353	807.634	.125	1.243
10000.0	120.000	2.9069	4.375	820.058	.126	1.242
10000.0	130.000	2.8696	4.396	832.475	.128	1.242
10000.0	140.000	2.8333	4.417	844.888	.129	1.241
10000.0	150.000	2.7979	4.437	857.296	.130	1.241
10000.0	160.000	2.7633	4.458	869.698	.132	1.240
10000.0	170.000	2.7296	4.477	882.097	.133	1.240
10000.0	180.000	2.6967	4.497	894.491	.134	1.239
10000.0	190.000	2.6646	4.516	906.882	.135	1.239
10000.0	200.000	2.6333	4.535	919.268	.137	1.239
10000.0	210.000	2.6027	4.554	931.652	.138	1.238
10000.0	220.000	2.5727	4.572	944.032	.139	1.238
10000.0	230.000	2.5435	4.590	956.409	.140	1.238
10000.0	240.000	2.5149	4.608	968.783	.141	1.237
10000.0	250.000	2.4870	4.626	981.154	.143	1.237

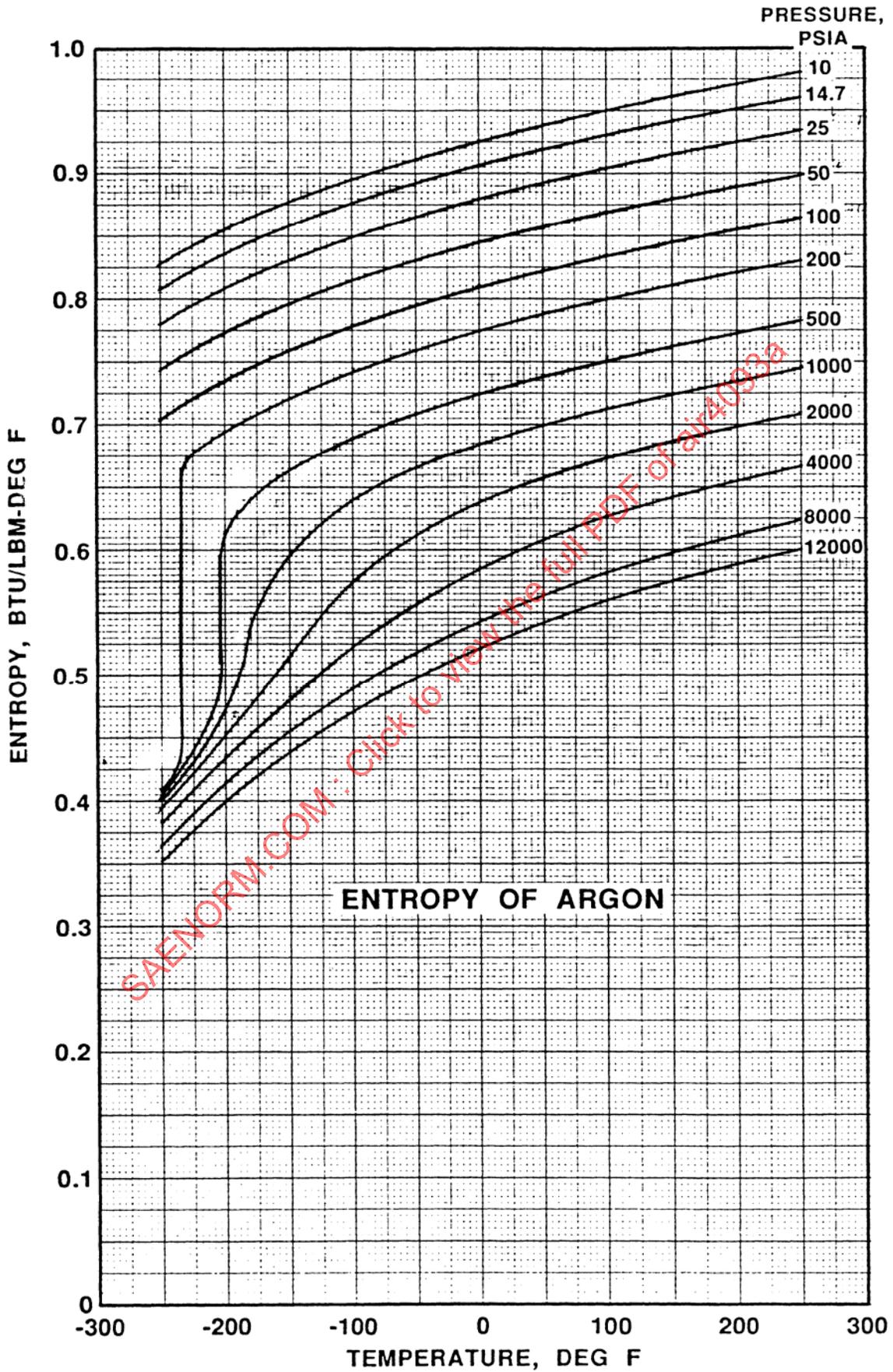
PROPERTIES OF HELIUM GAS

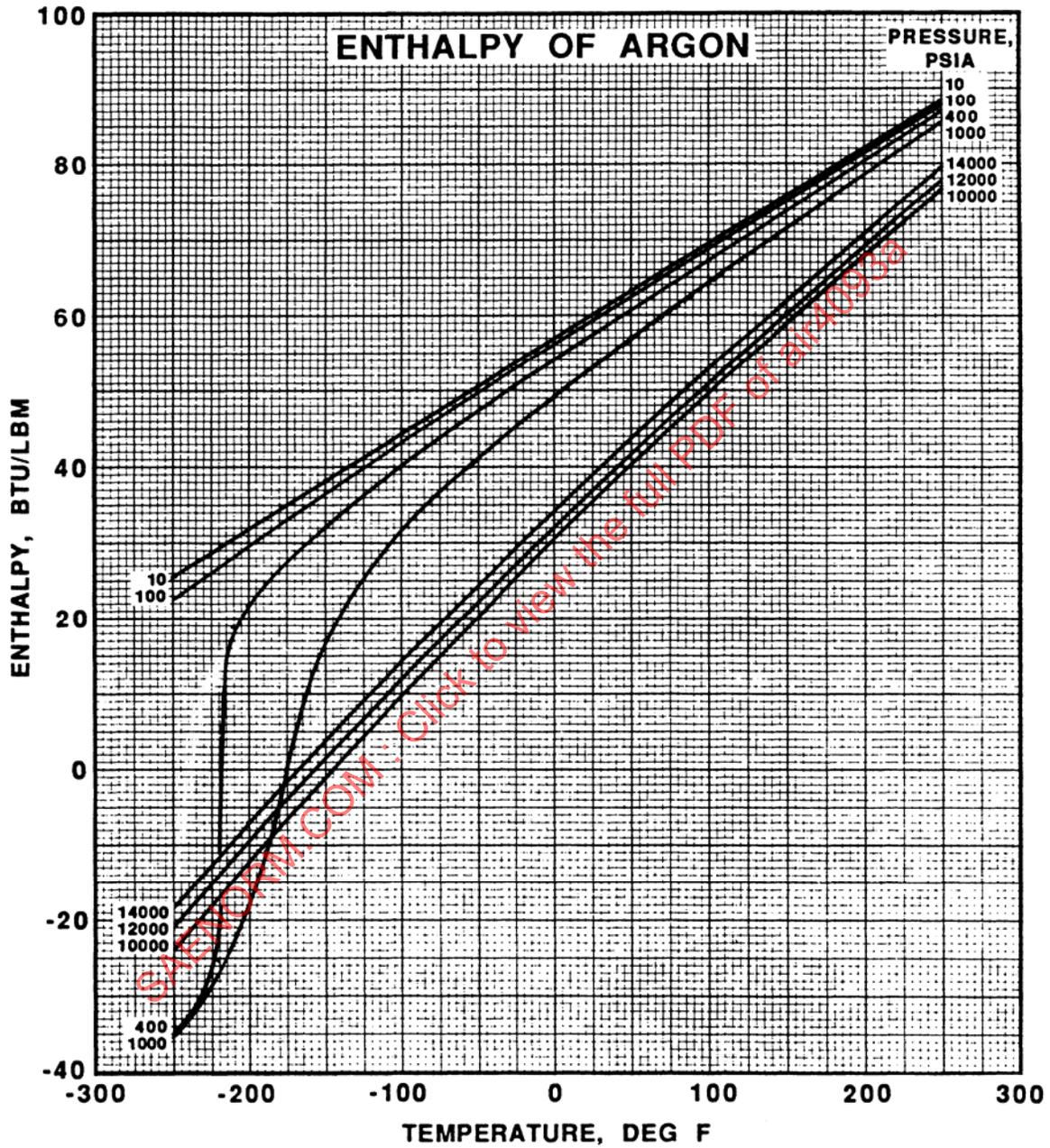
P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
12000.0	-250.000	6.2759	2.992	368.806	.095	1.303
12000.0	-240.000	6.1285	3.053	381.838	.095	1.303
12000.0	-230.000	5.9878	3.111	394.859	.096	1.301
12000.0	-220.000	5.8536	3.166	407.856	.097	1.300
12000.0	-210.000	5.7253	3.219	420.853	.098	1.298
12000.0	-200.000	5.6027	3.270	433.820	.098	1.296
12000.0	-190.000	5.4854	3.319	446.764	.099	1.293
12000.0	-180.000	5.3730	3.366	459.683	.100	1.291
12000.0	-170.000	5.2654	3.411	472.578	.101	1.288
12000.0	-160.000	5.1621	3.455	485.448	.102	1.286
