

Table 53
Density Reduction to 15°C

ASTM-IP

0.690 - 0.691

0 - 25°C

Observed Temperature °C	Observed Density									
	0.690	0.691	0.692	0.693	0.694	0.695	0.696	0.697	0.698	0.699
	Corresponding Density 15°C									
0.0										
0.5										
1.0										
1.5										
2.0										
2.5										
3.0										
3.5										
4.0										
4.5										
5.0										
5.5										
6.0										
6.5										
7.0										
7.5										
8.0										
8.5										
9.0										
9.5										
10.0										
10.5										
11.0										
11.5										
12.0										
12.5										
13.0										
13.5										
14.0										
14.5										
15.0	0.6900	0.6910	0.6920	0.6930	0.6940	0.6950	0.6960	0.6970	0.6980	0.6990
15.5	0.6904	0.6914	0.6924	0.6934	0.6944	0.6954	0.6964	0.6974	0.6984	0.6994
16.0	0.6909	0.6919	0.6929	0.6939	0.6949	0.6959	0.6969	0.6979	0.6989	0.6998
16.5	0.6913	0.6923	0.6933	0.6943	0.6953	0.6963	0.6973	0.6983	0.6993	0.7003
17.0	0.6917	0.6927	0.6937	0.6947	0.6957	0.6967	0.6977	0.6987	0.6997	0.7007
17.5	0.6922	0.6931	0.6942	0.6952	0.6962	0.6972	0.6982	0.6992	0.7001	0.7011
18.0	0.6926	0.6936	0.6946	0.6955	0.6966	0.6976	0.6986	0.6996	0.7006	0.7016
18.5	0.6930	0.6940	0.6950	0.6960	0.6970	0.6980	0.6990	0.7000	0.7010	0.7020
19.0	0.6935	0.6944	0.6955	0.6965	0.6975	0.6984	0.6994	0.7004	0.7014	0.7024
19.5	0.6939	0.6948	0.6959	0.6969	0.6979	0.6989	0.6999	0.7009	0.7019	0.7029
20.0	0.6944	0.6953	0.6963	0.6973	0.6983	0.6993	0.7003	0.7013	0.7023	0.7033
20.5	0.6948	0.6957	0.6967	0.6977	0.6987	0.6997	0.7007	0.7017	0.7027	0.7037
21.0	0.6952	0.6961	0.6972	0.6982	0.6992	0.7002	0.7012	0.7021	0.7031	0.7041
21.5	0.6956	0.6965	0.6976	0.6986	0.6996	0.7006	0.7016	0.7026	0.7036	0.7046
22.0	0.6961	0.6970	0.6980	0.6990	0.7000	0.7010	0.7020	0.7030	0.7040	0.7050
22.5	0.6965	0.6974	0.6985	0.6995	0.7005	0.7014	0.7024	0.7034	0.7044	0.7054
23.0	0.6969	0.6978	0.6989	0.6999	0.7009	0.7019	0.7029	0.7038	0.7048	0.7058
23.5	0.6973	0.6982	0.6993	0.7003	0.7013	0.7023	0.7033	0.7043	0.7053	0.7062
24.0	0.6978	0.6986	0.6997	0.7007	0.7017	0.7027	0.7037	0.7047	0.7057	0.7067
24.5	0.6982	0.6991	0.7002	0.7012	0.7022	0.7031	0.7041	0.7051	0.7061	0.7071
25.0	0.6986	0.6995	0.7006	0.7016	0.7026	0.7036	0.7045	0.7055	0.7065	0.7075

Table 53
Density Reduction to 15°C

ASTM-IP

0.690 - 0.699

25 - 50°C

Observed Temperature °C	Observed Density									
	0.690	0.691	0.692	0.693	0.694	0.695	0.696	0.697	0.698	0.699
	Corresponding Density 15°C									
25.0	0.6986	0.6996	0.7006	0.7016	0.7026	0.7036	0.7045	0.7055	0.7065	0.7075
25.5	0.6990	0.7000	0.7009	0.7020	0.7030	0.7040	0.7049	0.7060	0.7069	0.7079
26.0	0.6995	0.7005	0.7015	0.7024	0.7034	0.7044	0.7054	0.7064	0.7074	0.7083
26.5	0.6998	0.7009	0.7019	0.7029	0.7038	0.7048	0.7058	0.7068	0.7078	0.7088
27.0	0.7003	0.7013	0.7023	0.7033	0.7043	0.7053	0.7062	0.7072	0.7082	0.7092
27.5	0.7008	0.7017	0.7027	0.7037	0.7047	0.7057	0.7067	0.7076	0.7086	0.7096
28.0	0.7012	0.7022	0.7031	0.7041	0.7051	0.7061	0.7071	0.7081	0.7090	0.7099
28.5	0.7016	0.7026	0.7036	0.7045	0.7055	0.7065	0.7075	0.7085	0.7095	0.7104
29.0	0.7020	0.7030	0.7039	0.7049	0.7060	0.7069	0.7079	0.7089	0.7099	0.7109
29.5	0.7024	0.7034	0.7044	0.7054	0.7064	0.7074	0.7083	0.7093	0.7103	0.7113
30.0	0.7029	0.7039	0.7048	0.7058	0.7068	0.7078	0.7087	0.7097	0.7107	0.7117
30.5	0.7033	0.7043	0.7053	0.7062	0.7072	0.7082	0.7092	0.7101	0.7111	0.7121
31.0	0.7037	0.7047	0.7057	0.7066	0.7076	0.7086	0.7096	0.7106	0.7115	0.7125
31.5	0.7041	0.7051	0.7061	0.7071	0.7080	0.7089	0.7099	0.7110	0.7120	0.7129
32.0	0.7046	0.7055	0.7065	0.7075	0.7085	0.7094	0.7104	0.7114	0.7124	0.7133
32.5	0.7050	0.7059	0.7069	0.7079	0.7089	0.7099	0.7108	0.7117	0.7128	0.7138
33.0	0.7054	0.7064	0.7073	0.7083	0.7093	0.7103	0.7112	0.7122	0.7132	0.7142
33.5	0.7058	0.7068	0.7078	0.7087	0.7097	0.7107	0.7117	0.7126	0.7136	0.7146
34.0	0.7062	0.7072	0.7082	0.7092	0.7101	0.7111	0.7121	0.7129	0.7139	0.7150
34.5	0.7066	0.7076	0.7086	0.7096	0.7105	0.7115	0.7125	0.7135	0.7144	0.7154
35.0	0.7071	0.7080	0.7089	0.7099	0.7110	0.7119	0.7129	0.7139	0.7148	0.7158
35.5	0.7075	0.7085	0.7094	0.7104	0.7114	0.7123	0.7133	0.7143	0.7153	0.7162
36.0	0.7079	0.7089	0.7098	0.7108	0.7118	0.7128	0.7137	0.7147	0.7157	0.7166
36.5	0.7083	0.7093	0.7103	0.7112	0.7122	0.7132	0.7141	0.7151	0.7161	0.7170
37.0	0.7087	0.7097	0.7107	0.7116	0.7126	0.7136	0.7145	0.7155	0.7165	0.7175
37.5	0.7091	0.7101	0.7111	0.7120	0.7130	0.7139	0.7149	0.7159	0.7169	0.7179
38.0	0.7096	0.7105	0.7115	0.7125	0.7134	0.7144	0.7154	0.7163	0.7173	0.7183
38.5	0.7099	0.7109	0.7119	0.7129	0.7138	0.7148	0.7158	0.7167	0.7177	0.7187
39.0	0.7104	0.7113	0.7123	0.7133	0.7143	0.7152	0.7162	0.7172	0.7181	0.7191
39.5	0.7108	0.7118	0.7127	0.7137	0.7147	0.7156	0.7166	0.7176	0.7185	0.7195
40.0	0.7110	0.7120	0.7130	0.7140	0.7150	0.7160	0.7170	0.7180	0.7190	0.7200
40.5	0.7114	0.7124	0.7134	0.7144	0.7154	0.7164	0.7174	0.7184	0.7194	0.7204
41.0	0.7119	0.7129	0.7139	0.7149	0.7159	0.7169	0.7179	0.7188	0.7198	0.7208
41.5	0.7123	0.7133	0.7143	0.7153	0.7163	0.7173	0.7183	0.7193	0.7203	0.7213
42.0	0.7127	0.7137	0.7147	0.7157	0.7167	0.7177	0.7187	0.7197	0.7207	0.7217
42.5	0.6922	0.7141	0.7152	0.7161	0.7171	0.7181	0.7191	0.7201	0.7211	0.7221
43.0	0.6926	0.7146	0.7156	0.7166	0.7176	0.7185	0.7195	0.7205	0.7215	0.7225
43.5	0.6930	0.7150	0.7160	0.7170	0.7180	0.7190	0.7200	0.7210	0.7220	0.7230
44.0	0.6935	0.7154	0.7164	0.7174	0.7184	0.7194	0.7204	0.7214	0.7224	0.7234
44.5	0.6939	0.7158	0.7168	0.7178	0.7188	0.7198	0.7208	0.7218	0.7228	0.7238
45.0	0.6944	0.7163	0.7173	0.7183	0.7192	0.7202	0.7212	0.7222	0.7232	0.7242
45.5	0.6948	0.7167	0.7177	0.7187	0.7197	0.7207	0.7217	0.7226	0.7236	0.7246
46.0	0.6952	0.7171	0.7181	0.7191	0.7201	0.7211	0.7221	0.7231	0.7241	0.7250
46.5	0.6956	0.7175	0.7185	0.7195	0.7205	0.7215	0.7225	0.7235	0.7245	0.7255
47.0	0.6961	0.7180	0.7189	0.7199	0.7209	0.7219	0.7229	0.7239	0.7249	0.7259
47.5	0.6965	0.7184	0.7194	0.7204	0.7213	0.7223	0.7233	0.7243	0.7253	0.7263
48.0	0.6969	0.7188	0.7198	0.7208	0.7218	0.7228	0.7237	0.7247	0.7257	0.7267
48.5	0.6973	0.7192	0.7202	0.7212	0.7222	0.7232	0.7242	0.7252	0.7261	0.7271
49.0	0.6978	0.7196	0.7206	0.7216	0.7226	0.7236	0.7246	0.7256	0.7266	0.7275
49.5	0.6982	0.7201	0.7210	0.7220	0.7230	0.7240	0.7250	0.7260	0.7270	0.7280
50.0	0.6986	0.7205	0.7215	0.7225	0.7234	0.7244	0.7254	0.7264	0.7274	0.7284

Table 53
Density Reduction to 15°C

ASTM-IP

0.700 - 0.709
0 - 25°C

Observed Temperature °C	Observed Density									
	0.700	0.701	0.702	0.703	0.704	0.705	0.706	0.707	0.708	0.709
	Corresponding Density 15°C									
0.0	0.6869	0.6879	0.6890	0.6900	0.6910	0.6920	0.6930	0.6941	0.6951	0.6961
0.5	0.6874	0.6884	0.6894	0.6904	0.6914	0.6925	0.6935	0.6945	0.6955	0.6965
1.0	0.6878	0.6888	0.6898	0.6909	0.6919	0.6929	0.6939	0.6949	0.6959	0.6970
1.5	0.6882	0.6893	0.6903	0.6913	0.6923	0.6933	0.6943	0.6954	0.6964	0.6974
2.0	0.6887	0.6897	0.6907	0.6917	0.6928	0.6938	0.6948	0.6958	0.6968	0.6978
2.5	0.6891	0.6901	0.6912	0.6922	0.6932	0.6942	0.6952	0.6962	0.6973	0.6983
3.0	0.6896	0.6906	0.6916	0.6926	0.6936	0.6946	0.6957	0.6967	0.6977	0.6987
3.5	0.6900	0.6910	0.6920	0.6931	0.6941	0.6951	0.6961	0.6971	0.6981	0.6991
4.0	0.6904	0.6915	0.6925	0.6935	0.6945	0.6955	0.6965	0.6975	0.6986	0.6996
4.5	0.6909	0.6919	0.6929	0.6939	0.6949	0.6960	0.6970	0.6980	0.6990	0.7000
5.0	0.6913	0.6923	0.6933	0.6944	0.6954	0.6964	0.6974	0.6984	0.6994	0.7004
5.5	0.6918	0.6928	0.6938	0.6948	0.6958	0.6968	0.6978	0.6988	0.6999	0.7009
6.0	0.6922	0.6932	0.6942	0.6952	0.6962	0.6973	0.6983	0.6993	0.7003	0.7013
6.5	0.6926	0.6936	0.6947	0.6957	0.6967	0.6977	0.6987	0.6997	0.7007	0.7017
7.0	0.6931	0.6941	0.6951	0.6961	0.6971	0.6981	0.6991	0.7001	0.7012	0.7022
7.5	0.6935	0.6945	0.6955	0.6965	0.6975	0.6986	0.6996	0.7006	0.7016	0.7026
8.0	0.6939	0.6950	0.6960	0.6970	0.6980	0.6990	0.7000	0.7010	0.7020	0.7030
8.5	0.6944	0.6954	0.6964	0.6974	0.6984	0.6994	0.7004	0.7014	0.7024	0.7035
9.0	0.6948	0.6958	0.6968	0.6978	0.6988	0.6999	0.7009	0.7019	0.7029	0.7039
9.5	0.6953	0.6963	0.6973	0.6983	0.6993	0.7003	0.7013	0.7023	0.7033	0.7043
10.0	0.6957	0.6967	0.6977	0.6987	0.6997	0.7007	0.7017	0.7027	0.7037	0.7047
10.5	0.6961	0.6971	0.6981	0.6991	0.7001	0.7011	0.7022	0.7032	0.7042	0.7052
11.0	0.6966	0.6976	0.6986	0.6996	0.7006	0.7016	0.7026	0.7036	0.7046	0.7056
11.5	0.6970	0.6980	0.6990	0.7000	0.7010	0.7020	0.7030	0.7040	0.7050	0.7060
12.0	0.6974	0.6984	0.6994	0.7004	0.7014	0.7024	0.7034	0.7044	0.7054	0.7065
12.5	0.6978	0.6989	0.6999	0.7009	0.7019	0.7029	0.7039	0.7049	0.7059	0.7069
13.0	0.6983	0.6993	0.7003	0.7013	0.7023	0.7033	0.7043	0.7053	0.7063	0.7073
13.5	0.6987	0.6997	0.7007	0.7017	0.7027	0.7037	0.7047	0.7057	0.7067	0.7077
14.0	0.6991	0.7001	0.7011	0.7021	0.7031	0.7041	0.7051	0.7061	0.7072	0.7082
14.5	0.6996	0.7006	0.7016	0.7026	0.7036	0.7046	0.7056	0.7066	0.7076	0.7086
15.0	0.7000	0.7010	0.7020	0.7030	0.7040	0.7050	0.7060	0.7070	0.7080	0.7090
15.5	0.7004	0.7014	0.7024	0.7034	0.7044	0.7054	0.7064	0.7074	0.7084	0.7094
16.0	0.7009	0.7019	0.7029	0.7039	0.7049	0.7059	0.7069	0.7078	0.7088	0.7098
16.5	0.7013	0.7023	0.7033	0.7043	0.7053	0.7063	0.7073	0.7083	0.7093	0.7103
17.0	0.7017	0.7027	0.7037	0.7047	0.7057	0.7067	0.7077	0.7087	0.7097	0.7107
17.5	0.7021	0.7031	0.7042	0.7051	0.7061	0.7071	0.7081	0.7091	0.7101	0.7111
18.0	0.7026	0.7036	0.7046	0.7056	0.7066	0.7075	0.7085	0.7095	0.7105	0.7115
18.5	0.7030	0.7040	0.7050	0.7060	0.7070	0.7080	0.7090	0.7100	0.7110	0.7120
19.0	0.7034	0.7044	0.7054	0.7064	0.7074	0.7084	0.7094	0.7104	0.7114	0.7124
19.5	0.7038	0.7048	0.7058	0.7068	0.7078	0.7088	0.7098	0.7108	0.7118	0.7128
20.0	0.7043	0.7053	0.7063	0.7073	0.7082	0.7092	0.7102	0.7112	0.7122	0.7132
20.5	0.7047	0.7057	0.7067	0.7077	0.7087	0.7097	0.7107	0.7116	0.7126	0.7136
21.0	0.7051	0.7061	0.7071	0.7081	0.7091	0.7101	0.7111	0.7121	0.7131	0.7140
21.5	0.7055	0.7065	0.7075	0.7085	0.7095	0.7105	0.7115	0.7125	0.7135	0.7145
22.0	0.7060	0.7070	0.7079	0.7089	0.7099	0.7109	0.7119	0.7129	0.7139	0.7149
22.5	0.7064	0.7074	0.7084	0.7094	0.7103	0.7113	0.7123	0.7133	0.7143	0.7153
23.0	0.7068	0.7078	0.7088	0.7098	0.7108	0.7118	0.7127	0.7137	0.7147	0.7157
23.5	0.7072	0.7082	0.7092	0.7102	0.7112	0.7122	0.7132	0.7142	0.7151	0.7161
24.0	0.7077	0.7086	0.7096	0.7106	0.7116	0.7126	0.7136	0.7146	0.7156	0.7165
24.5	0.7081	0.7091	0.7100	0.7110	0.7120	0.7130	0.7140	0.7150	0.7160	0.7170
25.0	0.7085	0.7095	0.7105	0.7115	0.7124	0.7134	0.7144	0.7154	0.7164	0.7174

Table 53
* Density Reduction to 15°C

0.700 - 0.709

ASTM-IP Observed Temperature °C	Observed Density									
	0.700	0.701	0.702	0.703	0.704	0.705	0.706	0.707	0.708	0.709
	Corresponding Density 15°C									
25.0	0.7085	0.7095	0.7105	0.7115	0.7124	0.7134	0.7144	0.7154	0.7164	0.7174
25.5	0.7089	0.7099	0.7109	0.7119	0.7129	0.7138	0.7148	0.7158	0.7168	0.7178
26.0	0.7093	0.7103	0.7113	0.7123	0.7133	0.7143	0.7152	0.7162	0.7172	0.7182
26.5	0.7098	0.7107	0.7117	0.7127	0.7137	0.7147	0.7157	0.7166	0.7176	0.7186
27.0	0.7102	0.7112	0.7121	0.7131	0.7141	0.7151	0.7161	0.7171	0.7180	0.7190
27.5	0.7106	0.7116	0.7126	0.7135	0.7145	0.7155	0.7165	0.7175	0.7185	0.7194
28.0	0.7110	0.7120	0.7130	0.7140	0.7149	0.7159	0.7169	0.7179	0.7189	0.7198
28.5	0.7114	0.7124	0.7134	0.7144	0.7153	0.7163	0.7173	0.7183	0.7193	0.7203
29.0	0.7118	0.7128	0.7138	0.7148	0.7158	0.7167	0.7177	0.7187	0.7197	0.7207
29.5	0.7123	0.7132	0.7142	0.7152	0.7162	0.7172	0.7181	0.7191	0.7201	0.7211
30.0	0.7127	0.7136	0.7146	0.7156	0.7166	0.7176	0.7185	0.7195	0.7205	0.7215
30.5	0.7131	0.7141	0.7150	0.7160	0.7170	0.7180	0.7190	0.7199	0.7209	0.7219
31.0	0.7135	0.7145	0.7155	0.7164	0.7174	0.7184	0.7194	0.7203	0.7213	0.7223
31.5	0.7139	0.7149	0.7159	0.7168	0.7178	0.7188	0.7198	0.7208	0.7217	0.7227
32.0	0.7143	0.7153	0.7163	0.7173	0.7182	0.7192	0.7202	0.7212	0.7221	0.7231
32.5	0.7147	0.7157	0.7167	0.7177	0.7186	0.7196	0.7206	0.7216	0.7225	0.7235
33.0	0.7151	0.7161	0.7171	0.7181	0.7191	0.7200	0.7210	0.7220	0.7230	0.7239
33.5	0.7156	0.7165	0.7175	0.7185	0.7195	0.7204	0.7214	0.7224	0.7234	0.7243
34.0	0.7160	0.7169	0.7179	0.7189	0.7199	0.7208	0.7218	0.7228	0.7238	0.7247
34.5	0.7164	0.7174	0.7183	0.7193	0.7203	0.7212	0.7222	0.7232	0.7242	0.7251
35.0	0.7168	0.7178	0.7187	0.7197	0.7207	0.7217	0.7226	0.7236	0.7246	0.7255
35.5	0.7172	0.7182	0.7191	0.7201	0.7211	0.7221	0.7230	0.7240	0.7250	0.7260
36.0	0.7176	0.7186	0.7196	0.7205	0.7215	0.7225	0.7234	0.7244	0.7254	0.7264
36.5	0.7180	0.7190	0.7200	0.7209	0.7219	0.7229	0.7238	0.7248	0.7258	0.7268
37.0	0.7184	0.7194	0.7204	0.7213	0.7223	0.7233	0.7242	0.7252	0.7262	0.7272
37.5	0.7188	0.7198	0.7208	0.7217	0.7227	0.7237	0.7247	0.7256	0.7266	0.7276
38.0	0.7192	0.7202	0.7212	0.7221	0.7231	0.7241	0.7251	0.7260	0.7270	0.7280
38.5	0.7196	0.7206	0.7216	0.7226	0.7235	0.7245	0.7255	0.7264	0.7274	0.7284
39.0	0.7201	0.7210	0.7220	0.7230	0.7239	0.7249	0.7259	0.7268	0.7278	0.7288
39.5	0.7205	0.7214	0.7224	0.7234	0.7243	0.7253	0.7263	0.7272	0.7282	0.7292
40.0	0.7209	0.7218	0.7228	0.7238	0.7247	0.7257	0.7267	0.7276	0.7286	0.7296
40.5	0.7213	0.7222	0.7232	0.7242	0.7251	0.7261	0.7271	0.7280	0.7290	0.7300
41.0	0.7217	0.7226	0.7236	0.7246	0.7255	0.7265	0.7275	0.7284	0.7294	0.7304
41.5	0.7221	0.7230	0.7240	0.7250	0.7259	0.7269	0.7279	0.7288	0.7298	0.7308
42.0	0.7225	0.7234	0.7244	0.7254	0.7263	0.7273	0.7283	0.7292	0.7302	0.7312
42.5	0.7229	0.7238	0.7248	0.7258	0.7267	0.7277	0.7287	0.7296	0.7306	0.7315
43.0	0.7233	0.7242	0.7252	0.7262	0.7271	0.7281	0.7291	0.7300	0.7310	0.7319
43.5	0.7237	0.7246	0.7256	0.7266	0.7275	0.7285	0.7295	0.7304	0.7314	0.7323
44.0	0.7241	0.7250	0.7260	0.7270	0.7279	0.7289	0.7299	0.7308	0.7318	0.7327
44.5	0.7245	0.7254	0.7264	0.7274	0.7283	0.7293	0.7302	0.7312	0.7322	0.7331
45.0	0.7249	0.7258	0.7268	0.7278	0.7287	0.7297	0.7306	0.7316	0.7326	0.7335
45.5	0.7253	0.7262	0.7272	0.7282	0.7291	0.7301	0.7310	0.7320	0.7330	0.7339
46.0	0.7257	0.7266	0.7276	0.7286	0.7295	0.7305	0.7314	0.7324	0.7334	0.7343
46.5	0.7261	0.7270	0.7280	0.7290	0.7299	0.7309	0.7318	0.7328	0.7337	0.7347
47.0	0.7265	0.7274	0.7284	0.7294	0.7303	0.7313	0.7322	0.7332	0.7341	0.7351
47.5	0.7269	0.7278	0.7288	0.7298	0.7307	0.7317	0.7326	0.7336	0.7345	0.7355
48.0	0.7273	0.7282	0.7292	0.7301	0.7311	0.7321	0.7330	0.7340	0.7349	0.7359
48.5	0.7277	0.7286	0.7296	0.7305	0.7315	0.7324	0.7334	0.7344	0.7353	0.7363
49.0	0.7281	0.7290	0.7300	0.7309	0.7319	0.7328	0.7338	0.7347	0.7357	0.7367
49.5	0.7285	0.7294	0.7304	0.7313	0.7323	0.7332	0.7342	0.7351	0.7361	0.7370
50.0	0.7289	0.7298	0.7308	0.7317	0.7327	0.7336	0.7346	0.7355	0.7365	0.7374

Table 53
* Density Reduction to 15°C

0.710 - 0.719

0 - 25 °C

ASTM-IP Observed Temperature °C	Observed Density									
	0.710	0.711	0.712	0.713	0.714	0.715	0.716	0.717	0.718	0.719
	Corresponding Density 15°C									
0.0	0.6971	0.6981	0.6991	0.7002	0.7012	0.7022	0.7032	0.7042	0.7053	0.7063
0.5	0.6975	0.6986	0.6996	0.7006	0.7016	0.7026	0.7037	0.7047	0.7057	0.7067
1.0	0.6980	0.6990	0.7000	0.7010	0.7020	0.7031	0.7041	0.7051	0.7061	0.7071
1.5	0.6984	0.6994	0.7004	0.7015	0.7025	0.7035	0.7045	0.7055	0.7066	0.7076
2.0	0.6989	0.6999	0.7009	0.7019	0.7029	0.7039	0.7049	0.7060	0.7070	0.7080
2.5	0.6993	0.7003	0.7013	0.7023	0.7033	0.7044	0.7054	0.7064	0.7074	0.7084
3.0	0.6997	0.7007	0.7017	0.7028	0.7038	0.7048	0.7058	0.7068	0.7078	0.7089
3.5	0.7002	0.7012	0.7022	0.7032	0.7042	0.7052	0.7062	0.7073	0.7083	0.7093
4.0	0.7006	0.7016	0.7026	0.7036	0.7046	0.7057	0.7067	0.7077	0.7087	0.7097
4.5	0.7010	0.7020	0.7030	0.7041	0.7051	0.7061	0.7071	0.7081	0.7091	0.7101
5.0	0.7014	0.7025	0.7035	0.7045	0.7055	0.7065	0.7075	0.7085	0.7096	0.7106
5.5	0.7019	0.7029	0.7039	0.7049	0.7059	0.7069	0.7080	0.7090	0.7100	0.7110
6.0	0.7023	0.7033	0.7043	0.7053	0.7064	0.7074	0.7084	0.7094	0.7104	0.7114
6.5	0.7027	0.7038	0.7048	0.7058	0.7068	0.7078	0.7088	0.7098	0.7108	0.7118
7.0	0.7032	0.7042	0.7052	0.7062	0.7072	0.7082	0.7092	0.7102	0.7113	0.7123
7.5	0.7036	0.7046	0.7056	0.7066	0.7076	0.7087	0.7097	0.7107	0.7117	0.7127
8.0	0.7040	0.7050	0.7061	0.7071	0.7081	0.7091	0.7101	0.7111	0.7121	0.7131
8.5	0.7045	0.7055	0.7065	0.7075	0.7085	0.7095	0.7105	0.7115	0.7125	0.7135
9.0	0.7049	0.7059	0.7069	0.7079	0.7089	0.7099	0.7109	0.7119	0.7130	0.7140
9.5	0.7053	0.7063	0.7073	0.7083	0.7093	0.7104	0.7114	0.7124	0.7134	0.7144
10.0	0.7057	0.7068	0.7078	0.7088	0.7098	0.7108	0.7118	0.7128	0.7138	0.7148
10.5	0.7062	0.7072	0.7082	0.7092	0.7102	0.7112	0.7122	0.7132	0.7142	0.7152
11.0	0.7066	0.7076	0.7086	0.7096	0.7106	0.7116	0.7126	0.7136	0.7146	0.7157
11.5	0.7070	0.7080	0.7090	0.7100	0.7110	0.7121	0.7131	0.7141	0.7151	0.7161
12.0	0.7075	0.7085	0.7095	0.7105	0.7115	0.7125	0.7135	0.7145	0.7155	0.7165
12.5	0.7079	0.7089	0.7099	0.7109	0.7119	0.7129	0.7139	0.7149	0.7159	0.7169
13.0	0.7083	0.7093	0.7103	0.7113	0.7123	0.7133	0.7143	0.7153	0.7163	0.7173
13.5	0.7087	0.7097	0.7107	0.7117	0.7127	0.7137	0.7147	0.7157	0.7167	0.7177
14.0	0.7092	0.7102	0.7112	0.7122	0.7132	0.7142	0.7152	0.7162	0.7172	0.7182
14.5	0.7096	0.7106	0.7116	0.7126	0.7136	0.7146	0.7156	0.7166	0.7176	0.7186
15.0	0.7100	0.7110	0.7120	0.7130	0.7140	0.7150	0.7160	0.7170	0.7180	0.7190
15.5	0.7104	0.7114	0.7124	0.7134	0.7144	0.7154	0.7164	0.7174	0.7184	0.7194
16.0	0.7108	0.7118	0.7128	0.7138	0.7148	0.7158	0.7168	0.7178	0.7188	0.7198
16.5	0.7113	0.7123	0.7133	0.7143	0.7153	0.7163	0.7173	0.7183	0.7193	0.7202
17.0	0.7117	0.7127	0.7137	0.7147	0.7157	0.7167	0.7177	0.7187	0.7197	0.7207
17.5	0.7121	0.7131	0.7141	0.7151	0.7161	0.7171	0.7181	0.7191	0.7201	0.7211
18.0	0.7125	0.7135	0.7145	0.7155	0.7165	0.7175	0.7185	0.7195	0.7205	0.7215
18.5	0.7129	0.7139	0.7149	0.7159	0.7169	0.7179	0.7189	0.7199	0.7209	0.7219
19.0	0.7134	0.7144	0.7154	0.7164	0.7173	0.7183	0.7193	0.7203	0.7213	0.7223
19.5	0.7138	0.7148	0.7158	0.7168	0.7178	0.7188	0.7197	0.7207	0.7217	0.7227
20.0	0.7142	0.7152	0.7162	0.7172	0.7182	0.7192	0.7202	0.7212	0.7222	0.7231
20.5	0.7146	0.7156	0.7166	0.7176	0.7186	0.7196	0.7206	0.7216	0.7226	0.7236
21.0	0.7150	0.7160	0.7170	0.7180	0.7190	0.7200	0.7210	0.7220	0.7230	0.7240
21.5	0.7155	0.7164	0.7174	0.7184	0.7194	0.7204	0.7214	0.7224	0.7234	0.7244
22.0	0.7159	0.7169	0.7179	0.7188	0.7198	0.7208	0.7218	0.7228	0.7238	0.7248
22.5	0.7163	0.7173	0.7183	0.7193	0.7202	0.7212	0.7222	0.7232	0.7242	0.7252
23.0	0.7167	0.7177	0.7187	0.7197	0.7207	0.7216	0.7226	0.7236	0.7246	0.7256
23.5	0.7171	0.7181	0.7191	0.7201	0.7211	0.7221	0.7230	0.7240	0.7250	0.7260
24.0	0.7175	0.7185	0.7195	0.7205	0.7215	0.7225	0.7235	0.7244	0.7254	0.7264
24.5	0.7179	0.7189	0.7199	0.7209	0.7219	0.7229	0.7239	0.7249	0.7258	0.7268
25.0	0.7184	0.7193	0.7203	0.7213	0.7223	0.7233	0.7243	0.7253	0.7263	0.7272

Table 53
* Density Reduction to 15°C

0.710 - 0.719

ASTM-IP Observed Temperature °C	Observed Density									
	0.710	0.711	0.712	0.713	0.714	0.715	0.716	0.717	0.718	0.719
	Corresponding Density 15°C									
25.0	0.7184	0.7193	0.7203	0.7213	0.7223	0.7233	0.7243	0.7253	0.7263	0.7272
25.5	0.7188	0.7198	0.7207	0.7217	0.7227	0.7237	0.7247	0.7257	0.7267	0.7276
26.0	0.7192	0.7202	0.7212	0.7221	0.7231	0.7241	0.7251	0.7261	0.7271	0.7280
26.5	0.7196	0.7206	0.7216	0.7225	0.7235	0.7245	0.7255	0.7265	0.7275	0.7285
27.0	0.7200	0.7210	0.7220	0.7230	0.7239	0.7249	0.7259	0.7269	0.7279	0.7289
27.5	0.7204	0.7214	0.7224	0.7234	0.7244	0.7253	0.7263	0.7273	0.7283	0.7293
28.0	0.7208	0.7218	0.7228	0.7238	0.7248	0.7257	0.7267	0.7277	0.7287	0.7297
28.5	0.7212	0.7222	0.7232	0.7242	0.7252	0.7261	0.7271	0.7281	0.7291	0.7301
29.0	0.7216	0.7226	0.7236	0.7246	0.7256	0.7266	0.7275	0.7285	0.7295	0.7305
29.5	0.7221	0.7230	0.7240	0.7250	0.7260	0.7270	0.7279	0.7289	0.7299	0.7309
30.0	0.7225	0.7234	0.7244	0.7254	0.7264	0.7274	0.7283	0.7293	0.7303	0.7313
30.5	0.7229	0.7239	0.7248	0.7258	0.7268	0.7278	0.7287	0.7297	0.7307	0.7317
31.0	0.7233	0.7243	0.7252	0.7262	0.7272	0.7282	0.7291	0.7301	0.7311	0.7321
31.5	0.7237	0.7247	0.7256	0.7266	0.7276	0.7286	0.7296	0.7305	0.7315	0.7325
32.0	0.7241	0.7251	0.7260	0.7270	0.7280	0.7290	0.7300	0.7309	0.7319	0.7329
32.5	0.7245	0.7255	0.7265	0.7274	0.7284	0.7294	0.7304	0.7313	0.7323	0.7333
33.0	0.7249	0.7259	0.7269	0.7278	0.7288	0.7298	0.7308	0.7317	0.7327	0.7337
33.5	0.7253	0.7263	0.7273	0.7282	0.7292	0.7302	0.7312	0.7321	0.7331	0.7341
34.0	0.7257	0.7267	0.7277	0.7286	0.7296	0.7306	0.7316	0.7325	0.7335	0.7345
34.5	0.7261	0.7271	0.7281	0.7290	0.7300	0.7310	0.7320	0.7329	0.7339	0.7349
35.0	0.7265	0.7275	0.7285	0.7294	0.7304	0.7314	0.7324	0.7333	0.7343	0.7353
35.5	0.7269	0.7279	0.7289	0.7298	0.7308	0.7318	0.7328	0.7337	0.7347	0.7357
36.0	0.7273	0.7283	0.7293	0.7302	0.7312	0.7322	0.7332	0.7341	0.7351	0.7361
36.5	0.7277	0.7287	0.7297	0.7306	0.7316	0.7326	0.7336	0.7345	0.7355	0.7365
37.0	0.7281	0.7291	0.7301	0.7310	0.7320	0.7330	0.7339	0.7349	0.7359	0.7369
37.5	0.7285	0.7295	0.7305	0.7314	0.7324	0.7334	0.7343	0.7353	0.7363	0.7373
38.0	0.7289	0.7299	0.7309	0.7318	0.7328	0.7338	0.7347	0.7357	0.7367	0.7376
38.5	0.7293	0.7303	0.7313	0.7322	0.7332	0.7342	0.7351	0.7361	0.7371	0.7380
39.0	0.7297	0.7307	0.7317	0.7326	0.7336	0.7346	0.7355	0.7365	0.7375	0.7384
39.5	0.7301	0.7311	0.7321	0.7330	0.7340	0.7350	0.7359	0.7369	0.7379	0.7388
40.0	0.7305	0.7315	0.7325	0.7334	0.7344	0.7354	0.7363	0.7373	0.7383	0.7392
40.5	0.7309	0.7319	0.7329	0.7338	0.7348	0.7358	0.7367	0.7377	0.7386	0.7396
41.0	0.7313	0.7323	0.7333	0.7342	0.7352	0.7361	0.7371	0.7381	0.7390	0.7400
41.5	0.7317	0.7327	0.7336	0.7346	0.7356	0.7365	0.7375	0.7385	0.7394	0.7404
42.0	0.7321	0.7331	0.7340	0.7350	0.7360	0.7369	0.7379	0.7389	0.7398	0.7408
42.5	0.7325	0.7335	0.7344	0.7354	0.7364	0.7373	0.7383	0.7392	0.7402	0.7412
43.0	0.7329	0.7339	0.7348	0.7358	0.7368	0.7377	0.7387	0.7396	0.7406	0.7416
43.5	0.7333	0.7343	0.7352	0.7362	0.7371	0.7381	0.7391	0.7400	0.7410	0.7420
44.0	0.7337	0.7347	0.7356	0.7366	0.7375	0.7385	0.7395	0.7404	0.7414	0.7423
44.5	0.7341	0.7350	0.7360	0.7370	0.7379	0.7389	0.7398	0.7408	0.7418	0.7427
45.0	0.7345	0.7354	0.7364	0.7374	0.7383	0.7393	0.7402	0.7412	0.7422	0.7431
45.5	0.7349	0.7358	0.7368	0.7378	0.7387	0.7397	0.7406	0.7416	0.7425	0.7435
46.0	0.7353	0.7362	0.7372	0.7381	0.7391	0.7401	0.7410	0.7420	0.7429	0.7439
46.5	0.7357	0.7366	0.7376	0.7385	0.7395	0.7404	0.7414	0.7424	0.7433	0.7443
47.0	0.7361	0.7370	0.7380	0.7389	0.7399	0.7408	0.7418	0.7427	0.7437	0.7447
47.5	0.7364	0.7374	0.7384	0.7393	0.7403	0.7412	0.7422	0.7431	0.7441	0.7450
48.0	0.7368	0.7378	0.7387	0.7397	0.7407	0.7416	0.7426	0.7435	0.7445	0.7454
48.5	0.7372	0.7382	0.7391	0.7401	0.7410	0.7420	0.7429	0.7439	0.7449	0.7458
49.0	0.7376	0.7386	0.7395	0.7405	0.7414	0.7424	0.7433	0.7443	0.7452	0.7462
49.5	0.7380	0.7390	0.7399	0.7409	0.7418	0.7428	0.7437	0.7447	0.7456	0.7466
50.0	0.7384	0.7393	0.7403	0.7412	0.7422	0.7432	0.7441	0.7451	0.7460	0.7470

Table 53
Density Reduction to 15°C

0.720 - 0.729
0 - 25°C

ASTM-IP	Observed Density									
	0.720	0.721	0.722	0.723	0.724	0.725	0.726	0.727	0.728	0.729
	Corresponding Density 15°C									
Observed Temperature °C										
0.0	0.7073	0.7083	0.7093	0.7104	0.7114	0.7124	0.7134	0.7144	0.7155	0.7165
0.5	0.7077	0.7088	0.7098	0.7108	0.7118	0.7128	0.7138	0.7149	0.7159	0.7169
1.0	0.7082	0.7092	0.7102	0.7112	0.7122	0.7133	0.7143	0.7153	0.7163	0.7173
1.5	0.7086	0.7096	0.7106	0.7116	0.7127	0.7137	0.7147	0.7157	0.7167	0.7178
2.0	0.7090	0.7100	0.7111	0.7121	0.7131	0.7141	0.7151	0.7161	0.7172	0.7182
2.5	0.7094	0.7105	0.7115	0.7125	0.7135	0.7145	0.7155	0.7166	0.7176	0.7186
3.0	0.7099	0.7109	0.7119	0.7129	0.7139	0.7150	0.7160	0.7170	0.7180	0.7190
3.5	0.7103	0.7113	0.7123	0.7133	0.7144	0.7154	0.7164	0.7174	0.7184	0.7194
4.0	0.7107	0.7117	0.7128	0.7138	0.7148	0.7158	0.7168	0.7178	0.7188	0.7199
4.5	0.7112	0.7122	0.7132	0.7142	0.7152	0.7162	0.7172	0.7183	0.7193	0.7203
5.0	0.7116	0.7126	0.7136	0.7146	0.7156	0.7166	0.7177	0.7187	0.7197	0.7207
5.5	0.7120	0.7130	0.7140	0.7150	0.7161	0.7171	0.7181	0.7191	0.7201	0.7211
6.0	0.7124	0.7134	0.7145	0.7155	0.7165	0.7175	0.7185	0.7195	0.7205	0.7215
6.5	0.7129	0.7139	0.7149	0.7159	0.7169	0.7179	0.7189	0.7199	0.7209	0.7220
7.0	0.7133	0.7143	0.7153	0.7163	0.7173	0.7183	0.7193	0.7204	0.7214	0.7224
7.5	0.7137	0.7147	0.7157	0.7167	0.7177	0.7188	0.7198	0.7208	0.7218	0.7228
8.0	0.7141	0.7151	0.7161	0.7172	0.7182	0.7192	0.7202	0.7212	0.7222	0.7232
8.5	0.7146	0.7156	0.7166	0.7176	0.7186	0.7196	0.7206	0.7216	0.7226	0.7236
9.0	0.7150	0.7160	0.7170	0.7180	0.7190	0.7200	0.7210	0.7220	0.7230	0.7240
9.5	0.7154	0.7164	0.7174	0.7184	0.7194	0.7204	0.7214	0.7224	0.7235	0.7245
10.0	0.7158	0.7168	0.7178	0.7188	0.7198	0.7208	0.7219	0.7229	0.7239	0.7249
10.5	0.7162	0.7172	0.7182	0.7193	0.7203	0.7213	0.7223	0.7233	0.7243	0.7253
11.0	0.7167	0.7177	0.7187	0.7197	0.7207	0.7217	0.7227	0.7237	0.7247	0.7257
11.5	0.7171	0.7181	0.7191	0.7201	0.7211	0.7221	0.7231	0.7241	0.7251	0.7261
12.0	0.7175	0.7185	0.7195	0.7205	0.7215	0.7225	0.7235	0.7245	0.7255	0.7265
12.5	0.7179	0.7189	0.7199	0.7209	0.7219	0.7229	0.7239	0.7249	0.7259	0.7269
13.0	0.7183	0.7193	0.7203	0.7213	0.7223	0.7233	0.7243	0.7254	0.7264	0.7274
13.5	0.7188	0.7198	0.7208	0.7218	0.7228	0.7238	0.7248	0.7258	0.7268	0.7278
14.0	0.7192	0.7202	0.7212	0.7222	0.7232	0.7242	0.7252	0.7262	0.7272	0.7282
14.5	0.7196	0.7206	0.7216	0.7226	0.7236	0.7246	0.7256	0.7266	0.7276	0.7286
15.0	0.7200	0.7210	0.7220	0.7230	0.7240	0.7250	0.7260	0.7270	0.7280	0.7290
15.5	0.7204	0.7214	0.7224	0.7234	0.7244	0.7254	0.7264	0.7274	0.7284	0.7294
16.0	0.7208	0.7218	0.7228	0.7238	0.7248	0.7258	0.7268	0.7278	0.7288	0.7298
16.5	0.7212	0.7222	0.7232	0.7242	0.7252	0.7262	0.7272	0.7282	0.7292	0.7302
17.0	0.7217	0.7227	0.7237	0.7247	0.7257	0.7266	0.7276	0.7286	0.7296	0.7306
17.5	0.7221	0.7231	0.7241	0.7251	0.7261	0.7271	0.7281	0.7291	0.7300	0.7310
18.0	0.7225	0.7235	0.7245	0.7255	0.7265	0.7275	0.7285	0.7295	0.7305	0.7315
18.5	0.7229	0.7239	0.7249	0.7259	0.7269	0.7279	0.7289	0.7299	0.7309	0.7319
19.0	0.7233	0.7243	0.7253	0.7263	0.7273	0.7283	0.7293	0.7303	0.7313	0.7323
19.5	0.7237	0.7247	0.7257	0.7267	0.7277	0.7287	0.7297	0.7307	0.7317	0.7327
20.0	0.7241	0.7251	0.7261	0.7271	0.7281	0.7291	0.7301	0.7311	0.7321	0.7331
20.5	0.7245	0.7255	0.7265	0.7275	0.7285	0.7295	0.7305	0.7315	0.7325	0.7335
21.0	0.7250	0.7259	0.7269	0.7279	0.7289	0.7299	0.7309	0.7319	0.7329	0.7339
21.5	0.7254	0.7264	0.7274	0.7283	0.7293	0.7303	0.7313	0.7323	0.7333	0.7343
22.0	0.7258	0.7268	0.7278	0.7287	0.7297	0.7307	0.7317	0.7327	0.7337	0.7347
22.5	0.7262	0.7272	0.7282	0.7292	0.7301	0.7311	0.7321	0.7331	0.7341	0.7351
23.0	0.7266	0.7276	0.7286	0.7296	0.7306	0.7315	0.7325	0.7335	0.7345	0.7355
23.5	0.7270	0.7280	0.7290	0.7300	0.7310	0.7319	0.7329	0.7339	0.7349	0.7359
24.0	0.7274	0.7284	0.7294	0.7304	0.7314	0.7323	0.7333	0.7343	0.7353	0.7363
24.5	0.7278	0.7288	0.7298	0.7308	0.7318	0.7328	0.7337	0.7347	0.7357	0.7367
25.0	0.7282	0.7292	0.7302	0.7312	0.7322	0.7332	0.7341	0.7351	0.7361	0.7371