12000.0	-150.000	5.0630	3.497	498.293	.103	1.283
12000.0	-140.000	4.9678	3.538	511.113	.104	1.281
12000.0	-130.000	4.8763	3.577	523.909	.105	1.278
12000.0	-120.000	4.7882	3.616	536.681	.105	1.276
12000.0	-110.000	4.7033	3.653	549.430	.106	1.274
12000.0	-100.000	4.6216	3.689	562.157	.107	1.272
12000.0	-90.000	4.5427	3.723	574.862	.108	1.270
12000.0	-80.000	4.4666	3.757	587.547	.109	1.268
12000.0	-70.000	4.3931	3.790	600.212	.110	1.266
12000.0	-60.000	4.3220	3.822	612.859	.111	1.264
12000.0	-50.000	4.2533	3.853	625.487	.112	1.262
12000.0	-40.000	4.1868	3.884	638.098	.113	1.260
12000.0	-30.000	4.1225	3.913	650.693	.113	1.259
12000.0	-20.000	4.0601	3.942	663.273	.114	1.257
12000.0	-10.000	3.9996	3.971	675.838	.115	1.256
12000.0	.000	3.9410	3.998	688.388	.116	1.254
12000.0	10.000	3.8841	4.025	700.926	.117	1.253
12000.0	20.000	3.8288	4.052	713.451	.118	1.252
12000.0	30.000	3.7751	4.077	725.963	.119	1.251
12000.0	40.000	3.7230	4.103	738.455	.120	1.250
12000.0	50.000	3.6723	4.127	750.956	.120	1.249
12000.0	60.000	3.6229	4.152	763.436	.121	1.248
12000.0	70.000	3.5749	4.176	775.908	.122	1.247
12000.0	80.000	3.5282	4.199	788.370	.123	1.246
12000.0	90.000	3.4827	4.222	800.823	.124	1.245
12000.0	100.000	3.4383	4.244	813.268	.125	1.244
12000.0	110.000	3.3951	4.266	825.706	.127	1.243
12000.0	120.000	3.3530	4.288	838.136	.128	1.243