Table 53
*** Density Reduction to 15°C**
0.720 - 0.729
25 - 50 °C

Observed Temperature °C	Observed Density									
	0.720	0.721	0.722	0.723	0.724	0.725	0.726	0.727	0.728	0.729
	Corresponding Density 15°C									
25.0	0.7282	0.7292	0.7302	0.7312	0.7322	0.7332	0.7341	0.7351	0.7361	0.7371
25.5	0.7286	0.7296	0.7306	0.7316	0.7326	0.7336	0.7345	0.7355	0.7365	0.7375
26.0	0.7290	0.7300	0.7310	0.7320	0.7330	0.7340	0.7349	0.7359	0.7369	0.7379
26.5	0.7294	0.7304	0.7314	0.7324	0.7334	0.7344	0.7353	0.7363	0.7373	0.7383
27.0	0.7298	0.7308	0.7318	0.7328	0.7338	0.7348	0.7357	0.7367	0.7377	0.7387
27.5	0.7302	0.7312	0.7322	0.7332	0.7342	0.7352	0.7361	0.7371	0.7381	0.7391
28.0	0.7307	0.7316	0.7326	0.7336	0.7346	0.7356	0.7365	0.7375	0.7385	0.7395
28.5	0.7311	0.7320	0.7330	0.7340	0.7350	0.7360	0.7369	0.7379	0.7389	0.7399
29.0	0.7315	0.7324	0.7334	0.7344	0.7354	0.7364	0.7373	0.7383	0.7393	0.7403
29.5	0.7319	0.7328	0.7338	0.7348	0.7358	0.7368	0.7377	0.7387	0.7397	0.7407
30.0	0.7323	0.7332	0.7342	0.7352	0.7362	0.7372	0.7381	0.7391	0.7401	0.7411
30.5	0.7327	0.7336	0.7346	0.7356	0.7366	0.7376	0.7385	0.7395	0.7405	0.7415
31.0	0.7331	0.7340	0.7350	0.7360	0.7370	0.7380	0.7389	0.7399	0.7409	0.7419
31.5	0.7335	0.7344	0.7354	0.7364	0.7374	0.7384	0.7393	0.7403	0.7413	0.7423
32.0	0.7339	0.7348	0.7358	0.7368	0.7378	0.7387	0.7397	0.7407	0.7417	0.7427
32.5	0.7343	0.7352	0.7362	0.7372	0.7382	0.7391	0.7401	0.7411	0.7421	0.7430
33.0	0.7347	0.7356	0.7366	0.7376	0.7386	0.7395	0.7405	0.7415	0.7425	0.7434
33.5	0.7351	0.7360	0.7370	0.7380	0.7390	0.7399	0.7409	0.7419	0.7429	0.7438
34.0	0.7355	0.7364	0.7374	0.7384	0.7394	0.7403	0.7413	0.7423	0.7432	0.7442
34.5	0.7359	0.7368	0.7378	0.7388	0.7397	0.7407	0.7417	0.7427	0.7436	0.7446
35.0	0.7362	0.7372	0.7382	0.7392	0.7401	0.7411	0.7421	0.7431	0.7440	0.7450
35.5	0.7366	0.7376	0.7386	0.7396	0.7405	0.7415	0.7425	0.7435	0.7444	0.7454
36.0	0.7370	0.7380	0.7390	0.7400	0.7409	0.7419	0.7429	0.7438	0.7448	0.7458
36.5	0.7374	0.7384	0.7394	0.7403	0.7413	0.7423	0.7433	0.7442	0.7452	0.7462
37.0	0.7378	0.7388	0.7398	0.7407	0.7417	0.7427	0.7437	0.7446	0.7456	0.7466
37.5	0.7382	0.7392	0.7402	0.7411	0.7421	0.7431	0.7440	0.7450	0.7460	0.7469
38.0	0.7386	0.7396	0.7406	0.7415	0.7425	0.7435	0.7444	0.7454	0.7464	0.7473
38.5	0.7390	0.7400	0.7409	0.7419	0.7429	0.7439	0.7448	0.7458	0.7468	0.7477
39.0	0.7394	0.7404	0.7413	0.7423	0.7433	0.7442	0.7452	0.7462	0.7471	0.7481
39.5	0.7398	0.7408	0.7417	0.7427	0.7437	0.7446	0.7456	0.7466	0.7475	0.7485
40.0	0.7402	0.7412	0.7421	0.7431	0.7441	0.7450	0.7460	0.7469	0.7479	0.7489
40.5	0.7406	0.7415	0.7425	0.7435	0.7444	0.7454	0.7464	0.7473	0.7483	0.7493
41.0	0.7410	0.7419	0.7429	0.7439	0.7448	0.7458	0.7468	0.7477	0.7487	0.7497
41.5	0.7414	0.7423	0.7433	0.7443	0.7452	0.7462	0.7471	0.7481	0.7491	0.7500
42.0	0.7417	0.7427	0.7437	0.7446	0.7456	0.7466	0.7475	0.7485	0.7495	0.7504
42.5	0.7421	0.7431	0.7441	0.7450	0.7460	0.7470	0.7479	0.7489	0.7499	0.7508
43.0	0.7425	0.7435	0.7445	0.7454	0.7464	0.7473	0.7483	0.7493	0.7502	0.7512
43.5	0.7429	0.7439	0.7448	0.7458	0.7468	0.7477	0.7487	0.7497	0.7506	0.7516
44.0	0.7433	0.7443	0.7452	0.7462	0.7471	0.7481	0.7491	0.7500	0.7510	0.7519
44.5	0.7437	0.7446	0.7456	0.7466	0.7475	0.7485	0.7494	0.7504	0.7514	0.7523
45.0	0.7441	0.7450	0.7460	0.7470	0.7479	0.7489	0.7498	0.7508	0.7517	0.7527
45.5	0.7445	0.7454	0.7464	0.7473	0.7483	0.7493	0.7502	0.7512	0.7521	0.7531
46.0	0.7448	0.7458	0.7468	0.7477	0.7487	0.7497	0.7506	0.7515	0.7525	0.7534
46.5	0.7452	0.7462	0.7471	0.7481	0.7491	0.7500	0.7510	0.7519	0.7529	0.7538
47.0	0.7456	0.7466	0.7475	0.7485	0.7495	0.7504	0.7513	0.7523	0.7532	0.7542
47.5	0.7460	0.7470	0.7479	0.7489	0.7498	0.7508	0.7517	0.7527	0.7536	0.7545
48.0	0.7464	0.7473	0.7483	0.7493	0.7502	0.7512	0.7521	0.7530	0.7540	0.7549
48.5	0.7468	0.7477	0.7487	0.7497	0.7506	0.7515	0.7525	0.7534	0.7543	0.7553
49.0	0.7472	0.7481	0.7491	0.7500	0.7510	0.7519	0.7528	0.7538	0.7547	0.7556
49.5	0.7475	0.7485	0.7495	0.7504	0.7513	0.7523	0.7532	0.7541	0.7551	0.7560
50.0	0.7479	0.7489	0.7498	0.7508	0.7517	0.7526	0.7536	0.7545	0.7554	0.7564

Table 53
Density Reduction to 15°C

ASTM-IP

0.730 - 0.739

0 - 25°C

Observed Temperature °C	Observed Density									
	0.730	0.731	0.732	0.733	0.734	0.735	0.736	0.737	0.738	0.739
	Corresponding Density 15°C									
0.0	0.7175	0.7185	0.7195	0.7206	0.7216	0.7226	0.7236	0.7246	0.7257	0.7267
0.5	0.7179	0.7189	0.7200	0.7210	0.7220	0.7230	0.7240	0.7251	0.7261	0.7271
1.0	0.7183	0.7194	0.7204	0.7214	0.7224	0.7234	0.7245	0.7255	0.7265	0.7275
1.5	0.7188	0.7198	0.7208	0.7218	0.7228	0.7239	0.7249	0.7259	0.7269	0.7279
2.0	0.7192	0.7202	0.7212	0.7222	0.7233	0.7243	0.7253	0.7263	0.7273	0.7284
2.5	0.7196	0.7206	0.7216	0.7227	0.7237	0.7247	0.7257	0.7267	0.7278	0.7288
3.0	0.7200	0.7211	0.7221	0.7231	0.7241	0.7251	0.7261	0.7272	0.7282	0.7292
3.5	0.7205	0.7215	0.7225	0.7235	0.7245	0.7255	0.7266	0.7276	0.7286	0.7296
4.0	0.7209	0.7219	0.7229	0.7239	0.7249	0.7260	0.7270	0.7280	0.7290	0.7300
4.5	0.7213	0.7223	0.7233	0.7243	0.7254	0.7264	0.7274	0.7284	0.7294	0.7304
5.0	0.7217	0.7227	0.7237	0.7248	0.7258	0.7268	0.7278	0.7288	0.7298	0.7308
5.5	0.7221	0.7231	0.7242	0.7252	0.7262	0.7272	0.7282	0.7292	0.7302	0.7313
6.0	0.7226	0.7236	0.7246	0.7256	0.7266	0.7276	0.7286	0.7296	0.7307	0.7317
6.5	0.7230	0.7240	0.7250	0.7260	0.7270	0.7280	0.7290	0.7301	0.7311	0.7321
7.0	0.7234	0.7244	0.7254	0.7264	0.7274	0.7284	0.7295	0.7305	0.7315	0.7325
7.5	0.7238	0.7248	0.7258	0.7268	0.7278	0.7289	0.7299	0.7309	0.7319	0.7329
8.0	0.7242	0.7252	0.7262	0.7273	0.7283	0.7293	0.7303	0.7313	0.7323	0.7333
8.5	0.7246	0.7256	0.7267	0.7277	0.7287	0.7297	0.7307	0.7317	0.7327	0.7337
9.0	0.7251	0.7261	0.7271	0.7281	0.7291	0.7301	0.7311	0.7321	0.7331	0.7341
9.5	0.7255	0.7265	0.7275	0.7285	0.7295	0.7305	0.7315	0.7325	0.7335	0.7345
10.0	0.7259	0.7269	0.7279	0.7289	0.7299	0.7309	0.7319	0.7329	0.7339	0.7349
10.5	0.7263	0.7273	0.7283	0.7293	0.7303	0.7313	0.7323	0.7333	0.7343	0.7354
11.0	0.7267	0.7277	0.7287	0.7297	0.7307	0.7317	0.7327	0.7337	0.7348	0.7358
11.5	0.7271	0.7281	0.7291	0.7301	0.7311	0.7321	0.7332	0.7342	0.7352	0.7362
12.0	0.7275	0.7285	0.7295	0.7305	0.7316	0.7326	0.7336	0.7346	0.7356	0.7366
12.5	0.7279	0.7290	0.7300	0.7310	0.7320	0.7330	0.7340	0.7350	0.7360	0.7370
13.0	0.7284	0.7294	0.7304	0.7314	0.7324	0.7334	0.7344	0.7354	0.7364	0.7374
13.5	0.7288	0.7298	0.7308	0.7318	0.7328	0.7338	0.7348	0.7358	0.7368	0.7378
14.0	0.7292	0.7302	0.7312	0.7322	0.7332	0.7342	0.7352	0.7362	0.7372	0.7382
14.5	0.7296	0.7306	0.7316	0.7326	0.7336	0.7346	0.7356	0.7366	0.7376	0.7386
15.0	0.7300	0.7310	0.7320	0.7330	0.7340	0.7350	0.7360	0.7370	0.7380	0.7390
15.5	0.7304	0.7314	0.7324	0.7334	0.7344	0.7354	0.7364	0.7374	0.7384	0.7394
16.0	0.7308	0.7318	0.7328	0.7338	0.7348	0.7358	0.7368	0.7378	0.7388	0.7398
16.5	0.7312	0.7322	0.7332	0.7342	0.7352	0.7362	0.7372	0.7382	0.7392	0.7402
17.0	0.7316	0.7326	0.7336	0.7346	0.7356	0.7366	0.7376	0.7386	0.7396	0.7406
17.5	0.7320	0.7330	0.7340	0.7350	0.7360	0.7370	0.7380	0.7390	0.7400	0.7410
18.0	0.7324	0.7334	0.7344	0.7354	0.7364	0.7374	0.7384	0.7394	0.7404	0.7414
18.5	0.7329	0.7338	0.7348	0.7358	0.7368	0.7378	0.7388	0.7398	0.7408	0.7418
19.0	0.7333	0.7343	0.7352	0.7362	0.7372	0.7382	0.7392	0.7402	0.7412	0.7422
19.5	0.7337	0.7347	0.7357	0.7366	0.7376	0.7386	0.7396	0.7406	0.7416	0.7426
20.0	0.7341	0.7351	0.7361	0.7370	0.7380	0.7390	0.7400	0.7410	0.7420	0.7430
20.5	0.7345	0.7355	0.7365	0.7375	0.7384	0.7394	0.7404	0.7414	0.7424	0.7434
21.0	0.7349	0.7359	0.7369	0.7379	0.7388	0.7398	0.7408	0.7418	0.7428	0.7438
21.5	0.7353	0.7363	0.7373	0.7383	0.7392	0.7402	0.7412	0.7422	0.7432	0.7442
22.0	0.7357	0.7367	0.7377	0.7387	0.7396	0.7406	0.7416	0.7426	0.7436	0.7446
22.5	0.7361	0.7371	0.7381	0.7391	0.7400	0.7410	0.7420	0.7430	0.7440	0.7450
23.0	0.7365	0.7375	0.7385	0.7395	0.7404	0.7414	0.7424	0.7434	0.7444	0.7454
23.5	0.7369	0.7379	0.7389	0.7399	0.7408	0.7418	0.7428	0.7438	0.7448	0.7458
24.0	0.7373	0.7383	0.7393	0.7403	0.7412	0.7422	0.7432	0.7442	0.7452	0.7462
24.5	0.7377	0.7387	0.7397	0.7406	0.7416	0.7426	0.7436	0.7446	0.7456	0.7466
25.0	0.7381	0.7391	0.7401	0.7410	0.7420	0.7430	0.7440	0.7450	0.7460	0.7470

ASTM-IP

Table 53
* Density Reduction to 15°C

0.730 - 0.739

25 - 50 °C

Observed Temperature °C	Observed Density									
	0.730	0.731	0.732	0.733	0.734	0.735	0.736	0.737	0.738	0.739
	Corresponding Density 15°C									
25.0	0.7381	0.7391	0.7401	0.7410	0.7420	0.7430	0.7440	0.7450	0.7460	0.7470
25.5	0.7385	0.7395	0.7405	0.7414	0.7424	0.7434	0.7444	0.7454	0.7464	0.7474
26.0	0.7389	0.7399	0.7409	0.7418	0.7428	0.7438	0.7448	0.7458	0.7468	0.7478
26.5	0.7393	0.7403	0.7413	0.7422	0.7432	0.7442	0.7452	0.7462	0.7472	0.7481
27.0	0.7397	0.7407	0.7416	0.7426	0.7436	0.7446	0.7456	0.7466	0.7476	0.7485
27.5	0.7401	0.7411	0.7420	0.7430	0.7440	0.7450	0.7460	0.7470	0.7479	0.7489
28.0	0.7405	0.7415	0.7424	0.7434	0.7444	0.7454	0.7464	0.7474	0.7483	0.7493
28.5	0.7409	0.7419	0.7428	0.7438	0.7448	0.7458	0.7468	0.7477	0.7487	0.7497
29.0	0.7413	0.7422	0.7432	0.7442	0.7452	0.7462	0.7472	0.7481	0.7491	0.7501
29.5	0.7417	0.7426	0.7436	0.7446	0.7456	0.7466	0.7475	0.7485	0.7495	0.7505
30.0	0.7421	0.7430	0.7440	0.7450	0.7460	0.7470	0.7479	0.7489	0.7499	0.7509
30.5	0.7425	0.7434	0.7444	0.7454	0.7464	0.7473	0.7483	0.7493	0.7503	0.7513
31.0	0.7428	0.7438	0.7448	0.7458	0.7468	0.7477	0.7487	0.7497	0.7507	0.7516
31.5	0.7432	0.7442	0.7452	0.7462	0.7471	0.7481	0.7491	0.7501	0.7511	0.7520
32.0	0.7436	0.7446	0.7456	0.7466	0.7475	0.7485	0.7495	0.7505	0.7514	0.7524
32.5	0.7440	0.7450	0.7460	0.7470	0.7479	0.7489	0.7499	0.7509	0.7518	0.7528
33.0	0.7444	0.7454	0.7464	0.7473	0.7483	0.7493	0.7503	0.7512	0.7522	0.7532
33.5	0.7448	0.7458	0.7468	0.7477	0.7487	0.7497	0.7507	0.7516	0.7526	0.7536
34.0	0.7452	0.7462	0.7471	0.7481	0.7491	0.7501	0.7510	0.7520	0.7530	0.7539
34.5	0.7456	0.7466	0.7475	0.7485	0.7495	0.7505	0.7514	0.7524	0.7534	0.7543
35.0	0.7460	0.7470	0.7479	0.7489	0.7499	0.7508	0.7518	0.7528	0.7537	0.7547
35.5	0.7464	0.7473	0.7483	0.7493	0.7503	0.7512	0.7522	0.7531	0.7541	0.7551
36.0	0.7468	0.7477	0.7487	0.7497	0.7506	0.7516	0.7526	0.7535	0.7545	0.7554
36.5	0.7471	0.7481	0.7491	0.7501	0.7510	0.7520	0.7529	0.7539	0.7549	0.7558
37.0	0.7475	0.7485	0.7495	0.7504	0.7514	0.7524	0.7533	0.7543	0.7552	0.7562
37.5	0.7479	0.7489	0.7499	0.7508	0.7518	0.7527	0.7537	0.7547	0.7556	0.7566
38.0	0.7483	0.7493	0.7503	0.7512	0.7522	0.7531	0.7541	0.7550	0.7560	0.7570
38.5	0.7487	0.7497	0.7506	0.7516	0.7525	0.7535	0.7545	0.7554	0.7564	0.7573
39.0	0.7491	0.7501	0.7510	0.7520	0.7529	0.7539	0.7548	0.7558	0.7567	0.7577
39.5	0.7495	0.7504	0.7514	0.7523	0.7533	0.7543	0.7552	0.7562	0.7571	0.7581
40.0	0.7499	0.7508	0.7518	0.7527	0.7537	0.7546	0.7556	0.7565	0.7575	0.7584
40.5	0.7502	0.7512	0.7521	0.7531	0.7541	0.7550	0.7560	0.7569	0.7579	0.7588
41.0	0.7506	0.7516	0.7525	0.7535	0.7544	0.7554	0.7563	0.7573	0.7582	0.7592
41.5	0.7510	0.7519	0.7529	0.7538	0.7548	0.7558	0.7567	0.7577	0.7586	0.7596
42.0	0.7514	0.7523	0.7533	0.7542	0.7552	0.7561	0.7571	0.7580	0.7590	0.7599
42.5	0.7518	0.7527	0.7536	0.7546	0.7555	0.7565	0.7574	0.7584	0.7593	0.7603
43.0	0.7521	0.7531	0.7540	0.7550	0.7559	0.7569	0.7578	0.7588	0.7597	0.7607
43.5	0.7525	0.7534	0.7544	0.7553	0.7563	0.7572	0.7582	0.7591	0.7601	0.7610
44.0	0.7529	0.7538	0.7548	0.7557	0.7567	0.7576	0.7586	0.7595	0.7604	0.7614
44.5	0.7533	0.7542	0.7551	0.7561	0.7570	0.7580	0.7589	0.7599	0.7608	0.7618
45.0	0.7536	0.7546	0.7555	0.7565	0.7574	0.7583	0.7593	0.7602	0.7612	0.7621
45.5	0.7540	0.7549	0.7559	0.7568	0.7578	0.7587	0.7597	0.7606	0.7615	0.7625
46.0	0.7544	0.7553	0.7563	0.7572	0.7581	0.7591	0.7600	0.7610	0.7619	0.7628
46.5	0.7547	0.7557	0.7566	0.7576	0.7585	0.7594	0.7604	0.7613	0.7623	0.7632
47.0	0.7551	0.7560	0.7570	0.7579	0.7589	0.7598	0.7608	0.7617	0.7626	0.7636
47.5	0.7555	0.7564	0.7574	0.7583	0.7592	0.7602	0.7611	0.7621	0.7630	0.7639
48.0	0.7558	0.7568	0.7577	0.7587	0.7596	0.7605	0.7615	0.7624	0.7634	0.7643
48.5	0.7562	0.7572	0.7581	0.7590	0.7600	0.7609	0.7618	0.7628	0.7637	0.7647
49.0	0.7566	0.7575	0.7585	0.7594	0.7603	0.7613	0.7622	0.7631	0.7641	0.7650
49.5	0.7569	0.7579	0.7588	0.7598	0.7607	0.7616	0.7626	0.7635	0.7644	0.7654
50.0	0.7573	0.7583	0.7592	0.7601	0.7611	0.7620	0.7629	0.7639	0.7648	0.7657

Table 53
Density Reduction to 15°C

ASTM-IP	0.740 - 0.749 0 - 25°C									
	Observed Density									
	0.740	0.741	0.742	0.743	0.744	0.745	0.746	0.747	0.748	0.749
Observed Temperature °C	Corresponding Density 15°C									
0.0	0.7277	0.7287	0.7297	0.7308	0.7318	0.7328	0.7338	0.7348	0.7359	0.7369
0.5	0.7281	0.7291	0.7302	0.7312	0.7322	0.7332	0.7342	0.7353	0.7363	0.7373
1.0	0.7285	0.7296	0.7306	0.7316	0.7326	0.7336	0.7347	0.7357	0.7367	0.7377
1.5	0.7290	0.7300	0.7310	0.7320	0.7330	0.7340	0.7351	0.7361	0.7371	0.7381
2.0	0.7294	0.7304	0.7314	0.7324	0.7334	0.7345	0.7355	0.7365	0.7375	0.7385
2.5	0.7298	0.7308	0.7318	0.7328	0.7339	0.7349	0.7359	0.7369	0.7379	0.7389
3.0	0.7302	0.7312	0.7322	0.7332	0.7343	0.7353	0.7363	0.7373	0.7383	0.7393
3.5	0.7306	0.7316	0.7326	0.7337	0.7347	0.7357	0.7367	0.7377	0.7387	0.7398
4.0	0.7310	0.7320	0.7331	0.7341	0.7351	0.7361	0.7371	0.7381	0.7391	0.7402
4.5	0.7314	0.7325	0.7335	0.7345	0.7355	0.7365	0.7375	0.7385	0.7396	0.7406
5.0	0.7319	0.7329	0.7339	0.7349	0.7359	0.7369	0.7379	0.7389	0.7400	0.7410
5.5	0.7323	0.7333	0.7343	0.7353	0.7363	0.7373	0.7383	0.7394	0.7404	0.7414
6.0	0.7327	0.7337	0.7347	0.7357	0.7367	0.7377	0.7387	0.7398	0.7408	0.7418
6.5	0.7331	0.7341	0.7351	0.7361	0.7371	0.7381	0.7392	0.7402	0.7412	0.7422
7.0	0.7335	0.7345	0.7355	0.7365	0.7375	0.7386	0.7396	0.7406	0.7416	0.7426
7.5	0.7339	0.7349	0.7359	0.7369	0.7379	0.7390	0.7400	0.7410	0.7420	0.7430
8.0	0.7343	0.7353	0.7363	0.7373	0.7384	0.7394	0.7404	0.7414	0.7424	0.7434
8.5	0.7347	0.7357	0.7367	0.7378	0.7388	0.7398	0.7408	0.7418	0.7428	0.7438
9.0	0.7351	0.7361	0.7372	0.7382	0.7392	0.7402	0.7412	0.7422	0.7432	0.7442
9.5	0.7355	0.7366	0.7376	0.7386	0.7396	0.7406	0.7416	0.7426	0.7436	0.7446
10.0	0.7360	0.7370	0.7380	0.7390	0.7400	0.7410	0.7420	0.7430	0.7440	0.7450
10.5	0.7364	0.7374	0.7384	0.7394	0.7404	0.7414	0.7424	0.7434	0.7444	0.7454
11.0	0.7368	0.7378	0.7388	0.7398	0.7408	0.7418	0.7428	0.7438	0.7448	0.7458
11.5	0.7372	0.7382	0.7392	0.7402	0.7412	0.7422	0.7432	0.7442	0.7452	0.7462
12.0	0.7376	0.7386	0.7396	0.7406	0.7416	0.7426	0.7436	0.7446	0.7456	0.7466
12.5	0.7380	0.7390	0.7400	0.7410	0.7420	0.7430	0.7440	0.7450	0.7460	0.7470
13.0	0.7384	0.7394	0.7404	0.7414	0.7424	0.7434	0.7444	0.7454	0.7464	0.7474
13.5	0.7388	0.7398	0.7408	0.7418	0.7428	0.7438	0.7448	0.7458	0.7468	0.7478
14.0	0.7392	0.7402	0.7412	0.7422	0.7432	0.7442	0.7452	0.7462	0.7472	0.7482
14.5	0.7396	0.7406	0.7416	0.7426	0.7436	0.7446	0.7456	0.7466	0.7476	0.7486
15.0	0.7400	0.7410	0.7420	0.7430	0.7440	0.7450	0.7460	0.7470	0.7480	0.7490
15.5	0.7404	0.7414	0.7424	0.7434	0.7444	0.7454	0.7464	0.7474	0.7484	0.7494
16.0	0.7408	0.7418	0.7428	0.7438	0.7448	0.7458	0.7468	0.7478	0.7488	0.7498
16.5	0.7412	0.7422	0.7432	0.7442	0.7452	0.7462	0.7472	0.7482	0.7492	0.7502
17.0	0.7416	0.7426	0.7436	0.7446	0.7456	0.7466	0.7476	0.7486	0.7496	0.7506
17.5	0.7420	0.7430	0.7440	0.7450	0.7460	0.7470	0.7480	0.7490	0.7500	0.7510
18.0	0.7424	0.7434	0.7444	0.7454	0.7464	0.7474	0.7484	0.7494	0.7504	0.7514
18.5	0.7428	0.7438	0.7448	0.7458	0.7468	0.7478	0.7488	0.7498	0.7508	0.7518
19.0	0.7432	0.7442	0.7452	0.7462	0.7472	0.7482	0.7492	0.7502	0.7512	0.7522
19.5	0.7436	0.7446	0.7456	0.7466	0.7476	0.7486	0.7496	0.7506	0.7516	0.7525
20.0	0.7440	0.7450	0.7460	0.7470	0.7480	0.7490	0.7500	0.7510	0.7519	0.7529
20.5	0.7444	0.7454	0.7464	0.7474	0.7484	0.7494	0.7504	0.7513	0.7523	0.7533
21.0	0.7448	0.7458	0.7468	0.7478	0.7488	0.7498	0.7507	0.7517	0.7527	0.7537
21.5	0.7452	0.7462	0.7472	0.7482	0.7492	0.7502	0.7511	0.7521	0.7531	0.7541
22.0	0.7456	0.7466	0.7476	0.7486	0.7495	0.7505	0.7515	0.7525	0.7535	0.7545
22.5	0.7460	0.7470	0.7480	0.7490	0.7499	0.7509	0.7519	0.7529	0.7539	0.7549
23.0	0.7464	0.7474	0.7484	0.7493	0.7503	0.7513	0.7523	0.7533	0.7543	0.7553
23.5	0.7468	0.7478	0.7487	0.7497	0.7507	0.7517	0.7527	0.7537	0.7547	0.7556
24.0	0.7472	0.7482	0.7491	0.7501	0.7511	0.7521	0.7531	0.7541	0.7550	0.7560
24.5	0.7476	0.7485	0.7495	0.7505	0.7515	0.7525	0.7535	0.7545	0.7554	0.7564
25.0	0.7480	0.7489	0.7499	0.7509	0.7519	0.7529	0.7539	0.7548	0.7558	0.7568

Table 53
*** Density Reduction to 15°C**
0.740 - 0.749
25 - 50 °C

Observed Temperature °C	Observed Density									
	0.740	0.741	0.742	0.743	0.744	0.745	0.746	0.747	0.748	0.749
	Corresponding Density 15°C									
25.0	0.7480	0.7489	0.7499	0.7509	0.7519	0.7529	0.7539	0.7548	0.7558	0.7568
25.5	0.7483	0.7493	0.7503	0.7513	0.7523	0.7533	0.7542	0.7552	0.7562	0.7572
26.0	0.7487	0.7497	0.7507	0.7517	0.7527	0.7536	0.7546	0.7556	0.7566	0.7576
26.5	0.7491	0.7501	0.7511	0.7521	0.7531	0.7540	0.7550	0.7560	0.7570	0.7579
27.0	0.7495	0.7505	0.7515	0.7525	0.7534	0.7544	0.7554	0.7564	0.7573	0.7583
27.5	0.7499	0.7509	0.7519	0.7528	0.7538	0.7548	0.7558	0.7568	0.7577	0.7587
28.0	0.7503	0.7513	0.7523	0.7532	0.7542	0.7552	0.7562	0.7571	0.7581	0.7591
28.5	0.7507	0.7517	0.7526	0.7536	0.7546	0.7556	0.7565	0.7575	0.7585	0.7595
29.0	0.7511	0.7521	0.7530	0.7540	0.7550	0.7559	0.7569	0.7579	0.7589	0.7598
29.5	0.7515	0.7524	0.7534	0.7544	0.7554	0.7563	0.7573	0.7583	0.7592	0.7602
30.0	0.7518	0.7528	0.7538	0.7548	0.7557	0.7567	0.7577	0.7586	0.7596	0.7606
30.5	0.7522	0.7532	0.7542	0.7551	0.7561	0.7571	0.7581	0.7590	0.7600	0.7610
31.0	0.7526	0.7536	0.7546	0.7555	0.7565	0.7575	0.7584	0.7594	0.7604	0.7613
31.5	0.7530	0.7540	0.7549	0.7559	0.7569	0.7578	0.7588	0.7598	0.7607	0.7617
32.0	0.7534	0.7543	0.7553	0.7563	0.7573	0.7582	0.7592	0.7602	0.7611	0.7621
32.5	0.7538	0.7547	0.7557	0.7567	0.7576	0.7586	0.7596	0.7605	0.7615	0.7625
33.0	0.7541	0.7551	0.7561	0.7570	0.7580	0.7590	0.7599	0.7609	0.7619	0.7628
33.5	0.7545	0.7555	0.7565	0.7574	0.7584	0.7593	0.7603	0.7613	0.7622	0.7632
34.0	0.7549	0.7559	0.7568	0.7578	0.7588	0.7597	0.7607	0.7616	0.7626	0.7636
34.5	0.7553	0.7562	0.7572	0.7582	0.7591	0.7601	0.7611	0.7620	0.7630	0.7639
35.0	0.7557	0.7566	0.7576	0.7585	0.7595	0.7605	0.7614	0.7624	0.7634	0.7643
35.5	0.7560	0.7570	0.7580	0.7589	0.7599	0.7608	0.7618	0.7628	0.7637	0.7647
36.0	0.7564	0.7574	0.7583	0.7593	0.7603	0.7612	0.7622	0.7631	0.7641	0.7651
36.5	0.7568	0.7577	0.7587	0.7597	0.7606	0.7616	0.7625	0.7635	0.7645	0.7654
37.0	0.7572	0.7581	0.7591	0.7600	0.7610	0.7620	0.7629	0.7639	0.7648	0.7658
37.5	0.7575	0.7585	0.7594	0.7604	0.7614	0.7623	0.7633	0.7642	0.7652	0.7662
38.0	0.7579	0.7589	0.7598	0.7608	0.7617	0.7627	0.7636	0.7646	0.7656	0.7665
38.5	0.7583	0.7592	0.7602	0.7611	0.7621	0.7631	0.7640	0.7650	0.7659	0.7669
39.0	0.7587	0.7596	0.7606	0.7615	0.7625	0.7634	0.7644	0.7653	0.7663	0.7672
39.5	0.7590	0.7600	0.7609	0.7619	0.7628	0.7638	0.7647	0.7657	0.7667	0.7676
40.0	0.7594	0.7603	0.7613	0.7623	0.7632	0.7642	0.7651	0.7661	0.7670	0.7680
40.5	0.7598	0.7607	0.7617	0.7626	0.7636	0.7645	0.7655	0.7664	0.7674	0.7683
41.0	0.7601	0.7611	0.7620	0.7630	0.7639	0.7649	0.7658	0.7668	0.7677	0.7687
41.5	0.7605	0.7615	0.7624	0.7634	0.7643	0.7653	0.7662	0.7672	0.7681	0.7691
42.0	0.7609	0.7618	0.7628	0.7637	0.7647	0.7656	0.7666	0.7675	0.7685	0.7694
42.5	0.7612	0.7622	0.7631	0.7641	0.7650	0.7660	0.7669	0.7679	0.7688	0.7698
43.0	0.7616	0.7626	0.7635	0.7644	0.7654	0.7663	0.7673	0.7682	0.7692	0.7701
43.5	0.7620	0.7629	0.7639	0.7648	0.7658	0.7667	0.7677	0.7686	0.7696	0.7705
44.0	0.7623	0.7633	0.7642	0.7652	0.7661	0.7671	0.7680	0.7690	0.7699	0.7709
44.5	0.7627	0.7636	0.7646	0.7655	0.7665	0.7674	0.7684	0.7693	0.7703	0.7712
45.0	0.7631	0.7640	0.7650	0.7659	0.7668	0.7678	0.7687	0.7697	0.7706	0.7716
45.5	0.7634	0.7644	0.7653	0.7663	0.7672	0.7681	0.7691	0.7700	0.7710	0.7719
46.0	0.7638	0.7647	0.7657	0.7666	0.7676	0.7685	0.7694	0.7704	0.7713	0.7723
46.5	0.7642	0.7651	0.7660	0.7670	0.7679	0.7689	0.7698	0.7708	0.7717	0.7727
47.0	0.7645	0.7655	0.7664	0.7673	0.7683	0.7692	0.7702	0.7711	0.7721	0.7730
47.5	0.7649	0.7658	0.7668	0.7677	0.7686	0.7696	0.7705	0.7715	0.7724	0.7734
48.0	0.7652	0.7662	0.7671	0.7680	0.7690	0.7699	0.7709	0.7718	0.7728	0.7737
48.5	0.7656	0.7665	0.7675	0.7684	0.7693	0.7703	0.7712	0.7722	0.7731	0.7741
49.0	0.7660	0.7669	0.7678	0.7688	0.7697	0.7706	0.7716	0.7725	0.7735	0.7744
49.5	0.7663	0.7672	0.7682	0.7691	0.7701	0.7710	0.7720	0.7729	0.7738	0.7748
50.0	0.7667	0.7676	0.7685	0.7695	0.7704	0.7714	0.7723	0.7733	0.7742	0.7752

Table 53
Density Reduction to 15°C

ASTM-IP	0.750 - 0.759									
	0 - 25°C									
	Observed Density									
Observed Temperature °C	0.750	0.751	0.752	0.753	0.754	0.755	0.756	0.757	0.758	0.759
	Corresponding Density 15°C									
0.0	0.7379	0.7389	0.7399	0.7410	0.7420	0.7430	0.7440	0.7450	0.7461	0.7471
0.5	0.7383	0.7393	0.7404	0.7414	0.7424	0.7434	0.7444	0.7455	0.7465	0.7475
1.0	0.7387	0.7397	0.7408	0.7418	0.7428	0.7438	0.7448	0.7459	0.7469	0.7479
1.5	0.7391	0.7402	0.7412	0.7422	0.7432	0.7442	0.7452	0.7463	0.7473	0.7483
2.0	0.7395	0.7406	0.7416	0.7426	0.7436	0.7446	0.7457	0.7467	0.7477	0.7487
2.5	0.7400	0.7410	0.7420	0.7430	0.7440	0.7450	0.7461	0.7471	0.7481	0.7491
3.0	0.7404	0.7414	0.7424	0.7434	0.7444	0.7454	0.7465	0.7475	0.7485	0.7495
3.5	0.7408	0.7418	0.7428	0.7438	0.7448	0.7458	0.7469	0.7479	0.7489	0.7499
4.0	0.7412	0.7422	0.7432	0.7442	0.7452	0.7463	0.7473	0.7483	0.7493	0.7503
4.5	0.7416	0.7426	0.7436	0.7446	0.7456	0.7467	0.7477	0.7487	0.7497	0.7507
5.0	0.7420	0.7430	0.7440	0.7450	0.7460	0.7471	0.7481	0.7491	0.7501	0.7511
5.5	0.7424	0.7434	0.7444	0.7454	0.7464	0.7475	0.7485	0.7495	0.7505	0.7515
6.0	0.7428	0.7438	0.7448	0.7458	0.7468	0.7479	0.7489	0.7499	0.7509	0.7519
6.5	0.7432	0.7442	0.7452	0.7462	0.7472	0.7483	0.7493	0.7503	0.7513	0.7523
7.0	0.7436	0.7446	0.7456	0.7466	0.7476	0.7487	0.7497	0.7507	0.7517	0.7527
7.5	0.7440	0.7450	0.7460	0.7470	0.7480	0.7491	0.7501	0.7511	0.7521	0.7531
8.0	0.7444	0.7454	0.7464	0.7474	0.7485	0.7495	0.7505	0.7515	0.7525	0.7535
8.5	0.7448	0.7458	0.7468	0.7478	0.7488	0.7499	0.7509	0.7519	0.7529	0.7539
9.0	0.7452	0.7462	0.7472	0.7482	0.7492	0.7503	0.7513	0.7523	0.7533	0.7543
9.5	0.7456	0.7466	0.7476	0.7486	0.7496	0.7507	0.7517	0.7527	0.7537	0.7547
10.0	0.7460	0.7470	0.7480	0.7490	0.7500	0.7511	0.7521	0.7531	0.7541	0.7551
10.5	0.7464	0.7474	0.7484	0.7494	0.7504	0.7514	0.7525	0.7535	0.7545	0.7555
11.0	0.7468	0.7478	0.7488	0.7498	0.7508	0.7518	0.7529	0.7539	0.7549	0.7559
11.5	0.7472	0.7482	0.7492	0.7502	0.7512	0.7522	0.7533	0.7543	0.7553	0.7563
12.0	0.7476	0.7486	0.7496	0.7506	0.7516	0.7526	0.7536	0.7547	0.7557	0.7567
12.5	0.7480	0.7490	0.7500	0.7510	0.7520	0.7530	0.7540	0.7550	0.7560	0.7571
13.0	0.7484	0.7494	0.7504	0.7514	0.7524	0.7534	0.7544	0.7554	0.7564	0.7574
13.5	0.7488	0.7498	0.7508	0.7518	0.7528	0.7538	0.7548	0.7558	0.7568	0.7578
14.0	0.7492	0.7502	0.7512	0.7522	0.7532	0.7542	0.7552	0.7562	0.7572	0.7582
14.5	0.7496	0.7506	0.7516	0.7526	0.7536	0.7546	0.7556	0.7566	0.7576	0.7586
15.0	0.7500	0.7510	0.7520	0.7530	0.7540	0.7550	0.7560	0.7570	0.7580	0.7590
15.5	0.7504	0.7514	0.7524	0.7534	0.7544	0.7554	0.7564	0.7574	0.7584	0.7594
16.0	0.7508	0.7518	0.7528	0.7538	0.7548	0.7558	0.7568	0.7578	0.7588	0.7598
16.5	0.7512	0.7522	0.7532	0.7542	0.7552	0.7562	0.7572	0.7582	0.7592	0.7602
17.0	0.7516	0.7526	0.7536	0.7546	0.7556	0.7566	0.7576	0.7586	0.7595	0.7605
17.5	0.7520	0.7530	0.7540	0.7550	0.7560	0.7569	0.7579	0.7589	0.7599	0.7609
18.0	0.7524	0.7534	0.7544	0.7553	0.7563	0.7573	0.7583	0.7593	0.7603	0.7613
18.5	0.7528	0.7537	0.7547	0.7557	0.7567	0.7577	0.7587	0.7597	0.7607	0.7617
19.0	0.7531	0.7541	0.7551	0.7561	0.7571	0.7581	0.7591	0.7601	0.7611	0.7621
19.5	0.7535	0.7545	0.7555	0.7565	0.7575	0.7585	0.7595	0.7605	0.7615	0.7625
20.0	0.7539	0.7549	0.7559	0.7569	0.7579	0.7589	0.7599	0.7609	0.7618	0.7628
20.5	0.7543	0.7553	0.7563	0.7573	0.7583	0.7593	0.7603	0.7612	0.7622	0.7632
21.0	0.7547	0.7557	0.7567	0.7577	0.7587	0.7596	0.7606	0.7616	0.7626	0.7636
21.5	0.7551	0.7561	0.7571	0.7581	0.7590	0.7600	0.7610	0.7620	0.7630	0.7640
22.0	0.7555	0.7565	0.7574	0.7584	0.7594	0.7604	0.7614	0.7624	0.7634	0.7644
22.5	0.7559	0.7568	0.7578	0.7588	0.7598	0.7608	0.7618	0.7628	0.7637	0.7647
23.0	0.7562	0.7572	0.7582	0.7592	0.7602	0.7612	0.7622	0.7631	0.7641	0.7651
23.5	0.7566	0.7576	0.7586	0.7596	0.7606	0.7616	0.7625	0.7635	0.7645	0.7655
24.0	0.7570	0.7580	0.7590	0.7600	0.7609	0.7619	0.7629	0.7639	0.7649	0.7659
24.5	0.7574	0.7584	0.7594	0.7603	0.7613	0.7623	0.7633	0.7643	0.7653	0.7662
25.0	0.7578	0.7588	0.7597	0.7607	0.7617	0.7627	0.7637	0.7646	0.7656	0.7666

Table 53
Density Reduction to 15°C

ASTM-IP

0.750 - 0.759
25 - 50°C

Observed Temperature °C	Observed Density									
	0.750	0.751	0.752	0.753	0.754	0.755	0.756	0.757	0.758	0.759
	Corresponding Density 15°C									
25.0	0.7578	0.7588	0.7597	0.7607	0.7617	0.7627	0.7637	0.7646	0.7656	0.7666
25.5	0.7582	0.7592	0.7602	0.7611	0.7621	0.7631	0.7641	0.7651	0.7660	0.7670
26.0	0.7585	0.7596	0.7606	0.7615	0.7625	0.7635	0.7645	0.7655	0.7664	0.7674
26.5	0.7589	0.7601	0.7610	0.7619	0.7629	0.7639	0.7649	0.7659	0.7668	0.7678
27.0	0.7593	0.7605	0.7614	0.7623	0.7633	0.7643	0.7654	0.7663	0.7672	0.7682
27.5	0.7597	0.7609	0.7618	0.7627	0.7637	0.7647	0.7658	0.7667	0.7676	0.7686
28.0	0.7601	0.7613	0.7622	0.7631	0.7641	0.7651	0.7662	0.7671	0.7680	0.7690
28.5	0.7604	0.7617	0.7626	0.7635	0.7645	0.7655	0.7666	0.7675	0.7684	0.7694
29.0	0.7608	0.7621	0.7630	0.7639	0.7649	0.7660	0.7670	0.7679	0.7688	0.7698
29.5	0.7612	0.7625	0.7634	0.7643	0.7653	0.7664	0.7674	0.7683	0.7692	0.7702
30.0	0.7616	0.7629	0.7638	0.7647	0.7657	0.7668	0.7678	0.7688	0.7698	0.7708
30.5	0.7619	0.7633	0.7642	0.7651	0.7661	0.7672	0.7682	0.7692	0.7702	0.7712
31.0	0.7623	0.7637	0.7646	0.7655	0.7665	0.7676	0.7686	0.7696	0.7706	0.7716
31.5	0.7627	0.7641	0.7650	0.7659	0.7669	0.7680	0.7690	0.7700	0.7710	0.7720
32.0	0.7631	0.7645	0.7654	0.7663	0.7673	0.7684	0.7694	0.7704	0.7714	0.7724
32.5	0.7634	0.7649	0.7658	0.7667	0.7677	0.7688	0.7698	0.7708	0.7718	0.7728
33.0	0.7638	0.7653	0.7662	0.7671	0.7682	0.7692	0.7702	0.7712	0.7722	0.7732
33.5	0.7642	0.7657	0.7666	0.7675	0.7685	0.7696	0.7706	0.7716	0.7726	0.7736
34.0	0.7645	0.7661	0.7670	0.7679	0.7689	0.7700	0.7710	0.7720	0.7730	0.7740
34.5	0.7649	0.7665	0.7674	0.7683	0.7693	0.7704	0.7714	0.7724	0.7734	0.7744
35.0	0.7653	0.7669	0.7678	0.7687	0.7697	0.7708	0.7718	0.7728	0.7738	0.7748
35.5	0.7656	0.7673	0.7682	0.7691	0.7701	0.7711	0.7722	0.7732	0.7742	0.7752
36.0	0.7660	0.7677	0.7686	0.7695	0.7705	0.7715	0.7726	0.7736	0.7746	0.7756
36.5	0.7664	0.7681	0.7690	0.7699	0.7709	0.7719	0.7730	0.7740	0.7750	0.7760
37.0	0.7667	0.7685	0.7694	0.7703	0.7713	0.7723	0.7733	0.7744	0.7754	0.7764
37.5	0.7671	0.7689	0.7698	0.7707	0.7717	0.7727	0.7737	0.7747	0.7757	0.7768
38.0	0.7675	0.7693	0.7702	0.7711	0.7721	0.7731	0.7741	0.7751	0.7761	0.7771
38.5	0.7678	0.7697	0.7706	0.7715	0.7725	0.7735	0.7745	0.7755	0.7765	0.7775
39.0	0.7682	0.7701	0.7710	0.7719	0.7729	0.7739	0.7749	0.7759	0.7769	0.7779
39.5	0.7686	0.7705	0.7714	0.7723	0.7733	0.7743	0.7753	0.7763	0.7773	0.7783
40.0	0.7689	0.7709	0.7718	0.7727	0.7737	0.7747	0.7757	0.7767	0.7777	0.7787
40.5	0.7693	0.7713	0.7722	0.7731	0.7741	0.7751	0.7761	0.7771	0.7781	0.7791
41.0	0.7697	0.7717	0.7726	0.7735	0.7745	0.7755	0.7765	0.7775	0.7785	0.7795
41.5	0.7701	0.7721	0.7730	0.7739	0.7749	0.7759	0.7769	0.7779	0.7789	0.7799
42.0	0.7705	0.7725	0.7734	0.7743	0.7753	0.7763	0.7773	0.7783	0.7792	0.7802
42.5	0.7709	0.7729	0.7738	0.7747	0.7757	0.7766	0.7776	0.7786	0.7796	0.7806
43.0	0.7713	0.7733	0.7742	0.7750	0.7760	0.7770	0.7780	0.7790	0.7800	0.7810
43.5	0.7717	0.7736	0.7745	0.7754	0.7764	0.7774	0.7784	0.7794	0.7804	0.7814
44.0	0.7720	0.7740	0.7749	0.7758	0.7768	0.7778	0.7788	0.7798	0.7808	0.7818
44.5	0.7724	0.7744	0.7753	0.7762	0.7772	0.7782	0.7792	0.7802	0.7812	0.7822
45.0	0.7728	0.7748	0.7757	0.7766	0.7776	0.7786	0.7796	0.7806	0.7815	0.7825
45.5	0.7732	0.7752	0.7761	0.7770	0.7780	0.7790	0.7800	0.7809	0.7819	0.7829
46.0	0.7736	0.7756	0.7765	0.7774	0.7784	0.7793	0.7803	0.7813	0.7823	0.7833
46.5	0.7740	0.7760	0.7769	0.7778	0.7787	0.7797	0.7807	0.7817	0.7827	0.7837
47.0	0.7744	0.7764	0.7772	0.7781	0.7791	0.7801	0.7811	0.7821	0.7831	0.7841
47.5	0.7748	0.7767	0.7776	0.7785	0.7795	0.7805	0.7815	0.7825	0.7834	0.7844
48.0	0.7751	0.7771	0.7780	0.7789	0.7799	0.7809	0.7819	0.7828	0.7838	0.7848
48.5	0.7755	0.7775	0.7784	0.7793	0.7803	0.7813	0.7822	0.7832	0.7842	0.7852
49.0	0.7759	0.7779	0.7788	0.7797	0.7806	0.7816	0.7826	0.7836	0.7846	0.7856
49.5	0.7763	0.7783	0.7792	0.7800	0.7810	0.7820	0.7830	0.7840	0.7850	0.7859
50.0	0.7767	0.7787	0.7795	0.7804	0.7814	0.7824	0.7834	0.7843	0.7853	0.7863