12000.0	130.000	3.3119	4.309	850.560	.129	1.242
12000.0	140.000	3.2718	4.330	862.977	.130	1.241
12000.0	150.000	3.2327	4.350	875.388	.132	1.241
12000.0	160.000	3.1945	4.371	887.793	.133	1.240
12000.0	170.000	3.1571	4.390	900.192	.134	1.240
12000.0	180.000	3.1207	4.410	912.587	.135	1.239
12000.0	190.000	3.0851	4.429	924.977	.137	1.239
12000.0	200.000	3.0503	4.448	937.352	.138	1.238
12000.0	210.000	3.0162	4.467	949.743	.139	1.238
12000.0	220.000	2.9830	4.485	962.119	.140	1.237
12000.0	230.000	2.9504	4.503	974.492	.142	1.237
12000.0	240.000	2.9186	4.521	986.861	.143	1.237
12000.0	250.000	2.8874	4.539	999.227	.144	1.236

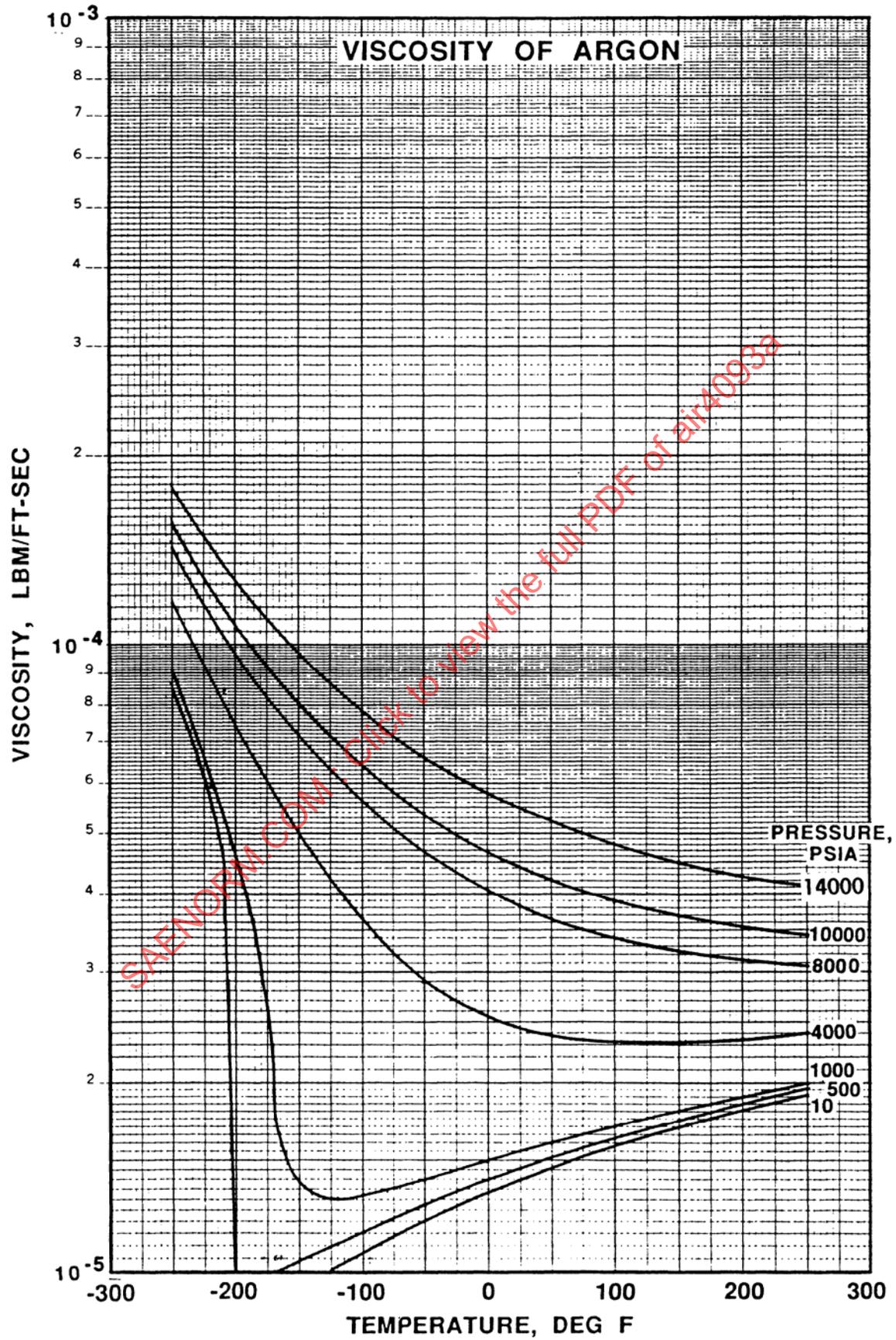
PROPERTIES OF HELIUM GAS

P PSIA	TEMP F	DENS LB/ CU IN E+3	S BTU/ LB-F	H BTU/ LBM	VIS LB/ IN-S E+5	CP BTU/ LB-F
14000.0	-250.000	6.8160	2.916	385.674	.099	1.302
14000.0	-240.000	6.6679	2.977	398.695	.100	1.302
14000.0	-230.000	6.5260	3.035	411.715	.100	1.302
14000.0	-220.000	6.3900	3.091	424.728	.101	1.301
14000.0	-210.000	6.2596	3.144	437.729	.102	1.299
14000.0	-200.000	6.1344	3.195	450.716	.102	1.298
14000.0	-190.000	6.0142	3.244	463.684	.103	1.296
14000.0	-180.000	5.8988	3.291	476.633	.104	1.294
14000.0	-170.000	5.7878	3.336	489.560	.105	1.292
14000.0	-160.000	5.6811	3.380	502.465	.105	1.289
14000.0	-150.000	5.5785	3.422	515.347	.106	1.287
14000.0	-140.000	5.4796	3.463	528.205	.107	1.285
14000.0	-130.000	5.3842	3.503	541.040	.108	1.282
14000.0	-120.000	5.2923	3.541	553.852	.108	1.280
14000.0	-110.000	5.2036	3.578	566.641	.109	1.278
14000.0	-100.000	5.1180	3.614	579.407	.110	1.276
14000.0	-90.000	5.0352	3.649	592.151	.111	1.273
14000.0	-80.000	4.9552	3.683	604.874	.112	1.271
14000.0	-70.000	4.8779	3.716	617.576	.112	1.269
14000.0	-60.000	4.8029	3.748	630.258	.113	1.267
14000.0	-50.000	4.7304	3.779	642.921	.114	1.265
14000.0	-40.000	4.6600	3.810	655.566	.115	1.264
14000.0	-30.000	4.5919	3.840	668.193	.116	1.262
14000.0	-20.000	4.5257	3.869	680.803	.116	1.260
14000.0	-10.000	4.4615	3.897	693.396	.117	1.259
14000.0	.000	4.3991	3.925	705.974	.118	1.257
14000.0	10.000	4.3386	3.952	718.537	.119	1.256
14000.0	20.000	4.2797	3.978	731.087	.120	1.254
14000.0	30.000	4.2224	4.004	743.622	.120	1.253
14000.0	40.000	4.1667	4.029	756.145	.121	1.252
14000.0	50.000	4.1124	4.054	768.655	.122	1.250
14000.0	60.000	4.0596	4.078	781.154	.123	1.249
14000.0	70.000	4.0082	4.102	793.642	.124	1.248
14000.0	80.000	3.9580	4.126	806.119	.124	1.247
14000.0	90.000	3.9091	4.148	818.587	.126	1.246
14000.0	100.000	3.8615	4.171	831.045	.127	1.245
14000.0	110.000	3.8150	4.193	843.493	.128	1.244
14000.0	120.000	3.7696	4.215	855.934	.129	1.244
14000.0	130.000	3.7253	4.236	868.366	.131	1.243
14000.0	140.000	3.6820	4.257	880.791	.132	1.242