Table 53
Density Reduction to 15°C

ASTM-IP	0.800 - 0.809									
	0 - 25°C									
	Observed Temperature °C	Observed Density								
0.800		0.801	0.802	0.803	0.804	0.805	0.806	0.807	0.808	0.809
	Corresponding Density 15°C									
0.0	0.7891	0.7902	0.7912	0.7922	0.7932	0.7942	0.7953	0.7963	0.7973	0.7983
0.5	0.7895	0.7905	0.7916	0.7926	0.7936	0.7946	0.7956	0.7967	0.7977	0.7987
1.0	0.7899	0.7909	0.7919	0.7929	0.7940	0.7950	0.7960	0.7970	0.7980	0.7991
1.5	0.7903	0.7913	0.7923	0.7933	0.7943	0.7953	0.7964	0.7974	0.7984	0.7994
2.0	0.7906	0.7916	0.7927	0.7937	0.7947	0.7957	0.7967	0.7977	0.7988	0.7998
2.5	0.7910	0.7920	0.7930	0.7940	0.7951	0.7961	0.7971	0.7981	0.7991	0.8001
3.0	0.7914	0.7924	0.7934	0.7944	0.7954	0.7964	0.7974	0.7985	0.7995	0.8005
3.5	0.7917	0.7927	0.7938	0.7948	0.7958	0.7968	0.7978	0.7988	0.7998	0.8009
4.0	0.7921	0.7931	0.7941	0.7951	0.7961	0.7972	0.7982	0.7992	0.8002	0.8012
4.5	0.7925	0.7935	0.7945	0.7955	0.7965	0.7975	0.7985	0.7995	0.8006	0.8016
5.0	0.7928	0.7938	0.7948	0.7959	0.7969	0.7979	0.7989	0.7999	0.8009	0.8019
5.5	0.7932	0.7942	0.7952	0.7962	0.7972	0.7982	0.7993	0.8003	0.8013	0.8023
6.0	0.7935	0.7946	0.7956	0.7966	0.7976	0.7986	0.7996	0.8006	0.8016	0.8026
6.5	0.7939	0.7949	0.7959	0.7969	0.7979	0.7990	0.8000	0.8010	0.8020	0.8030
7.0	0.7943	0.7953	0.7963	0.7973	0.7983	0.7993	0.8003	0.8013	0.8023	0.8034
7.5	0.7946	0.7956	0.7966	0.7977	0.7987	0.7997	0.8007	0.8017	0.8027	0.8037
8.0	0.7950	0.7960	0.7970	0.7980	0.7990	0.8000	0.8010	0.8021	0.8031	0.8041
8.5	0.7954	0.7964	0.7974	0.7984	0.7994	0.8004	0.8014	0.8024	0.8034	0.8044
9.0	0.7957	0.7967	0.7977	0.7987	0.7997	0.8007	0.8018	0.8028	0.8038	0.8048
9.5	0.7961	0.7971	0.7981	0.7991	0.8001	0.8011	0.8021	0.8031	0.8041	0.8051
10.0	0.7964	0.7974	0.7984	0.7994	0.8005	0.8015	0.8025	0.8035	0.8045	0.8055
10.5	0.7968	0.7978	0.7988	0.7998	0.8008	0.8018	0.8028	0.8038	0.8048	0.8058
11.0	0.7971	0.7982	0.7992	0.8002	0.8012	0.8022	0.8032	0.8042	0.8052	0.8062
11.5	0.7975	0.7985	0.7995	0.8005	0.8015	0.8025	0.8035	0.8045	0.8055	0.8065
12.0	0.7979	0.7989	0.7999	0.8009	0.8019	0.8029	0.8039	0.8049	0.8059	0.8069
12.5	0.7982	0.7992	0.8002	0.8012	0.8022	0.8032	0.8042	0.8052	0.8062	0.8073
13.0	0.7986	0.7996	0.8006	0.8016	0.8026	0.8036	0.8046	0.8056	0.8066	0.8076
13.5	0.7989	0.7999	0.8009	0.8019	0.8029	0.8039	0.8049	0.8059	0.8069	0.8080
14.0	0.7993	0.8003	0.8013	0.8023	0.8033	0.8043	0.8053	0.8063	0.8073	0.8083
14.5	0.7996	0.8006	0.8016	0.8026	0.8036	0.8046	0.8056	0.8067	0.8077	0.8087
15.0	0.8000	0.8010	0.8020	0.8030	0.8040	0.8050	0.8060	0.8070	0.8080	0.8090
15.5	0.8004	0.8014	0.8024	0.8034	0.8044	0.8054	0.8064	0.8074	0.8083	0.8093
16.0	0.8007	0.8017	0.8027	0.8037	0.8047	0.8057	0.8067	0.8077	0.8087	0.8097
16.5	0.8011	0.8021	0.8031	0.8041	0.8051	0.8061	0.8071	0.8080	0.8090	0.8100
17.0	0.8014	0.8024	0.8034	0.8044	0.8054	0.8064	0.8074	0.8084	0.8094	0.8104
17.5	0.8018	0.8028	0.8038	0.8048	0.8058	0.8068	0.8077	0.8087	0.8097	0.8107
18.0	0.8021	0.8031	0.8041	0.8051	0.8061	0.8071	0.8081	0.8091	0.8101	0.8111
18.5	0.8025	0.8035	0.8045	0.8055	0.8065	0.8074	0.8084	0.8094	0.8104	0.8114
19.0	0.8028	0.8038	0.8048	0.8058	0.8068	0.8078	0.8088	0.8098	0.8108	0.8118
19.5	0.8032	0.8042	0.8052	0.8062	0.8072	0.8081	0.8091	0.8101	0.8111	0.8121
20.0	0.8035	0.8045	0.8055	0.8065	0.8075	0.8085	0.8095	0.8105	0.8115	0.8125
20.5	0.8039	0.8049	0.8059	0.8069	0.8078	0.8088	0.8098	0.8108	0.8118	0.8128
21.0	0.8042	0.8052	0.8062	0.8072	0.8082	0.8092	0.8102	0.8112	0.8122	0.8132
21.5	0.8046	0.8056	0.8066	0.8075	0.8085	0.8095	0.8105	0.8115	0.8125	0.8135
22.0	0.8049	0.8059	0.8069	0.8079	0.8089	0.8099	0.8109	0.8119	0.8129	0.8139
22.5	0.8053	0.8063	0.8072	0.8082	0.8092	0.8102	0.8112	0.8122	0.8132	0.8142
23.0	0.8056	0.8066	0.8076	0.8086	0.8096	0.8106	0.8116	0.8126	0.8135	0.8145
23.5	0.8060	0.8070	0.8079	0.8089	0.8099	0.8109	0.8119	0.8129	0.8139	0.8149
24.0	0.8063	0.8073	0.8083	0.8093	0.8103	0.8113	0.8123	0.8132	0.8142	0.8152
24.5	0.8067	0.8076	0.8086	0.8096	0.8106	0.8116	0.8126	0.8136	0.8146	0.8156
25.0	0.8070	0.8080	0.8090	0.8100	0.8110	0.8119	0.8129	0.8139	0.8149	0.8159

Table 53
*** Density Reduction to 15°C** **0.800 - 0.809**
25 - 50 °C

Observed Temperature °C	Observed Density									
	0.800	0.801	0.802	0.803	0.804	0.805	0.806	0.807	0.808	0.809
	Corresponding Density 15°C									
25.0	0.8070	0.8080	0.8090	0.8100	0.8110	0.8119	0.8129	0.8139	0.8149	0.8159
25.5	0.8073	0.8083	0.8093	0.8103	0.8113	0.8123	0.8133	0.8143	0.8153	0.8162
26.0	0.8077	0.8087	0.8097	0.8107	0.8116	0.8126	0.8136	0.8146	0.8156	0.8166
26.5	0.8080	0.8090	0.8100	0.8110	0.8120	0.8130	0.8140	0.8150	0.8159	0.8169
27.0	0.8084	0.8094	0.8104	0.8113	0.8123	0.8133	0.8143	0.8153	0.8163	0.8173
27.5	0.8087	0.8097	0.8107	0.8117	0.8127	0.8137	0.8147	0.8156	0.8166	0.8176
28.0	0.8091	0.8101	0.8110	0.8120	0.8130	0.8140	0.8150	0.8160	0.8170	0.8180
28.5	0.8094	0.8104	0.8114	0.8124	0.8134	0.8143	0.8153	0.8163	0.8173	0.8183
29.0	0.8098	0.8107	0.8118	0.8127	0.8137	0.8147	0.8157	0.8167	0.8176	0.8186
29.5	0.8101	0.8111	0.8121	0.8131	0.8140	0.8150	0.8160	0.8170	0.8180	0.8190
30.0	0.8104	0.8114	0.8124	0.8134	0.8144	0.8154	0.8164	0.8173	0.8183	0.8193
30.5	0.8108	0.8118	0.8128	0.8137	0.8147	0.8157	0.8167	0.8177	0.8187	0.8196
31.0	0.8111	0.8121	0.8131	0.8141	0.8151	0.8160	0.8170	0.8180	0.8190	0.8200
31.5	0.8115	0.8125	0.8134	0.8144	0.8154	0.8164	0.8174	0.8184	0.8193	0.8203
32.0	0.8118	0.8128	0.8138	0.8148	0.8157	0.8167	0.8177	0.8187	0.8197	0.8207
32.5	0.8122	0.8131	0.8141	0.8151	0.8161	0.8171	0.8180	0.8190	0.8200	0.8210
33.0	0.8125	0.8135	0.8145	0.8154	0.8164	0.8174	0.8184	0.8194	0.8203	0.8213
33.5	0.8128	0.8138	0.8148	0.8158	0.8168	0.8177	0.8187	0.8197	0.8207	0.8217
34.0	0.8132	0.8142	0.8151	0.8161	0.8171	0.8181	0.8191	0.8200	0.8210	0.8220
34.5	0.8135	0.8145	0.8155	0.8165	0.8174	0.8184	0.8194	0.8204	0.8214	0.8223
35.0	0.8139	0.8148	0.8158	0.8168	0.8178	0.8187	0.8197	0.8207	0.8217	0.8227
35.5	0.8142	0.8152	0.8161	0.8171	0.8181	0.8191	0.8201	0.8210	0.8220	0.8230
36.0	0.8145	0.8155	0.8165	0.8175	0.8184	0.8194	0.8204	0.8214	0.8224	0.8233
36.5	0.8149	0.8158	0.8168	0.8178	0.8188	0.8198	0.8207	0.8217	0.8227	0.8237
37.0	0.8152	0.8162	0.8172	0.8181	0.8191	0.8201	0.8211	0.8220	0.8230	0.8240
37.5	0.8155	0.8165	0.8175	0.8185	0.8194	0.8204	0.8214	0.8224	0.8234	0.8243
38.0	0.8159	0.8169	0.8178	0.8188	0.8198	0.8208	0.8217	0.8227	0.8237	0.8247
38.5	0.8162	0.8172	0.8182	0.8191	0.8201	0.8211	0.8221	0.8230	0.8240	0.8250
39.0	0.8165	0.8175	0.8185	0.8195	0.8205	0.8214	0.8224	0.8234	0.8244	0.8253
39.5	0.8169	0.8179	0.8188	0.8198	0.8208	0.8218	0.8227	0.8237	0.8247	0.8257
40.0	0.8172	0.8182	0.8192	0.8201	0.8211	0.8221	0.8231	0.8240	0.8250	0.8260
40.5	0.8176	0.8185	0.8195	0.8205	0.8214	0.8224	0.8234	0.8244	0.8253	0.8263
41.0	0.8179	0.8189	0.8198	0.8208	0.8218	0.8228	0.8237	0.8247	0.8257	0.8266
41.5	0.8182	0.8192	0.8202	0.8211	0.8221	0.8231	0.8241	0.8250	0.8260	0.8270
42.0	0.8186	0.8195	0.8205	0.8215	0.8224	0.8234	0.8244	0.8254	0.8263	0.8273
42.5	0.8189	0.8199	0.8208	0.8218	0.8228	0.8237	0.8247	0.8257	0.8267	0.8276
43.0	0.8192	0.8202	0.8212	0.8221	0.8231	0.8241	0.8250	0.8260	0.8270	0.8280
43.5	0.8196	0.8205	0.8215	0.8225	0.8234	0.8244	0.8254	0.8263	0.8273	0.8283
44.0	0.8199	0.8209	0.8218	0.8228	0.8238	0.8247	0.8257	0.8267	0.8276	0.8286
44.5	0.8202	0.8212	0.8222	0.8231	0.8241	0.8251	0.8260	0.8270	0.8280	0.8289
45.0	0.8206	0.8215	0.8225	0.8235	0.8244	0.8254	0.8264	0.8273	0.8283	0.8293
45.5	0.8209	0.8219	0.8228	0.8238	0.8248	0.8257	0.8267	0.8277	0.8286	0.8296
46.0	0.8212	0.8222	0.8231	0.8241	0.8251	0.8261	0.8270	0.8280	0.8290	0.8299
46.5	0.8215	0.8225	0.8235	0.8244	0.8254	0.8264	0.8273	0.8283	0.8293	0.8303
47.0	0.8219	0.8228	0.8238	0.8248	0.8257	0.8267	0.8277	0.8286	0.8296	0.8306
47.5	0.8222	0.8232	0.8241	0.8251	0.8261	0.8270	0.8280	0.8290	0.8299	0.8309
48.0	0.8225	0.8235	0.8245	0.8254	0.8264	0.8274	0.8283	0.8293	0.8303	0.8312
48.5	0.8229	0.8238	0.8248	0.8258	0.8267	0.8277	0.8287	0.8296	0.8306	0.8316
49.0	0.8232	0.8242	0.8251	0.8261	0.8270	0.8280	0.8290	0.8299	0.8309	0.8319
49.5	0.8235	0.8245	0.8254	0.8264	0.8274	0.8283	0.8293	0.8303	0.8312	0.8322
50.0	0.8238	0.8248	0.8258	0.8267	0.8277	0.8287	0.8296	0.8306	0.8316	0.8325

Table 53
Density Reduction to 15°C

ASTM-IP	0.810 - 0.819 0 - 25°C									
	Observed Density									
Observed Temperature °C	0.810	0.811	0.812	0.813	0.814	0.815	0.816	0.817	0.818	0.819
	Corresponding Density 15°C									
0.0	0.7993	0.8004	0.8014	0.8024	0.8034	0.8044	0.8055	0.8065	0.8075	0.8085
0.5	0.7997	0.8007	0.8017	0.8028	0.8038	0.8048	0.8058	0.8068	0.8079	0.8089
1.0	0.8001	0.8011	0.8021	0.8031	0.8041	0.8052	0.8062	0.8072	0.8082	0.8092
1.5	0.8004	0.8014	0.8025	0.8035	0.8045	0.8055	0.8065	0.8076	0.8086	0.8096
2.0	0.8008	0.8018	0.8028	0.8038	0.8049	0.8059	0.8069	0.8079	0.8089	0.8099
2.5	0.8012	0.8022	0.8032	0.8042	0.8052	0.8062	0.8072	0.8083	0.8093	0.8103
3.0	0.8015	0.8025	0.8035	0.8046	0.8056	0.8066	0.8076	0.8086	0.8096	0.8106
3.5	0.8019	0.8029	0.8039	0.8049	0.8059	0.8069	0.8080	0.8090	0.8100	0.8110
4.0	0.8022	0.8032	0.8043	0.8053	0.8063	0.8073	0.8083	0.8093	0.8103	0.8113
4.5	0.8026	0.8036	0.8046	0.8056	0.8066	0.8077	0.8087	0.8097	0.8107	0.8117
5.0	0.8029	0.8040	0.8050	0.8060	0.8070	0.8080	0.8090	0.8100	0.8110	0.8120
5.5	0.8033	0.8043	0.8053	0.8063	0.8073	0.8084	0.8094	0.8104	0.8114	0.8124
6.0	0.8037	0.8047	0.8057	0.8067	0.8077	0.8087	0.8097	0.8107	0.8117	0.8127
6.5	0.8040	0.8050	0.8060	0.8070	0.8081	0.8091	0.8101	0.8111	0.8121	0.8131
7.0	0.8044	0.8054	0.8064	0.8074	0.8084	0.8094	0.8104	0.8114	0.8124	0.8134
7.5	0.8047	0.8057	0.8067	0.8078	0.8088	0.8098	0.8108	0.8118	0.8128	0.8138
8.0	0.8051	0.8061	0.8071	0.8081	0.8091	0.8101	0.8111	0.8121	0.8131	0.8141
8.5	0.8054	0.8064	0.8075	0.8085	0.8095	0.8105	0.8115	0.8125	0.8135	0.8145
9.0	0.8058	0.8068	0.8078	0.8088	0.8098	0.8108	0.8118	0.8128	0.8138	0.8148
9.5	0.8061	0.8071	0.8082	0.8092	0.8102	0.8112	0.8122	0.8132	0.8142	0.8152
10.0	0.8065	0.8075	0.8085	0.8095	0.8105	0.8115	0.8125	0.8135	0.8145	0.8155
10.5	0.8068	0.8079	0.8089	0.8099	0.8109	0.8119	0.8129	0.8139	0.8149	0.8159
11.0	0.8072	0.8082	0.8092	0.8102	0.8112	0.8122	0.8132	0.8143	0.8152	0.8162
11.5	0.8076	0.8086	0.8096	0.8106	0.8116	0.8126	0.8136	0.8146	0.8156	0.8166
12.0	0.8079	0.8089	0.8099	0.8109	0.8119	0.8129	0.8139	0.8149	0.8159	0.8169
12.5	0.8083	0.8093	0.8103	0.8113	0.8123	0.8133	0.8143	0.8153	0.8163	0.8173
13.0	0.8086	0.8096	0.8106	0.8116	0.8126	0.8136	0.8146	0.8156	0.8166	0.8176
13.5	0.8090	0.8100	0.8110	0.8120	0.8130	0.8140	0.8150	0.8160	0.8170	0.8180
14.0	0.8093	0.8103	0.8113	0.8123	0.8133	0.8143	0.8153	0.8163	0.8173	0.8183
14.5	0.8097	0.8107	0.8117	0.8127	0.8137	0.8147	0.8157	0.8167	0.8177	0.8187
15.0	0.8100	0.8110	0.8120	0.8130	0.8140	0.8150	0.8160	0.8170	0.8180	0.8190
15.5	0.8103	0.8113	0.8123	0.8133	0.8143	0.8153	0.8163	0.8173	0.8183	0.8193
16.0	0.8107	0.8117	0.8127	0.8137	0.8147	0.8157	0.8167	0.8177	0.8187	0.8197
16.5	0.8110	0.8120	0.8130	0.8140	0.8150	0.8160	0.8170	0.8180	0.8190	0.8200
17.0	0.8114	0.8124	0.8134	0.8144	0.8154	0.8164	0.8174	0.8184	0.8194	0.8204
17.5	0.8117	0.8127	0.8137	0.8147	0.8157	0.8167	0.8177	0.8187	0.8197	0.8207
18.0	0.8121	0.8131	0.8141	0.8151	0.8161	0.8171	0.8181	0.8191	0.8201	0.8211
18.5	0.8124	0.8134	0.8144	0.8154	0.8164	0.8174	0.8184	0.8194	0.8204	0.8214
19.0	0.8128	0.8138	0.8148	0.8158	0.8168	0.8178	0.8188	0.8197	0.8207	0.8217
19.5	0.8131	0.8141	0.8151	0.8161	0.8171	0.8181	0.8191	0.8201	0.8211	0.8221
20.0	0.8135	0.8145	0.8155	0.8165	0.8174	0.8184	0.8194	0.8204	0.8214	0.8224
20.5	0.8138	0.8148	0.8158	0.8168	0.8178	0.8188	0.8198	0.8208	0.8218	0.8228
21.0	0.8142	0.8152	0.8161	0.8172	0.8181	0.8191	0.8201	0.8211	0.8221	0.8231
21.5	0.8145	0.8155	0.8165	0.8175	0.8185	0.8195	0.8205	0.8215	0.8224	0.8234
22.0	0.8148	0.8158	0.8168	0.8178	0.8188	0.8198	0.8208	0.8218	0.8228	0.8238
22.5	0.8152	0.8162	0.8172	0.8182	0.8192	0.8201	0.8211	0.8221	0.8231	0.8241
23.0	0.8155	0.8165	0.8175	0.8185	0.8195	0.8205	0.8215	0.8225	0.8235	0.8245
23.5	0.8159	0.8169	0.8179	0.8188	0.8198	0.8208	0.8218	0.8228	0.8238	0.8248
24.0	0.8162	0.8172	0.8182	0.8192	0.8202	0.8212	0.8222	0.8232	0.8241	0.8251
24.5	0.8166	0.8175	0.8185	0.8195	0.8205	0.8215	0.8225	0.8235	0.8245	0.8255
25.0	0.8169	0.8179	0.8189	0.8199	0.8209	0.8218	0.8228	0.8238	0.8248	0.8258

Table 53
*** Density Reduction to 15°C**
0.810 - 0.819
25 - 50 °C

Observed Temperature °C	Observed Density									
	0.810	0.811	0.812	0.813	0.814	0.815	0.816	0.817	0.818	0.819
	Corresponding Density 15°C									
25.0	0.8169	0.8179	0.8189	0.8199	0.8209	0.8218	0.8228	0.8238	0.8248	0.8258
25.5	0.8172	0.8182	0.8192	0.8202	0.8212	0.8222	0.8232	0.8242	0.8252	0.8261
26.0	0.8176	0.8186	0.8196	0.8205	0.8215	0.8225	0.8235	0.8245	0.8255	0.8265
26.5	0.8179	0.8189	0.8199	0.8209	0.8219	0.8229	0.8238	0.8248	0.8258	0.8268
27.0	0.8183	0.8192	0.8202	0.8212	0.8222	0.8232	0.8242	0.8252	0.8262	0.8271
27.5	0.8186	0.8196	0.8206	0.8216	0.8225	0.8235	0.8245	0.8255	0.8265	0.8275
28.0	0.8189	0.8199	0.8209	0.8219	0.8229	0.8239	0.8249	0.8258	0.8268	0.8278
28.5	0.8193	0.8203	0.8212	0.8222	0.8232	0.8242	0.8252	0.8262	0.8272	0.8282
29.0	0.8196	0.8206	0.8216	0.8226	0.8236	0.8245	0.8255	0.8265	0.8275	0.8285
29.5	0.8200	0.8209	0.8219	0.8229	0.8239	0.8249	0.8259	0.8268	0.8278	0.8288
30.0	0.8203	0.8213	0.8223	0.8232	0.8242	0.8252	0.8262	0.8272	0.8282	0.8292
30.5	0.8206	0.8216	0.8226	0.8236	0.8246	0.8255	0.8265	0.8275	0.8285	0.8295
31.0	0.8210	0.8219	0.8229	0.8239	0.8249	0.8259	0.8269	0.8278	0.8288	0.8298
31.5	0.8213	0.8223	0.8233	0.8243	0.8252	0.8262	0.8272	0.8282	0.8292	0.8302
32.0	0.8216	0.8226	0.8236	0.8246	0.8256	0.8265	0.8275	0.8285	0.8295	0.8305
32.5	0.8220	0.8230	0.8239	0.8249	0.8259	0.8269	0.8279	0.8288	0.8298	0.8308
33.0	0.8223	0.8233	0.8243	0.8253	0.8262	0.8272	0.8282	0.8292	0.8302	0.8312
33.5	0.8226	0.8236	0.8246	0.8256	0.8266	0.8275	0.8285	0.8295	0.8305	0.8315
34.0	0.8230	0.8240	0.8249	0.8259	0.8269	0.8279	0.8289	0.8298	0.8308	0.8318
34.5	0.8233	0.8243	0.8253	0.8263	0.8272	0.8282	0.8292	0.8302	0.8312	0.8321
35.0	0.8236	0.8246	0.8256	0.8266	0.8276	0.8285	0.8295	0.8305	0.8315	0.8325
35.5	0.8240	0.8250	0.8259	0.8269	0.8279	0.8289	0.8299	0.8308	0.8318	0.8328
36.0	0.8243	0.8253	0.8263	0.8272	0.8282	0.8292	0.8302	0.8312	0.8322	0.8331
36.5	0.8246	0.8256	0.8266	0.8276	0.8286	0.8295	0.8305	0.8315	0.8325	0.8335
37.0	0.8250	0.8260	0.8269	0.8279	0.8289	0.8299	0.8308	0.8318	0.8328	0.8338
37.5	0.8253	0.8263	0.8273	0.8282	0.8292	0.8302	0.8312	0.8322	0.8331	0.8341
38.0	0.8256	0.8266	0.8276	0.8286	0.8295	0.8305	0.8315	0.8325	0.8335	0.8345
38.5	0.8260	0.8269	0.8279	0.8289	0.8299	0.8309	0.8318	0.8328	0.8338	0.8348
39.0	0.8263	0.8273	0.8283	0.8292	0.8302	0.8312	0.8322	0.8332	0.8341	0.8351
39.5	0.8266	0.8276	0.8286	0.8296	0.8305	0.8315	0.8325	0.8335	0.8345	0.8354
40.0	0.8270	0.8279	0.8289	0.8299	0.8309	0.8319	0.8328	0.8338	0.8348	0.8358
40.5	0.8273	0.8283	0.8292	0.8302	0.8312	0.8322	0.8332	0.8341	0.8351	0.8361
41.0	0.8276	0.8286	0.8296	0.8305	0.8315	0.8325	0.8335	0.8345	0.8354	0.8364
41.5	0.8279	0.8289	0.8299	0.8309	0.8319	0.8328	0.8338	0.8348	0.8358	0.8368
42.0	0.8283	0.8292	0.8302	0.8312	0.8322	0.8332	0.8341	0.8351	0.8361	0.8371
42.5	0.8286	0.8296	0.8306	0.8315	0.8325	0.8335	0.8345	0.8355	0.8364	0.8374
43.0	0.8289	0.8299	0.8309	0.8319	0.8328	0.8338	0.8348	0.8358	0.8368	0.8377
43.5	0.8293	0.8302	0.8312	0.8322	0.8332	0.8342	0.8351	0.8361	0.8371	0.8381
44.0	0.8296	0.8306	0.8315	0.8325	0.8335	0.8345	0.8355	0.8364	0.8374	0.8384
44.5	0.8299	0.8309	0.8319	0.8329	0.8338	0.8348	0.8358	0.8368	0.8377	0.8387
45.0	0.8302	0.8312	0.8322	0.8332	0.8342	0.8351	0.8361	0.8371	0.8381	0.8390
45.5	0.8306	0.8316	0.8325	0.8335	0.8345	0.8355	0.8364	0.8374	0.8384	0.8394
46.0	0.8309	0.8319	0.8329	0.8338	0.8348	0.8358	0.8368	0.8377	0.8387	0.8397
46.5	0.8312	0.8322	0.8332	0.8342	0.8351	0.8361	0.8371	0.8381	0.8390	0.8400
47.0	0.8316	0.8325	0.8335	0.8345	0.8355	0.8364	0.8374	0.8384	0.8394	0.8403
47.5	0.8319	0.8329	0.8338	0.8348	0.8358	0.8368	0.8377	0.8387	0.8397	0.8407
48.0	0.8322	0.8332	0.8342	0.8351	0.8361	0.8371	0.8381	0.8390	0.8400	0.8410
48.5	0.8325	0.8335	0.8345	0.8355	0.8364	0.8374	0.8384	0.8394	0.8403	0.8413
49.0	0.8329	0.8338	0.8348	0.8358	0.8368	0.8377	0.8387	0.8397	0.8407	0.8416
49.5	0.8332	0.8342	0.8351	0.8361	0.8371	0.8381	0.8390	0.8400	0.8410	0.8419
50.0	0.8335	0.8345	0.8355	0.8364	0.8374	0.8384	0.8394	0.8403	0.8413	0.8423