14000.0	150.000	3.6398	4.277	893.208	.133	1.241
14000.0	160.000	3.5985	4.297	905.618	.134	1.241
14000.0	170.000	3.5581	4.317	918.022	.135	1.240
14000.0	180.000	3.5186	4.337	930.420	.137	1.239
14000.0	190.000	3.4800	4.356	942.812	.138	1.239
14000.0	200.000	3.4423	4.375	955.198	.139	1.238
14000.0	210.000	3.4053	4.394	967.579	.140	1.238
14000.0	220.000	3.3692	4.412	979.955	.142	1.237
14000.0	230.000	3.3338	4.430	992.327	.143	1.237
14000.0	240.000	3.2991	4.448	1004.694	.144	1.237
14000.0	250.000	3.2652	4.465	1017.057	.145	1.236









PROPERTIES OF ARGON GAS

P	TEMP	DENS	S	H	VIS	CP
PSIA	F	LB/ CU FT	BTU/ LB-F	BTU/ LBM	LB/ FT-S E+5	BTU/ LB-F
10.0	-250.000	.179	.827	25.772	.640	.127
10.0	-240.000	.171	.833	27.041	.669	.127
10.0	-230.000	.163	.839	28.305	.699	.126
10.0	-220.000	.156	.844	29.567	.728	.126
10.0	-210.000	.150	.849	30.827	.758	.126
10.0	-200.000	.144	.854	32.085	.787	.126
10.0	-190.000	.139	.859	33.341	.817	.126
10.0	-180.000	.134	.863	34.596	.846	.125
10.0	-170.000	.129	.868	35.849	.875	.125
10.0	-160.000	.125	.872	37.102	.904	.125
10.0	-150.000	.121	.876	38.354	.932	.125
10.0	-140.000	.117	.880	39.605	.961	.125
10.0	-130.000	.113	.884	40.856	.989	.125
10.0	-120.000	.110	.888	42.106	1.017	.125
10.0	-110.000	.107	.891	43.355	1.045	.125
10.0	-100.000	.104	.895	44.605	1.073	.125
10.0	-90.000	.101	.898	45.853	1.101	.125
10.0	-80.000	.098	.902	47.102	1.128	.125