Table 53
Density Reduction to 15°C

ASTM-IP	0.820 - 0.829									
	0 - 25°C									
	Observed Density									
Observed Temperature °C	0.820	0.821	0.822	0.823	0.824	0.825	0.826	0.827	0.828	0.829
	Corresponding Density 15°C									
0.0	0.8095	0.8105	0.8116	0.8126	0.8136	0.8146	0.8156	0.8166	0.8177	0.8187
0.5	0.8099	0.8109	0.8119	0.8129	0.8139	0.8150	0.8160	0.8170	0.8180	0.8190
1.0	0.8102	0.8113	0.8123	0.8133	0.8143	0.8153	0.8163	0.8173	0.8184	0.8194
1.5	0.8106	0.8116	0.8126	0.8136	0.8146	0.8157	0.8167	0.8177	0.8187	0.8197
2.0	0.8109	0.8120	0.8130	0.8140	0.8150	0.8160	0.8170	0.8180	0.8190	0.8201
2.5	0.8113	0.8123	0.8133	0.8143	0.8153	0.8164	0.8174	0.8184	0.8194	0.8204
3.0	0.8117	0.8127	0.8137	0.8147	0.8157	0.8167	0.8177	0.8187	0.8197	0.8208
3.5	0.8120	0.8130	0.8140	0.8150	0.8160	0.8171	0.8181	0.8191	0.8201	0.8211
4.0	0.8124	0.8134	0.8144	0.8154	0.8164	0.8174	0.8184	0.8194	0.8204	0.8215
4.5	0.8127	0.8137	0.8147	0.8157	0.8167	0.8178	0.8188	0.8198	0.8208	0.8218
5.0	0.8131	0.8141	0.8151	0.8161	0.8171	0.8181	0.8191	0.8201	0.8211	0.8221
5.5	0.8134	0.8144	0.8154	0.8164	0.8174	0.8185	0.8195	0.8205	0.8215	0.8225
6.0	0.8138	0.8148	0.8158	0.8168	0.8178	0.8188	0.8198	0.8208	0.8218	0.8228
6.5	0.8141	0.8151	0.8161	0.8171	0.8181	0.8192	0.8202	0.8212	0.8222	0.8232
7.0	0.8145	0.8155	0.8165	0.8175	0.8185	0.8195	0.8205	0.8215	0.8225	0.8235
7.5	0.8148	0.8158	0.8168	0.8178	0.8188	0.8198	0.8209	0.8219	0.8229	0.8239
8.0	0.8152	0.8162	0.8172	0.8182	0.8192	0.8202	0.8212	0.8222	0.8232	0.8242
8.5	0.8155	0.8165	0.8175	0.8185	0.8195	0.8205	0.8215	0.8226	0.8236	0.8246
9.0	0.8159	0.8169	0.8179	0.8189	0.8199	0.8209	0.8219	0.8229	0.8239	0.8249
9.5	0.8162	0.8172	0.8182	0.8192	0.8202	0.8212	0.8222	0.8232	0.8242	0.8252
10.0	0.8165	0.8176	0.8186	0.8196	0.8206	0.8216	0.8226	0.8236	0.8246	0.8256
10.5	0.8169	0.8179	0.8189	0.8199	0.8209	0.8219	0.8229	0.8239	0.8249	0.8259
11.0	0.8172	0.8182	0.8192	0.8203	0.8213	0.8223	0.8233	0.8243	0.8253	0.8263
11.5	0.8176	0.8186	0.8196	0.8206	0.8216	0.8226	0.8236	0.8246	0.8256	0.8266
12.0	0.8179	0.8189	0.8199	0.8209	0.8219	0.8229	0.8240	0.8250	0.8260	0.8270
12.5	0.8183	0.8193	0.8203	0.8213	0.8223	0.8233	0.8243	0.8253	0.8263	0.8273
13.0	0.8186	0.8196	0.8206	0.8216	0.8226	0.8236	0.8246	0.8256	0.8266	0.8276
13.5	0.8190	0.8200	0.8210	0.8220	0.8230	0.8240	0.8250	0.8260	0.8270	0.8280
14.0	0.8193	0.8203	0.8213	0.8223	0.8233	0.8243	0.8253	0.8263	0.8273	0.8283
14.5	0.8197	0.8207	0.8217	0.8227	0.8237	0.8247	0.8257	0.8267	0.8277	0.8287
15.0	0.8200	0.8210	0.8220	0.8230	0.8240	0.8250	0.8260	0.8270	0.8280	0.8290
15.5	0.8203	0.8213	0.8223	0.8233	0.8243	0.8253	0.8263	0.8273	0.8283	0.8293
16.0	0.8207	0.8217	0.8227	0.8237	0.8247	0.8257	0.8267	0.8277	0.8287	0.8297
16.5	0.8210	0.8220	0.8230	0.8240	0.8250	0.8260	0.8270	0.8280	0.8290	0.8300
17.0	0.8214	0.8224	0.8234	0.8244	0.8254	0.8264	0.8274	0.8284	0.8294	0.8304
17.5	0.8217	0.8227	0.8237	0.8247	0.8257	0.8267	0.8277	0.8287	0.8297	0.8307
18.0	0.8221	0.8231	0.8240	0.8250	0.8260	0.8270	0.8280	0.8290	0.8300	0.8310
18.5	0.8224	0.8234	0.8244	0.8254	0.8264	0.8274	0.8284	0.8294	0.8304	0.8314
19.0	0.8227	0.8237	0.8247	0.8257	0.8267	0.8277	0.8287	0.8297	0.8307	0.8317
19.5	0.8231	0.8241	0.8251	0.8261	0.8271	0.8281	0.8290	0.8300	0.8310	0.8320
20.0	0.8234	0.8244	0.8254	0.8264	0.8274	0.8284	0.8294	0.8304	0.8314	0.8324
20.5	0.8238	0.8248	0.8257	0.8267	0.8277	0.8287	0.8297	0.8307	0.8317	0.8327
21.0	0.8241	0.8251	0.8261	0.8271	0.8281	0.8291	0.8301	0.8311	0.8321	0.8330
21.5	0.8244	0.8254	0.8264	0.8274	0.8284	0.8294	0.8304	0.8314	0.8324	0.8334
22.0	0.8248	0.8258	0.8268	0.8278	0.8287	0.8297	0.8307	0.8317	0.8327	0.8337
22.5	0.8251	0.8261	0.8271	0.8281	0.8291	0.8301	0.8311	0.8321	0.8331	0.8341
23.0	0.8254	0.8264	0.8274	0.8284	0.8294	0.8304	0.8314	0.8324	0.8334	0.8344
23.5	0.8258	0.8268	0.8278	0.8288	0.8298	0.8307	0.8317	0.8327	0.8337	0.8347
24.0	0.8261	0.8271	0.8281	0.8291	0.8301	0.8311	0.8321	0.8331	0.8341	0.8351
24.5	0.8265	0.8274	0.8284	0.8294	0.8304	0.8314	0.8324	0.8334	0.8344	0.8354
25.0	0.8268	0.8278	0.8288	0.8298	0.8308	0.8318	0.8327	0.8337	0.8347	0.8357

ASTM-IP	Table 53									
	* Density Reduction to 15°C									
	0.820 - 0.829 25 - 50 °C									
Observed Temperature °C	Observed Density									
	0.820	0.821	0.822	0.823	0.824	0.825	0.826	0.827	0.828	0.829
	Corresponding Density 15°C									
25.0	0.8268	0.8278	0.8288	0.8298	0.8308	0.8318	0.8327	0.8337	0.8347	0.8357
25.5	0.8271	0.8281	0.8291	0.8301	0.8311	0.8321	0.8331	0.8341	0.8351	0.8361
26.0	0.8275	0.8285	0.8294	0.8304	0.8314	0.8324	0.8334	0.8344	0.8354	0.8364
26.5	0.8278	0.8288	0.8298	0.8308	0.8318	0.8328	0.8337	0.8347	0.8357	0.8367
27.0	0.8281	0.8291	0.8301	0.8311	0.8321	0.8331	0.8341	0.8351	0.8361	0.8371
27.5	0.8285	0.8295	0.8304	0.8314	0.8324	0.8334	0.8344	0.8354	0.8364	0.8374
28.0	0.8288	0.8298	0.8308	0.8318	0.8328	0.8338	0.8347	0.8357	0.8367	0.8377
28.5	0.8291	0.8301	0.8311	0.8321	0.8331	0.8341	0.8351	0.8361	0.8371	0.8380
29.0	0.8295	0.8305	0.8315	0.8324	0.8334	0.8344	0.8354	0.8364	0.8374	0.8384
29.5	0.8298	0.8308	0.8318	0.8328	0.8338	0.8348	0.8357	0.8367	0.8377	0.8387
30.0	0.8301	0.8311	0.8321	0.8331	0.8341	0.8351	0.8361	0.8371	0.8380	0.8390
30.5	0.8305	0.8315	0.8324	0.8334	0.8344	0.8354	0.8364	0.8374	0.8384	0.8394
31.0	0.8308	0.8318	0.8328	0.8338	0.8348	0.8357	0.8367	0.8377	0.8387	0.8397
31.5	0.8311	0.8321	0.8331	0.8341	0.8351	0.8361	0.8371	0.8381	0.8390	0.8400
32.0	0.8315	0.8325	0.8334	0.8344	0.8354	0.8364	0.8374	0.8384	0.8394	0.8404
32.5	0.8318	0.8328	0.8338	0.8348	0.8358	0.8367	0.8377	0.8387	0.8397	0.8407
33.0	0.8321	0.8331	0.8341	0.8351	0.8361	0.8371	0.8381	0.8390	0.8400	0.8410
33.5	0.8325	0.8335	0.8344	0.8354	0.8364	0.8374	0.8384	0.8394	0.8404	0.8413
34.0	0.8328	0.8338	0.8348	0.8358	0.8367	0.8377	0.8387	0.8397	0.8407	0.8417
34.5	0.8331	0.8341	0.8351	0.8361	0.8371	0.8381	0.8390	0.8400	0.8410	0.8420
35.0	0.8335	0.8344	0.8354	0.8364	0.8374	0.8384	0.8394	0.8404	0.8413	0.8423
35.5	0.8338	0.8348	0.8358	0.8367	0.8377	0.8387	0.8397	0.8407	0.8417	0.8427
36.0	0.8341	0.8351	0.8361	0.8371	0.8381	0.8390	0.8400	0.8410	0.8420	0.8430
36.5	0.8345	0.8354	0.8364	0.8374	0.8384	0.8394	0.8404	0.8413	0.8423	0.8433
37.0	0.8348	0.8358	0.8367	0.8377	0.8387	0.8397	0.8407	0.8417	0.8426	0.8436
37.5	0.8351	0.8361	0.8371	0.8381	0.8390	0.8400	0.8410	0.8420	0.8430	0.8440
38.0	0.8354	0.8364	0.8374	0.8384	0.8394	0.8404	0.8413	0.8423	0.8433	0.8443
38.5	0.8358	0.8368	0.8377	0.8387	0.8397	0.8407	0.8417	0.8426	0.8436	0.8446
39.0	0.8361	0.8371	0.8381	0.8390	0.8400	0.8410	0.8420	0.8430	0.8439	0.8449
39.5	0.8364	0.8374	0.8384	0.8394	0.8403	0.8413	0.8423	0.8433	0.8443	0.8453
40.0	0.8368	0.8377	0.8387	0.8397	0.8407	0.8417	0.8426	0.8436	0.8446	0.8456
40.5	0.8371	0.8381	0.8390	0.8400	0.8410	0.8420	0.8430	0.8439	0.8449	0.8459
41.0	0.8374	0.8384	0.8394	0.8403	0.8413	0.8423	0.8433	0.8443	0.8452	0.8462
41.5	0.8377	0.8387	0.8397	0.8407	0.8417	0.8426	0.8436	0.8446	0.8456	0.8465
42.0	0.8381	0.8390	0.8400	0.8410	0.8420	0.8430	0.8439	0.8449	0.8459	0.8469
42.5	0.8384	0.8394	0.8403	0.8413	0.8423	0.8433	0.8443	0.8452	0.8462	0.8472
43.0	0.8387	0.8397	0.8407	0.8416	0.8426	0.8436	0.8446	0.8456	0.8465	0.8475
43.5	0.8390	0.8400	0.8410	0.8420	0.8430	0.8439	0.8449	0.8459	0.8469	0.8478
44.0	0.8394	0.8403	0.8413	0.8423	0.8433	0.8443	0.8452	0.8462	0.8472	0.8482
44.5	0.8397	0.8407	0.8416	0.8426	0.8436	0.8446	0.8456	0.8465	0.8475	0.8485
45.0	0.8400	0.8410	0.8420	0.8429	0.8439	0.8449	0.8459	0.8469	0.8478	0.8488
45.5	0.8403	0.8413	0.8423	0.8433	0.8442	0.8452	0.8462	0.8472	0.8481	0.8491
46.0	0.8407	0.8416	0.8426	0.8436	0.8446	0.8455	0.8465	0.8475	0.8485	0.8494
46.5	0.8410	0.8420	0.8429	0.8439	0.8449	0.8459	0.8468	0.8478	0.8488	0.8498
47.0	0.8413	0.8423	0.8433	0.8442	0.8452	0.8462	0.8472	0.8481	0.8491	0.8501
47.5	0.8416	0.8426	0.8436	0.8446	0.8455	0.8465	0.8475	0.8485	0.8494	0.8504
48.0	0.8420	0.8429	0.8439	0.8449	0.8459	0.8468	0.8478	0.8488	0.8497	0.8507
48.5	0.8423	0.8433	0.8442	0.8452	0.8462	0.8471	0.8481	0.8491	0.8501	0.8510
49.0	0.8426	0.8436	0.8445	0.8455	0.8465	0.8475	0.8484	0.8494	0.8504	0.8514
49.5	0.8429	0.8439	0.8449	0.8458	0.8468	0.8478	0.8488	0.8497	0.8507	0.8517
50.0	0.8432	0.8442	0.8452	0.8462	0.8471	0.8481	0.8491	0.8500	0.8510	0.8520

Table 53
Density Reduction to 15°C

ASTM-IP	0.830 - 0.839									
	0 - 25°C									
	Observed Density									
Observed Temperature °C	0.830	0.831	0.832	0.833	0.834	0.835	0.836	0.837	0.838	0.839
	Corresponding Density 15°C									
0.0	0.8197	0.8207	0.8217	0.8227	0.8237	0.8248	0.8258	0.8268	0.8278	0.8288
0.5	0.8200	0.8210	0.8221	0.8231	0.8241	0.8251	0.8261	0.8271	0.8281	0.8292
1.0	0.8204	0.8214	0.8224	0.8234	0.8244	0.8254	0.8265	0.8275	0.8285	0.8295
1.5	0.8207	0.8217	0.8228	0.8238	0.8248	0.8258	0.8268	0.8278	0.8288	0.8298
2.0	0.8211	0.8221	0.8231	0.8241	0.8251	0.8261	0.8272	0.8282	0.8292	0.8302
2.5	0.8214	0.8224	0.8234	0.8245	0.8255	0.8265	0.8275	0.8285	0.8295	0.8305
3.0	0.8218	0.8228	0.8238	0.8248	0.8258	0.8268	0.8278	0.8289	0.8299	0.8309
3.5	0.8221	0.8231	0.8241	0.8252	0.8262	0.8272	0.8282	0.8292	0.8302	0.8312
4.0	0.8225	0.8235	0.8245	0.8255	0.8265	0.8275	0.8285	0.8295	0.8306	0.8316
4.5	0.8228	0.8238	0.8248	0.8258	0.8269	0.8279	0.8289	0.8299	0.8309	0.8319
5.0	0.8232	0.8242	0.8252	0.8262	0.8272	0.8282	0.8292	0.8302	0.8312	0.8322
5.5	0.8235	0.8245	0.8255	0.8265	0.8275	0.8286	0.8296	0.8306	0.8316	0.8326
6.0	0.8238	0.8249	0.8259	0.8269	0.8279	0.8289	0.8299	0.8309	0.8319	0.8329
6.5	0.8242	0.8252	0.8262	0.8272	0.8282	0.8292	0.8302	0.8312	0.8323	0.8333
7.0	0.8245	0.8255	0.8266	0.8276	0.8286	0.8296	0.8306	0.8316	0.8326	0.8336
7.5	0.8249	0.8259	0.8269	0.8279	0.8289	0.8299	0.8309	0.8319	0.8329	0.8339
8.0	0.8252	0.8262	0.8272	0.8282	0.8293	0.8303	0.8313	0.8323	0.8333	0.8343
8.5	0.8256	0.8266	0.8276	0.8286	0.8296	0.8306	0.8316	0.8326	0.8336	0.8346
9.0	0.8259	0.8269	0.8279	0.8289	0.8299	0.8309	0.8319	0.8329	0.8340	0.8350
9.5	0.8263	0.8273	0.8283	0.8293	0.8303	0.8313	0.8323	0.8333	0.8343	0.8353
10.0	0.8266	0.8276	0.8286	0.8296	0.8306	0.8316	0.8326	0.8336	0.8346	0.8356
10.5	0.8269	0.8279	0.8289	0.8300	0.8310	0.8320	0.8330	0.8340	0.8350	0.8360
11.0	0.8273	0.8283	0.8293	0.8303	0.8313	0.8323	0.8333	0.8343	0.8353	0.8363
11.5	0.8276	0.8286	0.8296	0.8306	0.8316	0.8326	0.8336	0.8346	0.8356	0.8366
12.0	0.8280	0.8290	0.8300	0.8310	0.8320	0.8330	0.8340	0.8350	0.8360	0.8370
12.5	0.8283	0.8293	0.8303	0.8313	0.8323	0.8333	0.8343	0.8353	0.8363	0.8373
13.0	0.8286	0.8296	0.8306	0.8316	0.8327	0.8337	0.8347	0.8357	0.8367	0.8377
13.5	0.8290	0.8300	0.8310	0.8320	0.8330	0.8340	0.8350	0.8360	0.8370	0.8380
14.0	0.8293	0.8303	0.8313	0.8323	0.8333	0.8343	0.8353	0.8363	0.8373	0.8383
14.5	0.8297	0.8307	0.8317	0.8327	0.8337	0.8347	0.8357	0.8367	0.8377	0.8387
15.0	0.8300	0.8310	0.8320	0.8330	0.8340	0.8350	0.8360	0.8370	0.8380	0.8390
15.5	0.8303	0.8313	0.8323	0.8333	0.8343	0.8353	0.8363	0.8373	0.8383	0.8393
16.0	0.8307	0.8317	0.8327	0.8337	0.8347	0.8357	0.8367	0.8377	0.8387	0.8397
16.5	0.8310	0.8320	0.8330	0.8340	0.8350	0.8360	0.8370	0.8380	0.8390	0.8400
17.0	0.8314	0.8324	0.8333	0.8343	0.8353	0.8363	0.8373	0.8383	0.8393	0.8403
17.5	0.8317	0.8327	0.8337	0.8347	0.8357	0.8367	0.8377	0.8387	0.8397	0.8407
18.0	0.8320	0.8330	0.8340	0.8350	0.8360	0.8370	0.8380	0.8390	0.8400	0.8410
18.5	0.8324	0.8334	0.8344	0.8354	0.8364	0.8374	0.8383	0.8393	0.8403	0.8413
19.0	0.8327	0.8337	0.8347	0.8357	0.8367	0.8377	0.8387	0.8397	0.8407	0.8417
19.5	0.8330	0.8340	0.8350	0.8360	0.8370	0.8380	0.8390	0.8400	0.8410	0.8420
20.0	0.8334	0.8344	0.8354	0.8364	0.8374	0.8384	0.8393	0.8403	0.8413	0.8423
20.5	0.8337	0.8347	0.8357	0.8367	0.8377	0.8387	0.8397	0.8407	0.8417	0.8427
21.0	0.8340	0.8350	0.8360	0.8370	0.8380	0.8390	0.8400	0.8410	0.8420	0.8430
21.5	0.8344	0.8354	0.8364	0.8374	0.8384	0.8394	0.8403	0.8413	0.8423	0.8433
22.0	0.8347	0.8357	0.8367	0.8377	0.8387	0.8397	0.8407	0.8417	0.8427	0.8437
22.5	0.8350	0.8360	0.8370	0.8380	0.8390	0.8400	0.8410	0.8420	0.8430	0.8440
23.0	0.8354	0.8364	0.8374	0.8384	0.8394	0.8403	0.8413	0.8423	0.8433	0.8443
23.5	0.8357	0.8367	0.8377	0.8387	0.8397	0.8407	0.8417	0.8427	0.8437	0.8447
24.0	0.8360	0.8370	0.8380	0.8390	0.8400	0.8410	0.8420	0.8430	0.8440	0.8450
24.5	0.8364	0.8374	0.8384	0.8394	0.8404	0.8413	0.8423	0.8433	0.8443	0.8453
25.0	0.8367	0.8377	0.8387	0.8397	0.8407	0.8417	0.8427	0.8437	0.8447	0.8456

Table 53
*** Density Reduction to 15°C**
0.830 - 0.839
25 - 50 °C

Observed Temperature °C	Observed Density									
	0.830	0.831	0.832	0.833	0.834	0.835	0.836	0.837	0.838	0.839
	Corresponding Density 15°C									
25.0	0.8367	0.8377	0.8387	0.8397	0.8407	0.8417	0.8427	0.8437	0.8447	0.8456
25.5	0.8370	0.8380	0.8390	0.8400	0.8410	0.8420	0.8430	0.8440	0.8450	0.8460
26.0	0.8374	0.8384	0.8394	0.8404	0.8413	0.8423	0.8433	0.8443	0.8453	0.8463
26.5	0.8377	0.8387	0.8397	0.8407	0.8417	0.8427	0.8437	0.8446	0.8456	0.8466
27.0	0.8380	0.8390	0.8400	0.8410	0.8420	0.8430	0.8440	0.8450	0.8460	0.8470
27.5	0.8384	0.8394	0.8404	0.8413	0.8423	0.8433	0.8443	0.8453	0.8463	0.8473
28.0	0.8387	0.8397	0.8407	0.8417	0.8427	0.8437	0.8446	0.8456	0.8466	0.8476
28.5	0.8390	0.8400	0.8410	0.8420	0.8430	0.8440	0.8450	0.8460	0.8470	0.8479
29.0	0.8394	0.8404	0.8413	0.8423	0.8433	0.8443	0.8453	0.8463	0.8473	0.8483
29.5	0.8397	0.8407	0.8417	0.8427	0.8437	0.8446	0.8456	0.8466	0.8476	0.8486
30.0	0.8400	0.8410	0.8420	0.8430	0.8440	0.8450	0.8460	0.8469	0.8479	0.8489
30.5	0.8404	0.8413	0.8423	0.8433	0.8443	0.8453	0.8463	0.8473	0.8483	0.8492
31.0	0.8407	0.8417	0.8427	0.8436	0.8446	0.8456	0.8466	0.8476	0.8486	0.8496
31.5	0.8410	0.8420	0.8430	0.8440	0.8450	0.8460	0.8469	0.8479	0.8489	0.8499
32.0	0.8413	0.8423	0.8433	0.8443	0.8453	0.8463	0.8473	0.8483	0.8492	0.8502
32.5	0.8417	0.8427	0.8436	0.8446	0.8456	0.8466	0.8476	0.8486	0.8496	0.8505
33.0	0.8420	0.8430	0.8440	0.8450	0.8459	0.8469	0.8479	0.8489	0.8499	0.8509
33.5	0.8423	0.8433	0.8443	0.8453	0.8463	0.8473	0.8482	0.8492	0.8502	0.8512
34.0	0.8427	0.8436	0.8446	0.8456	0.8466	0.8476	0.8486	0.8496	0.8505	0.8515
34.5	0.8430	0.8440	0.8450	0.8459	0.8469	0.8479	0.8489	0.8499	0.8509	0.8518
35.0	0.8433	0.8443	0.8453	0.8463	0.8472	0.8482	0.8492	0.8502	0.8512	0.8522
35.5	0.8436	0.8446	0.8456	0.8466	0.8476	0.8486	0.8495	0.8505	0.8515	0.8525
36.0	0.8440	0.8449	0.8459	0.8469	0.8479	0.8489	0.8499	0.8508	0.8518	0.8528
36.5	0.8443	0.8453	0.8463	0.8472	0.8482	0.8492	0.8502	0.8512	0.8522	0.8531
37.0	0.8446	0.8456	0.8466	0.8476	0.8485	0.8495	0.8505	0.8515	0.8525	0.8535
37.5	0.8449	0.8459	0.8469	0.8479	0.8489	0.8498	0.8508	0.8518	0.8528	0.8538
38.0	0.8453	0.8462	0.8472	0.8482	0.8492	0.8502	0.8512	0.8521	0.8531	0.8541
38.5	0.8456	0.8466	0.8476	0.8485	0.8495	0.8505	0.8515	0.8525	0.8535	0.8544
39.0	0.8459	0.8469	0.8479	0.8489	0.8498	0.8508	0.8518	0.8528	0.8538	0.8548
39.5	0.8462	0.8472	0.8482	0.8492	0.8502	0.8511	0.8521	0.8531	0.8541	0.8551
40.0	0.8466	0.8475	0.8485	0.8495	0.8505	0.8515	0.8524	0.8534	0.8544	0.8554
40.5	0.8469	0.8479	0.8488	0.8498	0.8508	0.8518	0.8528	0.8538	0.8547	0.8557
41.0	0.8472	0.8482	0.8492	0.8501	0.8511	0.8521	0.8531	0.8541	0.8551	0.8561
41.5	0.8475	0.8485	0.8495	0.8505	0.8514	0.8524	0.8534	0.8544	0.8554	0.8564
42.0	0.8479	0.8488	0.8498	0.8508	0.8518	0.8528	0.8537	0.8547	0.8557	0.8567
42.5	0.8482	0.8492	0.8501	0.8511	0.8521	0.8531	0.8541	0.8550	0.8560	0.8570
43.0	0.8485	0.8495	0.8504	0.8514	0.8524	0.8534	0.8544	0.8554	0.8564	0.8573
43.5	0.8488	0.8498	0.8508	0.8518	0.8527	0.8537	0.8547	0.8557	0.8567	0.8577
44.0	0.8491	0.8501	0.8511	0.8521	0.8531	0.8540	0.8550	0.8560	0.8570	0.8580
44.5	0.8494	0.8504	0.8514	0.8524	0.8534	0.8544	0.8553	0.8563	0.8573	0.8583
45.0	0.8498	0.8508	0.8517	0.8527	0.8537	0.8547	0.8557	0.8566	0.8576	0.8586
45.5	0.8501	0.8511	0.8521	0.8530	0.8540	0.8550	0.8560	0.8570	0.8580	0.8589
46.0	0.8504	0.8514	0.8524	0.8534	0.8543	0.8553	0.8563	0.8573	0.8583	0.8593
46.5	0.8507	0.8517	0.8527	0.8537	0.8547	0.8556	0.8566	0.8576	0.8586	0.8596
47.0	0.8511	0.8520	0.8530	0.8540	0.8550	0.8560	0.8569	0.8579	0.8589	0.8599
47.5	0.8514	0.8524	0.8533	0.8543	0.8553	0.8563	0.8573	0.8582	0.8592	0.8602
48.0	0.8517	0.8527	0.8537	0.8546	0.8556	0.8566	0.8576	0.8586	0.8595	0.8605
48.5	0.8520	0.8530	0.8540	0.8550	0.8559	0.8569	0.8579	0.8589	0.8599	0.8608
49.0	0.8523	0.8533	0.8543	0.8553	0.8563	0.8572	0.8582	0.8592	0.8602	0.8612
49.5	0.8527	0.8536	0.8546	0.8556	0.8566	0.8576	0.8585	0.8595	0.8605	0.8615
50.0	0.8530	0.8540	0.8549	0.8559	0.8569	0.8579	0.8589	0.8598	0.8608	0.8618

Table 53
Density Reduction to 15°C

ASTM-IP	0.840 - 0.849									
	0 - 25°C									
	Observed Density									
Observed Temperature °C	0.840	0.841	0.842	0.843	0.844	0.845	0.846	0.847	0.848	0.849
	Corresponding Density 15°C									
0.0	0.8298	0.8308	0.8319	0.8329	0.8339	0.8349	0.8359	0.8369	0.8379	0.8389
0.5	0.8302	0.8312	0.8322	0.8332	0.8342	0.8352	0.8362	0.8372	0.8383	0.8393
1.0	0.8305	0.8315	0.8325	0.8335	0.8346	0.8356	0.8366	0.8376	0.8386	0.8396
1.5	0.8309	0.8319	0.8329	0.8339	0.8349	0.8359	0.8369	0.8379	0.8389	0.8399
2.0	0.8312	0.8322	0.8332	0.8342	0.8352	0.8362	0.8373	0.8383	0.8393	0.8403
2.5	0.8315	0.8326	0.8336	0.8346	0.8356	0.8366	0.8376	0.8386	0.8396	0.8406
3.0	0.8319	0.8329	0.8339	0.8349	0.8359	0.8369	0.8379	0.8389	0.8400	0.8410
3.5	0.8322	0.8332	0.8342	0.8353	0.8363	0.8373	0.8383	0.8393	0.8403	0.8413
4.0	0.8326	0.8336	0.8346	0.8356	0.8366	0.8376	0.8386	0.8396	0.8406	0.8416
4.5	0.8329	0.8339	0.8349	0.8359	0.8369	0.8379	0.8390	0.8400	0.8410	0.8420
5.0	0.8332	0.8343	0.8353	0.8363	0.8373	0.8383	0.8393	0.8403	0.8413	0.8423
5.5	0.8336	0.8346	0.8356	0.8366	0.8376	0.8386	0.8396	0.8406	0.8416	0.8427
6.0	0.8339	0.8349	0.8359	0.8369	0.8380	0.8390	0.8400	0.8410	0.8420	0.8430
6.5	0.8343	0.8353	0.8363	0.8373	0.8383	0.8393	0.8403	0.8413	0.8423	0.8433
7.0	0.8346	0.8356	0.8366	0.8376	0.8387	0.8396	0.8406	0.8416	0.8427	0.8437
7.5	0.8349	0.8360	0.8370	0.8380	0.8390	0.8400	0.8410	0.8420	0.8430	0.8440
8.0	0.8353	0.8363	0.8373	0.8383	0.8393	0.8403	0.8413	0.8423	0.8433	0.8443
8.5	0.8356	0.8366	0.8376	0.8386	0.8396	0.8406	0.8417	0.8427	0.8437	0.8447
9.0	0.8360	0.8370	0.8380	0.8390	0.8400	0.8410	0.8420	0.8430	0.8440	0.8450
9.5	0.8363	0.8373	0.8383	0.8393	0.8403	0.8413	0.8423	0.8433	0.8443	0.8453
10.0	0.8366	0.8376	0.8386	0.8396	0.8407	0.8417	0.8427	0.8437	0.8447	0.8457
10.5	0.8370	0.8380	0.8390	0.8400	0.8410	0.8420	0.8430	0.8440	0.8450	0.8460
11.0	0.8373	0.8383	0.8393	0.8403	0.8413	0.8423	0.8433	0.8443	0.8453	0.8463
11.5	0.8377	0.8387	0.8397	0.8407	0.8417	0.8427	0.8437	0.8447	0.8457	0.8467
12.0	0.8380	0.8390	0.8400	0.8410	0.8420	0.8430	0.8440	0.8450	0.8460	0.8470
12.5	0.8383	0.8393	0.8403	0.8413	0.8423	0.8433	0.8443	0.8453	0.8463	0.8473
13.0	0.8387	0.8397	0.8407	0.8417	0.8427	0.8437	0.8447	0.8457	0.8467	0.8477
13.5	0.8390	0.8400	0.8410	0.8420	0.8430	0.8440	0.8450	0.8460	0.8470	0.8480
14.0	0.8393	0.8403	0.8413	0.8423	0.8433	0.8443	0.8453	0.8463	0.8473	0.8483
14.5	0.8397	0.8407	0.8417	0.8427	0.8437	0.8447	0.8457	0.8467	0.8477	0.8487
15.0	0.8400	0.8410	0.8420	0.8430	0.8440	0.8450	0.8460	0.8470	0.8480	0.8490
15.5	0.8403	0.8413	0.8423	0.8433	0.8443	0.8453	0.8463	0.8473	0.8483	0.8493
16.0	0.8407	0.8417	0.8427	0.8437	0.8447	0.8457	0.8467	0.8477	0.8487	0.8497
16.5	0.8410	0.8420	0.8430	0.8440	0.8450	0.8460	0.8470	0.8480	0.8490	0.8500
17.0	0.8413	0.8423	0.8433	0.8443	0.8453	0.8463	0.8473	0.8483	0.8493	0.8503
17.5	0.8417	0.8427	0.8437	0.8447	0.8457	0.8467	0.8477	0.8487	0.8497	0.8507
18.0	0.8420	0.8430	0.8440	0.8450	0.8460	0.8470	0.8480	0.8490	0.8500	0.8510
18.5	0.8423	0.8433	0.8443	0.8453	0.8463	0.8473	0.8483	0.8493	0.8503	0.8513
19.0	0.8427	0.8437	0.8447	0.8457	0.8467	0.8477	0.8487	0.8496	0.8506	0.8516
19.5	0.8430	0.8440	0.8450	0.8460	0.8470	0.8480	0.8490	0.8500	0.8510	0.8520
20.0	0.8433	0.8443	0.8453	0.8463	0.8473	0.8483	0.8493	0.8503	0.8513	0.8523
20.5	0.8437	0.8447	0.8457	0.8467	0.8476	0.8486	0.8496	0.8506	0.8516	0.8526
21.0	0.8440	0.8450	0.8460	0.8470	0.8480	0.8490	0.8500	0.8510	0.8520	0.8530
21.5	0.8443	0.8453	0.8463	0.8473	0.8483	0.8493	0.8503	0.8513	0.8523	0.8533
22.0	0.8447	0.8457	0.8466	0.8476	0.8486	0.8496	0.8506	0.8516	0.8526	0.8536
22.5	0.8450	0.8460	0.8470	0.8480	0.8490	0.8500	0.8510	0.8520	0.8529	0.8539
23.0	0.8453	0.8463	0.8473	0.8483	0.8493	0.8503	0.8513	0.8523	0.8533	0.8543
23.5	0.8456	0.8466	0.8476	0.8486	0.8496	0.8506	0.8516	0.8526	0.8536	0.8546
24.0	0.8460	0.8470	0.8480	0.8490	0.8499	0.8509	0.8519	0.8529	0.8539	0.8549
24.5	0.8463	0.8473	0.8483	0.8493	0.8503	0.8513	0.8523	0.8533	0.8543	0.8553
25.0	0.8466	0.8476	0.8486	0.8496	0.8506	0.8516	0.8526	0.8536	0.8546	0.8556

Table 53
* Density Reduction to 15°C

ASTM-IP	0.840 - 0.849									
	25 - 50 °C									
	Observed Density									
Observed Temperature °C	0.840	0.841	0.842	0.843	0.844	0.845	0.846	0.847	0.848	0.849
	Corresponding Density 15°C									
25.0	0.8466	0.8476	0.8486	0.8496	0.8506	0.8516	0.8526	0.8536	0.8546	0.8556
25.5	0.8470	0.8480	0.8490	0.8499	0.8509	0.8519	0.8529	0.8539	0.8549	0.8559
26.0	0.8473	0.8483	0.8493	0.8503	0.8513	0.8523	0.8532	0.8542	0.8552	0.8562
26.5	0.8476	0.8486	0.8496	0.8506	0.8516	0.8526	0.8536	0.8546	0.8556	0.8566
27.0	0.8480	0.8489	0.8499	0.8509	0.8519	0.8529	0.8539	0.8549	0.8559	0.8569
27.5	0.8483	0.8493	0.8503	0.8512	0.8522	0.8532	0.8542	0.8552	0.8562	0.8572
28.0	0.8486	0.8496	0.8506	0.8516	0.8526	0.8536	0.8546	0.8555	0.8565	0.8575
28.5	0.8489	0.8499	0.8509	0.8519	0.8529	0.8539	0.8549	0.8559	0.8569	0.8579
29.0	0.8493	0.8502	0.8512	0.8522	0.8532	0.8542	0.8552	0.8562	0.8572	0.8582
29.5	0.8496	0.8506	0.8516	0.8526	0.8535	0.8545	0.8555	0.8565	0.8575	0.8585
30.0	0.8499	0.8509	0.8519	0.8529	0.8539	0.8549	0.8559	0.8568	0.8578	0.8588
30.5	0.8502	0.8512	0.8522	0.8532	0.8542	0.8552	0.8562	0.8572	0.8582	0.8592
31.0	0.8506	0.8516	0.8525	0.8535	0.8545	0.8555	0.8565	0.8575	0.8585	0.8595
31.5	0.8509	0.8519	0.8529	0.8539	0.8548	0.8558	0.8568	0.8578	0.8588	0.8598
32.0	0.8512	0.8522	0.8532	0.8542	0.8552	0.8562	0.8572	0.8581	0.8591	0.8601
32.5	0.8515	0.8525	0.8535	0.8545	0.8555	0.8565	0.8575	0.8585	0.8595	0.8604
33.0	0.8519	0.8529	0.8538	0.8548	0.8558	0.8568	0.8578	0.8588	0.8598	0.8608
33.5	0.8522	0.8532	0.8542	0.8552	0.8561	0.8571	0.8581	0.8591	0.8601	0.8611
34.0	0.8525	0.8535	0.8545	0.8555	0.8565	0.8575	0.8584	0.8594	0.8604	0.8614
34.5	0.8528	0.8538	0.8548	0.8558	0.8568	0.8578	0.8588	0.8598	0.8608	0.8617
35.0	0.8532	0.8542	0.8551	0.8561	0.8571	0.8581	0.8591	0.8601	0.8611	0.8621
35.5	0.8535	0.8545	0.8555	0.8565	0.8574	0.8584	0.8594	0.8604	0.8614	0.8624
36.0	0.8538	0.8548	0.8558	0.8568	0.8578	0.8588	0.8597	0.8607	0.8617	0.8627
36.5	0.8541	0.8551	0.8561	0.8571	0.8581	0.8591	0.8601	0.8610	0.8620	0.8630
37.0	0.8545	0.8554	0.8564	0.8574	0.8584	0.8594	0.8604	0.8614	0.8624	0.8633
37.5	0.8548	0.8558	0.8568	0.8577	0.8587	0.8597	0.8607	0.8617	0.8627	0.8637
38.0	0.8551	0.8561	0.8571	0.8581	0.8591	0.8600	0.8610	0.8620	0.8630	0.8640
38.5	0.8554	0.8564	0.8574	0.8584	0.8594	0.8604	0.8613	0.8623	0.8633	0.8643
39.0	0.8557	0.8567	0.8577	0.8587	0.8597	0.8607	0.8617	0.8627	0.8636	0.8646
39.5	0.8561	0.8571	0.8580	0.8590	0.8600	0.8610	0.8620	0.8630	0.8640	0.8649
40.0	0.8564	0.8574	0.8584	0.8594	0.8603	0.8613	0.8623	0.8633	0.8643	0.8653
40.5	0.8567	0.8577	0.8587	0.8597	0.8607	0.8616	0.8626	0.8636	0.8646	0.8656
41.0	0.8570	0.8580	0.8590	0.8600	0.8610	0.8620	0.8629	0.8639	0.8649	0.8659
41.5	0.8574	0.8583	0.8593	0.8603	0.8613	0.8623	0.8633	0.8643	0.8652	0.8662
42.0	0.8577	0.8587	0.8596	0.8606	0.8616	0.8626	0.8636	0.8646	0.8656	0.8665
42.5	0.8580	0.8590	0.8600	0.8610	0.8619	0.8629	0.8639	0.8649	0.8659	0.8669
43.0	0.8583	0.8593	0.8603	0.8613	0.8623	0.8632	0.8642	0.8652	0.8662	0.8672
43.5	0.8586	0.8596	0.8606	0.8616	0.8626	0.8636	0.8645	0.8655	0.8665	0.8675
44.0	0.8590	0.8599	0.8609	0.8619	0.8629	0.8639	0.8649	0.8658	0.8668	0.8678
44.5	0.8593	0.8603	0.8612	0.8622	0.8632	0.8642	0.8652	0.8662	0.8671	0.8681
45.0	0.8596	0.8606	0.8616	0.8625	0.8635	0.8645	0.8655	0.8665	0.8675	0.8684
45.5	0.8599	0.8609	0.8619	0.8629	0.8638	0.8648	0.8658	0.8668	0.8678	0.8688
46.0	0.8602	0.8612	0.8622	0.8632	0.8642	0.8651	0.8661	0.8671	0.8681	0.8691
46.5	0.8606	0.8615	0.8625	0.8635	0.8645	0.8655	0.8664	0.8674	0.8684	0.8694
47.0	0.8609	0.8619	0.8628	0.8638	0.8648	0.8658	0.8668	0.8677	0.8687	0.8697
47.5	0.8612	0.8622	0.8632	0.8641	0.8651	0.8661	0.8671	0.8681	0.8690	0.8700
48.0	0.8615	0.8625	0.8635	0.8645	0.8654	0.8664	0.8674	0.8684	0.8694	0.8703
48.5	0.8618	0.8628	0.8638	0.8648	0.8657	0.8667	0.8677	0.8687	0.8697	0.8707
49.0	0.8621	0.8631	0.8641	0.8651	0.8661	0.8670	0.8680	0.8690	0.8700	0.8710
49.5	0.8625	0.8634	0.8644	0.8654	0.8664	0.8674	0.8683	0.8693	0.8703	0.8713
50.0	0.8628	0.8638	0.8647	0.8657	0.8667	0.8677	0.8687	0.8696	0.8706	0.8716

Table 53
Density Reduction to 15°C

ASTM-IP	0.850 - 0.859									
	0 - 25°C									
	Observed Density									
Observed Temperature °C	0.850	0.851	0.852	0.853	0.854	0.855	0.856	0.857	0.858	0.859
	Corresponding Density 15°C									
0.0	0.8399	0.8409	0.8420	0.8430	0.8440	0.8450	0.8460	0.8470	0.8480	0.8490
0.5	0.8403	0.8413	0.8423	0.8433	0.8443	0.8453	0.8463	0.8474	0.8484	0.8494
1.0	0.8406	0.8416	0.8426	0.8436	0.8447	0.8457	0.8467	0.8477	0.8487	0.8497
1.5	0.8410	0.8420	0.8430	0.8440	0.8450	0.8460	0.8470	0.8480	0.8490	0.8500
2.0	0.8413	0.8423	0.8433	0.8443	0.8453	0.8463	0.8474	0.8484	0.8494	0.8504
2.5	0.8416	0.8426	0.8437	0.8447	0.8457	0.8467	0.8477	0.8487	0.8497	0.8507
3.0	0.8420	0.8430	0.8440	0.8450	0.8460	0.8470	0.8480	0.8490	0.8500	0.8511
3.5	0.8423	0.8433	0.8443	0.8453	0.8463	0.8474	0.8484	0.8494	0.8504	0.8514
4.0	0.8426	0.8437	0.8447	0.8457	0.8467	0.8477	0.8487	0.8497	0.8507	0.8517
4.5	0.8430	0.8440	0.8450	0.8460	0.8470	0.8480	0.8490	0.8500	0.8510	0.8521
5.0	0.8433	0.8443	0.8453	0.8463	0.8474	0.8484	0.8494	0.8504	0.8514	0.8524
5.5	0.8437	0.8447	0.8457	0.8467	0.8477	0.8487	0.8497	0.8507	0.8517	0.8527
6.0	0.8440	0.8450	0.8460	0.8470	0.8480	0.8490	0.8500	0.8510	0.8520	0.8531
6.5	0.8443	0.8453	0.8463	0.8473	0.8484	0.8494	0.8504	0.8514	0.8524	0.8534
7.0	0.8447	0.8457	0.8467	0.8477	0.8487	0.8497	0.8507	0.8517	0.8527	0.8537
7.5	0.8450	0.8460	0.8470	0.8480	0.8490	0.8500	0.8510	0.8520	0.8530	0.8540
8.0	0.8453	0.8463	0.8473	0.8484	0.8494	0.8504	0.8514	0.8524	0.8534	0.8544
8.5	0.8457	0.8467	0.8477	0.8487	0.8497	0.8507	0.8517	0.8527	0.8537	0.8547
9.0	0.8460	0.8470	0.8480	0.8490	0.8500	0.8510	0.8520	0.8530	0.8540	0.8550
9.5	0.8463	0.8473	0.8483	0.8494	0.8504	0.8514	0.8524	0.8534	0.8544	0.8554
10.0	0.8467	0.8477	0.8487	0.8497	0.8507	0.8517	0.8527	0.8537	0.8547	0.8557
10.5	0.8470	0.8480	0.8490	0.8500	0.8510	0.8520	0.8530	0.8540	0.8550	0.8560
11.0	0.8473	0.8483	0.8493	0.8504	0.8514	0.8524	0.8534	0.8544	0.8554	0.8564
11.5	0.8477	0.8487	0.8497	0.8507	0.8517	0.8527	0.8537	0.8547	0.8557	0.8567
12.0	0.8480	0.8490	0.8500	0.8510	0.8520	0.8530	0.8540	0.8550	0.8560	0.8570
12.5	0.8483	0.8493	0.8503	0.8513	0.8523	0.8534	0.8544	0.8554	0.8564	0.8574
13.0	0.8487	0.8497	0.8507	0.8517	0.8527	0.8537	0.8547	0.8557	0.8567	0.8577
13.5	0.8490	0.8500	0.8510	0.8520	0.8530	0.8540	0.8550	0.8560	0.8570	0.8580
14.0	0.8493	0.8503	0.8513	0.8523	0.8533	0.8543	0.8553	0.8563	0.8573	0.8583
14.5	0.8497	0.8507	0.8517	0.8527	0.8537	0.8547	0.8557	0.8567	0.8577	0.8587
15.0	0.8500	0.8510	0.8520	0.8530	0.8540	0.8550	0.8560	0.8570	0.8580	0.8590
15.5	0.8503	0.8513	0.8523	0.8533	0.8543	0.8553	0.8563	0.8573	0.8583	0.8593
16.0	0.8507	0.8517	0.8527	0.8537	0.8547	0.8557	0.8567	0.8577	0.8587	0.8597
16.5	0.8510	0.8520	0.8530	0.8540	0.8550	0.8560	0.8570	0.8580	0.8590	0.8600
17.0	0.8513	0.8523	0.8533	0.8543	0.8553	0.8563	0.8573	0.8583	0.8593	0.8603
17.5	0.8517	0.8527	0.8536	0.8546	0.8556	0.8566	0.8576	0.8586	0.8596	0.8606
18.0	0.8520	0.8530	0.8540	0.8550	0.8560	0.8570	0.8580	0.8590	0.8600	0.8610
18.5	0.8523	0.8533	0.8543	0.8553	0.8563	0.8573	0.8583	0.8593	0.8603	0.8613
19.0	0.8526	0.8536	0.8546	0.8556	0.8566	0.8576	0.8586	0.8596	0.8606	0.8616
19.5	0.8530	0.8540	0.8550	0.8560	0.8570	0.8580	0.8590	0.8600	0.8610	0.8619
20.0	0.8533	0.8543	0.8553	0.8563	0.8573	0.8583	0.8593	0.8603	0.8613	0.8623
20.5	0.8536	0.8546	0.8556	0.8566	0.8576	0.8586	0.8596	0.8606	0.8616	0.8626
21.0	0.8540	0.8550	0.8559	0.8569	0.8579	0.8589	0.8599	0.8609	0.8619	0.8629
21.5	0.8543	0.8553	0.8563	0.8573	0.8583	0.8593	0.8603	0.8613	0.8623	0.8633
22.0	0.8546	0.8556	0.8566	0.8576	0.8586	0.8596	0.8606	0.8616	0.8626	0.8636
22.5	0.8549	0.8559	0.8569	0.8579	0.8589	0.8599	0.8609	0.8619	0.8629	0.8639
23.0	0.8553	0.8563	0.8573	0.8583	0.8592	0.8602	0.8612	0.8622	0.8632	0.8642
23.5	0.8556	0.8566	0.8576	0.8586	0.8596	0.8606	0.8616	0.8626	0.8636	0.8646
24.0	0.8559	0.8569	0.8579	0.8589	0.8599	0.8609	0.8619	0.8629	0.8639	0.8649
24.5	0.8562	0.8572	0.8582	0.8592	0.8602	0.8612	0.8622	0.8632	0.8642	0.8652
25.0	0.8566	0.8576	0.8586	0.8596	0.8606	0.8615	0.8625	0.8635	0.8645	0.8655