10.0	-70.000	.096	.905	48.350	1.155	.125
10.0	-60.000	.093	.908	49.598	1.182	.125
10.0	-50.000	.091	.911	50.845	1.209	.125
10.0	-40.000	.089	.914	52.092	1.236	.125
10.0	-30.000	.087	.917	53.340	1.262	.125
10.0	-20.000	.085	.920	54.586	1.288	.125
10.0	-10.000	.083	.923	55.833	1.314	.125
10.0	.000	.081	.926	57.080	1.340	.125
10.0	10.000	.079	.928	58.326	1.365	.125
10.0	20.000	.078	.931	59.573	1.390	.125
10.0	30.000	.076	.933	60.819	1.415	.125
10.0	40.000	.075	.936	62.065	1.440	.125
10.0	50.000	.073	.938	63.311	1.465	.125
10.0	60.000	.072	.941	64.556	1.489	.125
10.0	70.000	.070	.943	65.802	1.514	.125
10.0	80.000	.069	.946	67.048	1.538	.125
10.0	90.000	.068	.948	68.293	1.562	.125
10.0	100.000	.067	.950	69.539	1.585	.125
10.0	110.000	.065	.952	70.784	1.609	.125
10.0	120.000	.064	.954	72.030	1.632	.125
10.0	130.000	.063	.957	73.275	1.656	.125
10.0	140.000	.062	.959	74.520	1.679	.125
10.0	150.000	.061	.961	75.765	1.701	.125
10.0	160.000	.060	.963	77.010	1.724	.125
10.0	170.000	.059	.965	78.255	1.747	.125
10.0	180.000	.058	.967	79.500	1.769	.124
10.0	190.000	.057	.969	80.745	1.791	.124
10.0	200.000	.056	.971	81.990	1.813	.124
10.0	210.000	.056	.972	83.235	1.835	.124
10.0	220.000	.055	.974	84.480	1.857	.124
10.0	230.000	.054	.976	85.725	1.879	.124
10.0	240.000	.053	.978	86.969	1.900	.124
10.0	250.000	.052	.980	88.214	1.921	.124