Table 53
* Density Reduction to 15°C

ASTM-IP	0.850 - 0.859									
	25 - 50 °C									
	Observed Density									
Observed Temperature °C	0.850	0.851	0.852	0.853	0.854	0.855	0.856	0.857	0.858	0.859
	Corresponding Density 15°C									
25.0	0.8566	0.8576	0.8586	0.8596	0.8606	0.8615	0.8625	0.8635	0.8645	0.8655
25.5	0.8569	0.8579	0.8589	0.8599	0.8609	0.8619	0.8629	0.8639	0.8649	0.8658
26.0	0.8572	0.8582	0.8592	0.8602	0.8612	0.8622	0.8632	0.8642	0.8652	0.8662
26.5	0.8576	0.8585	0.8595	0.8605	0.8615	0.8625	0.8635	0.8645	0.8655	0.8665
27.0	0.8579	0.8589	0.8599	0.8609	0.8518	0.8528	0.8538	0.8548	0.8558	0.8568
27.5	0.8582	0.8592	0.8602	0.8612	0.8622	0.8632	0.8642	0.8652	0.8661	0.8671
28.0	0.8585	0.8595	0.8605	0.8615	0.8625	0.8635	0.8645	0.8655	0.8665	0.8675
28.5	0.8588	0.8598	0.8608	0.8618	0.8628	0.8638	0.8648	0.8658	0.8668	0.8678
29.0	0.8592	0.8602	0.8612	0.8622	0.8631	0.8641	0.8651	0.8661	0.8671	0.8681
29.5	0.8595	0.8605	0.8615	0.8625	0.8635	0.8645	0.8655	0.8664	0.8674	0.8684
30.0	0.8598	0.8608	0.8618	0.8628	0.8638	0.8648	0.8658	0.8668	0.8678	0.8687
30.5	0.8601	0.8611	0.8621	0.8631	0.8641	0.8651	0.8661	0.8671	0.8681	0.8691
31.0	0.8605	0.8615	0.8625	0.8634	0.8644	0.8654	0.8664	0.8674	0.8684	0.8694
31.5	0.8608	0.8618	0.8628	0.8638	0.8648	0.8657	0.8667	0.8677	0.8687	0.8697
32.0	0.8611	0.8621	0.8631	0.8641	0.8651	0.8661	0.8671	0.8681	0.8690	0.8700
32.5	0.8614	0.8624	0.8634	0.8644	0.8654	0.8664	0.8674	0.8684	0.8694	0.8704
33.0	0.8618	0.8628	0.8637	0.8647	0.8657	0.8667	0.8677	0.8687	0.8697	0.8707
33.5	0.8621	0.8631	0.8641	0.8651	0.8660	0.8670	0.8680	0.8690	0.8700	0.8710
34.0	0.8624	0.8634	0.8644	0.8654	0.8664	0.8674	0.8683	0.8693	0.8703	0.8713
34.5	0.8627	0.8637	0.8647	0.8657	0.8667	0.8677	0.8687	0.8697	0.8706	0.8716
35.0	0.8630	0.8640	0.8650	0.8660	0.8670	0.8680	0.8690	0.8700	0.8710	0.8719
35.5	0.8634	0.8644	0.8654	0.8663	0.8673	0.8683	0.8693	0.8703	0.8713	0.8723
36.0	0.8637	0.8647	0.8657	0.8667	0.8676	0.8686	0.8696	0.8706	0.8716	0.8726
36.5	0.8640	0.8650	0.8660	0.8670	0.8680	0.8690	0.8699	0.8709	0.8719	0.8729
37.0	0.8643	0.8653	0.8663	0.8673	0.8683	0.8693	0.8703	0.8712	0.8722	0.8732
37.5	0.8647	0.8656	0.8666	0.8676	0.8686	0.8696	0.8706	0.8716	0.8726	0.8735
38.0	0.8650	0.8660	0.8669	0.8679	0.8689	0.8699	0.8709	0.8719	0.8729	0.8739
38.5	0.8653	0.8663	0.8673	0.8683	0.8693	0.8702	0.8712	0.8722	0.8732	0.8742
39.0	0.8656	0.8666	0.8676	0.8686	0.8696	0.8705	0.8715	0.8725	0.8735	0.8745
39.5	0.8659	0.8669	0.8679	0.8689	0.8699	0.8709	0.8718	0.8728	0.8738	0.8748
40.0	0.8663	0.8672	0.8682	0.8692	0.8702	0.8712	0.8722	0.8732	0.8741	0.8751
40.5	0.8666	0.8676	0.8685	0.8695	0.8705	0.8715	0.8725	0.8735	0.8745	0.8755
41.0	0.8669	0.8679	0.8689	0.8698	0.8708	0.8718	0.8728	0.8738	0.8748	0.8758
41.5	0.8672	0.8682	0.8692	0.8702	0.8711	0.8721	0.8731	0.8741	0.8751	0.8761
42.0	0.8675	0.8685	0.8695	0.8705	0.8715	0.8724	0.8734	0.8744	0.8754	0.8764
42.5	0.8678	0.8688	0.8698	0.8708	0.8718	0.8728	0.8737	0.8747	0.8757	0.8767
43.0	0.8682	0.8691	0.8701	0.8711	0.8721	0.8731	0.8741	0.8751	0.8760	0.8770
43.5	0.8685	0.8695	0.8704	0.8714	0.8724	0.8734	0.8744	0.8754	0.8764	0.8774
44.0	0.8688	0.8698	0.8708	0.8717	0.8727	0.8737	0.8747	0.8757	0.8767	0.8777
44.5	0.8691	0.8701	0.8711	0.8721	0.8730	0.8740	0.8750	0.8760	0.8770	0.8780
45.0	0.8694	0.8704	0.8714	0.8724	0.8734	0.8743	0.8753	0.8763	0.8773	0.8783
45.5	0.8697	0.8707	0.8717	0.8727	0.8737	0.8747	0.8757	0.8766	0.8776	0.8786
46.0	0.8701	0.8710	0.8720	0.8730	0.8740	0.8750	0.8760	0.8770	0.8779	0.8789
46.5	0.8704	0.8714	0.8723	0.8733	0.8743	0.8753	0.8763	0.8773	0.8783	0.8793
47.0	0.8707	0.8717	0.8727	0.8736	0.8746	0.8756	0.8766	0.8776	0.8786	0.8796
47.5	0.8710	0.8720	0.8730	0.8739	0.8749	0.8759	0.8769	0.8779	0.8789	0.8799
48.0	0.8713	0.8723	0.8733	0.8743	0.8753	0.8762	0.8772	0.8782	0.8792	0.8802
48.5	0.8716	0.8726	0.8736	0.8746	0.8756	0.8766	0.8775	0.8785	0.8795	0.8805
49.0	0.8719	0.8729	0.8739	0.8749	0.8759	0.8769	0.8779	0.8789	0.8798	0.8808
49.5	0.8723	0.8732	0.8742	0.8752	0.8762	0.8772	0.8782	0.8792	0.8802	0.8811
50.0	0.8726	0.8736	0.8745	0.8755	0.8765	0.8775	0.8785	0.8795	0.8805	0.8815

Table 53
Density Reduction to 15°C

ASTM-IP	0.860 - 0.869									
	0 - 25°C									
Observed Temperature °C	Observed Density									
	0.860	0.861	0.862	0.863	0.864	0.865	0.866	0.867	0.868	0.869
	Corresponding Density 15°C									
0.0	0.8500	0.8511	0.8521	0.8531	0.8541	0.8551	0.8561	0.8571	0.8581	0.8591
0.5	0.8504	0.8514	0.8524	0.8534	0.8544	0.8554	0.8564	0.8574	0.8584	0.8595
1.0	0.8507	0.8517	0.8527	0.8537	0.8548	0.8558	0.8568	0.8578	0.8588	0.8598
1.5	0.8511	0.8521	0.8531	0.8541	0.8551	0.8561	0.8571	0.8581	0.8591	0.8601
2.0	0.8514	0.8524	0.8534	0.8544	0.8554	0.8564	0.8574	0.8584	0.8594	0.8605
2.5	0.8517	0.8527	0.8537	0.8547	0.8557	0.8568	0.8578	0.8588	0.8598	0.8608
3.0	0.8521	0.8531	0.8541	0.8551	0.8561	0.8571	0.8581	0.8591	0.8601	0.8611
3.5	0.8524	0.8534	0.8544	0.8554	0.8564	0.8574	0.8584	0.8594	0.8604	0.8614
4.0	0.8527	0.8537	0.8547	0.8557	0.8567	0.8578	0.8588	0.8598	0.8608	0.8618
4.5	0.8531	0.8541	0.8551	0.8561	0.8571	0.8581	0.8591	0.8601	0.8611	0.8621
5.0	0.8534	0.8544	0.8554	0.8564	0.8574	0.8584	0.8594	0.8604	0.8614	0.8624
5.5	0.8537	0.8547	0.8557	0.8567	0.8577	0.8587	0.8598	0.8608	0.8618	0.8628
6.0	0.8541	0.8551	0.8561	0.8571	0.8581	0.8591	0.8601	0.8611	0.8621	0.8631
6.5	0.8544	0.8554	0.8564	0.8574	0.8584	0.8594	0.8604	0.8614	0.8624	0.8634
7.0	0.8547	0.8557	0.8567	0.8577	0.8587	0.8597	0.8607	0.8617	0.8628	0.8638
7.5	0.8551	0.8561	0.8571	0.8581	0.8591	0.8601	0.8611	0.8621	0.8631	0.8641
8.0	0.8554	0.8564	0.8574	0.8584	0.8594	0.8604	0.8614	0.8624	0.8634	0.8644
8.5	0.8557	0.8567	0.8577	0.8587	0.8597	0.8607	0.8617	0.8627	0.8637	0.8647
9.0	0.8560	0.8570	0.8581	0.8591	0.8601	0.8611	0.8621	0.8631	0.8641	0.8651
9.5	0.8564	0.8574	0.8584	0.8594	0.8604	0.8614	0.8624	0.8634	0.8644	0.8654
10.0	0.8567	0.8577	0.8587	0.8597	0.8607	0.8617	0.8627	0.8637	0.8647	0.8657
10.5	0.8570	0.8580	0.8590	0.8600	0.8610	0.8620	0.8631	0.8641	0.8651	0.8661
11.0	0.8574	0.8584	0.8594	0.8604	0.8614	0.8624	0.8634	0.8644	0.8654	0.8664
11.5	0.8577	0.8587	0.8597	0.8607	0.8617	0.8627	0.8637	0.8647	0.8657	0.8667
12.0	0.8580	0.8590	0.8600	0.8610	0.8620	0.8630	0.8640	0.8650	0.8660	0.8670
12.5	0.8584	0.8594	0.8604	0.8614	0.8624	0.8634	0.8644	0.8654	0.8664	0.8674
13.0	0.8587	0.8597	0.8607	0.8617	0.8627	0.8637	0.8647	0.8657	0.8667	0.8677
13.5	0.8590	0.8600	0.8610	0.8620	0.8630	0.8640	0.8650	0.8660	0.8670	0.8680
14.0	0.8593	0.8603	0.8613	0.8623	0.8633	0.8643	0.8653	0.8663	0.8673	0.8683
14.5	0.8597	0.8607	0.8617	0.8627	0.8637	0.8647	0.8657	0.8667	0.8677	0.8687
15.0	0.8600	0.8610	0.8620	0.8630	0.8640	0.8650	0.8660	0.8670	0.8680	0.8690
15.5	0.8603	0.8613	0.8623	0.8633	0.8643	0.8653	0.8663	0.8673	0.8683	0.8693
16.0	0.8607	0.8617	0.8627	0.8637	0.8647	0.8657	0.8667	0.8677	0.8687	0.8697
16.5	0.8610	0.8620	0.8630	0.8640	0.8650	0.8660	0.8670	0.8680	0.8690	0.8700
17.0	0.8613	0.8623	0.8633	0.8643	0.8653	0.8663	0.8673	0.8683	0.8693	0.8703
17.5	0.8616	0.8626	0.8636	0.8646	0.8656	0.8666	0.8676	0.8686	0.8696	0.8706
18.0	0.8620	0.8630	0.8640	0.8650	0.8660	0.8670	0.8680	0.8690	0.8700	0.8710
18.5	0.8623	0.8633	0.8643	0.8653	0.8663	0.8673	0.8683	0.8693	0.8703	0.8713
19.0	0.8626	0.8636	0.8646	0.8656	0.8666	0.8676	0.8686	0.8696	0.8706	0.8716
19.5	0.8629	0.8639	0.8649	0.8659	0.8669	0.8679	0.8689	0.8699	0.8709	0.8719
20.0	0.8633	0.8643	0.8653	0.8663	0.8673	0.8683	0.8693	0.8703	0.8713	0.8722
20.5	0.8636	0.8646	0.8656	0.8666	0.8676	0.8686	0.8696	0.8706	0.8716	0.8726
21.0	0.8639	0.8649	0.8659	0.8669	0.8679	0.8689	0.8699	0.8709	0.8719	0.8729
21.5	0.8642	0.8652	0.8662	0.8672	0.8682	0.8692	0.8702	0.8712	0.8722	0.8732
22.0	0.8646	0.8656	0.8666	0.8676	0.8686	0.8696	0.8706	0.8715	0.8725	0.8735
22.5	0.8649	0.8659	0.8669	0.8679	0.8689	0.8699	0.8709	0.8719	0.8729	0.8739
23.0	0.8652	0.8662	0.8672	0.8682	0.8692	0.8702	0.8712	0.8722	0.8732	0.8742
23.5	0.8655	0.8665	0.8675	0.8685	0.8695	0.8705	0.8715	0.8725	0.8735	0.8745
24.0	0.8659	0.8669	0.8679	0.8688	0.8699	0.8708	0.8718	0.8728	0.8738	0.8748
24.5	0.8662	0.8672	0.8682	0.8692	0.8702	0.8712	0.8722	0.8732	0.8742	0.8752
25.0	0.8665	0.8675	0.8685	0.8695	0.8705	0.8715	0.8725	0.8735	0.8745	0.8755

Table 53
* Density Reduction to 15°C

ASTM-IP	0.860 - 0.869 25 - 50 °C									
	Observed Density									
Observed Temperature °C	0.860	0.861	0.862	0.863	0.864	0.865	0.866	0.867	0.868	0.869
	Corresponding Density 15°C									
25.0	0.8665	0.8675	0.8685	0.8695	0.8705	0.8715	0.8725	0.8735	0.8745	0.8755
25.5	0.8668	0.8678	0.8688	0.8698	0.8708	0.8718	0.8728	0.8738	0.8748	0.8758
26.0	0.8672	0.8682	0.8692	0.8701	0.8711	0.8721	0.8731	0.8741	0.8751	0.8761
26.5	0.8675	0.8685	0.8695	0.8705	0.8715	0.8725	0.8735	0.8744	0.8754	0.8764
27.0	0.8678	0.8688	0.8698	0.8708	0.8718	0.8728	0.8738	0.8748	0.8758	0.8768
27.5	0.8681	0.8691	0.8701	0.8711	0.8721	0.8731	0.8741	0.8751	0.8761	0.8771
28.0	0.8685	0.8694	0.8704	0.8714	0.8724	0.8734	0.8744	0.8754	0.8764	0.8774
28.5	0.8688	0.8698	0.8708	0.8718	0.8727	0.8737	0.8747	0.8757	0.8767	0.8777
29.0	0.8691	0.8701	0.8711	0.8721	0.8731	0.8741	0.8751	0.8761	0.8770	0.8780
29.5	0.8694	0.8704	0.8714	0.8724	0.8734	0.8744	0.8754	0.8764	0.8774	0.8784
30.0	0.8697	0.8707	0.8717	0.8727	0.8737	0.8747	0.8757	0.8767	0.8777	0.8787
30.5	0.8701	0.8711	0.8720	0.8730	0.8740	0.8750	0.8760	0.8770	0.8780	0.8790
31.0	0.8704	0.8714	0.8724	0.8734	0.8743	0.8753	0.8763	0.8773	0.8783	0.8793
31.5	0.8707	0.8717	0.8727	0.8737	0.8747	0.8757	0.8767	0.8777	0.8786	0.8796
32.0	0.8710	0.8720	0.8730	0.8740	0.8750	0.8760	0.8770	0.8780	0.8790	0.8800
32.5	0.8713	0.8723	0.8733	0.8743	0.8753	0.8763	0.8773	0.8783	0.8793	0.8803
33.0	0.8717	0.8727	0.8736	0.8746	0.8756	0.8766	0.8776	0.8786	0.8796	0.8806
33.5	0.8720	0.8730	0.8740	0.8750	0.8759	0.8769	0.8779	0.8789	0.8799	0.8809
34.0	0.8723	0.8733	0.8743	0.8753	0.8763	0.8773	0.8783	0.8792	0.8802	0.8812
34.5	0.8726	0.8736	0.8746	0.8756	0.8766	0.8776	0.8786	0.8796	0.8806	0.8816
35.0	0.8729	0.8739	0.8749	0.8759	0.8769	0.8779	0.8789	0.8799	0.8809	0.8819
35.5	0.8733	0.8742	0.8752	0.8762	0.8772	0.8782	0.8792	0.8802	0.8812	0.8822
36.0	0.8736	0.8746	0.8756	0.8766	0.8775	0.8785	0.8795	0.8805	0.8815	0.8825
36.5	0.8739	0.8749	0.8759	0.8769	0.8779	0.8789	0.8798	0.8808	0.8818	0.8828
37.0	0.8742	0.8752	0.8762	0.8772	0.8782	0.8792	0.8802	0.8812	0.8822	0.8831
37.5	0.8745	0.8755	0.8765	0.8775	0.8785	0.8795	0.8805	0.8815	0.8825	0.8835
38.0	0.8749	0.8758	0.8768	0.8778	0.8788	0.8798	0.8808	0.8818	0.8828	0.8838
38.5	0.8752	0.8762	0.8772	0.8781	0.8791	0.8801	0.8811	0.8821	0.8831	0.8841
39.0	0.8755	0.8765	0.8775	0.8785	0.8795	0.8804	0.8814	0.8824	0.8834	0.8844
39.5	0.8758	0.8768	0.8778	0.8788	0.8798	0.8808	0.8818	0.8827	0.8837	0.8847
40.0	0.8761	0.8771	0.8781	0.8791	0.8801	0.8811	0.8821	0.8831	0.8841	0.8850
40.5	0.8764	0.8774	0.8784	0.8794	0.8804	0.8814	0.8824	0.8834	0.8844	0.8854
41.0	0.8768	0.8777	0.8787	0.8797	0.8807	0.8817	0.8827	0.8837	0.8847	0.8857
41.5	0.8771	0.8781	0.8791	0.8800	0.8810	0.8820	0.8830	0.8840	0.8850	0.8860
42.0	0.8774	0.8784	0.8794	0.8804	0.8814	0.8823	0.8833	0.8843	0.8853	0.8863
42.5	0.8777	0.8787	0.8797	0.8807	0.8817	0.8827	0.8837	0.8846	0.8856	0.8866
43.0	0.8780	0.8790	0.8800	0.8810	0.8820	0.8830	0.8840	0.8850	0.8859	0.8869
43.5	0.8783	0.8793	0.8803	0.8813	0.8823	0.8833	0.8843	0.8853	0.8863	0.8873
44.0	0.8787	0.8796	0.8806	0.8816	0.8826	0.8836	0.8846	0.8856	0.8866	0.8876
44.5	0.8790	0.8800	0.8810	0.8819	0.8829	0.8839	0.8849	0.8859	0.8869	0.8879
45.0	0.8793	0.8803	0.8813	0.8823	0.8832	0.8842	0.8852	0.8862	0.8872	0.8882
45.5	0.8796	0.8806	0.8816	0.8826	0.8836	0.8846	0.8855	0.8865	0.8875	0.8885
46.0	0.8799	0.8809	0.8819	0.8829	0.8839	0.8849	0.8859	0.8868	0.8878	0.8888
46.5	0.8802	0.8812	0.8822	0.8832	0.8842	0.8852	0.8862	0.8872	0.8881	0.8891
47.0	0.8806	0.8815	0.8825	0.8835	0.8845	0.8855	0.8865	0.8875	0.8885	0.8894
47.5	0.8809	0.8819	0.8828	0.8838	0.8848	0.8858	0.8868	0.8878	0.8888	0.8898
48.0	0.8812	0.8822	0.8832	0.8841	0.8851	0.8861	0.8871	0.8881	0.8891	0.8901
48.5	0.8815	0.8825	0.8835	0.8845	0.8854	0.8864	0.8874	0.8884	0.8894	0.8904
49.0	0.8818	0.8828	0.8838	0.8848	0.8858	0.8868	0.8877	0.8887	0.8897	0.8907
49.5	0.8821	0.8831	0.8841	0.8851	0.8861	0.8871	0.8881	0.8890	0.8900	0.8910
50.0	0.8824	0.8834	0.8844	0.8854	0.8864	0.8874	0.8884	0.8893	0.8903	0.8913

Table 53
* Density Reduction to 15°C

ASTM-IP	0.870 - 0.879 25 - 50 °C									
	Observed Density									
	0.870	0.871	0.872	0.873	0.874	0.875	0.876	0.877	0.878	0.879
	Corresponding Density 15°C									
25.0	0.8765	0.8775	0.8785	0.8795	0.8805	0.8815	0.8824	0.8834	0.8844	0.8854
25.5	0.8768	0.8778	0.8788	0.8798	0.8808	0.8818	0.8828	0.8838	0.8848	0.8857
26.0	0.8771	0.8781	0.8791	0.8801	0.8811	0.8821	0.8831	0.8841	0.8851	0.8861
26.5	0.8774	0.8784	0.8794	0.8804	0.8814	0.8824	0.8834	0.8844	0.8854	0.8864
27.0	0.8778	0.8788	0.8797	0.8807	0.8817	0.8827	0.8837	0.8847	0.8857	0.8867
27.5	0.8781	0.8791	0.8801	0.8811	0.8821	0.8831	0.8841	0.8850	0.8860	0.8870
28.0	0.8784	0.8794	0.8804	0.8814	0.8824	0.8834	0.8844	0.8854	0.8864	0.8874
28.5	0.8787	0.8797	0.8807	0.8817	0.8827	0.8837	0.8847	0.8857	0.8867	0.8877
29.0	0.8790	0.8800	0.8810	0.8820	0.8830	0.8840	0.8850	0.8860	0.8870	0.8880
29.5	0.8794	0.8804	0.8813	0.8823	0.8833	0.8843	0.8853	0.8863	0.8873	0.8883
30.0	0.8797	0.8807	0.8817	0.8827	0.8837	0.8847	0.8856	0.8866	0.8876	0.8886
30.5	0.8800	0.8810	0.8820	0.8830	0.8840	0.8850	0.8860	0.8870	0.8880	0.8889
31.0	0.8803	0.8813	0.8823	0.8833	0.8843	0.8853	0.8863	0.8873	0.8883	0.8893
31.5	0.8806	0.8816	0.8826	0.8836	0.8846	0.8856	0.8866	0.8876	0.8886	0.8896
32.0	0.8810	0.8819	0.8829	0.8839	0.8849	0.8859	0.8869	0.8879	0.8889	0.8899
32.5	0.8813	0.8823	0.8833	0.8843	0.8852	0.8862	0.8872	0.8882	0.8892	0.8902
33.0	0.8816	0.8826	0.8836	0.8846	0.8856	0.8866	0.8876	0.8885	0.8895	0.8905
33.5	0.8819	0.8829	0.8839	0.8849	0.8859	0.8869	0.8879	0.8889	0.8899	0.8909
34.0	0.8822	0.8832	0.8842	0.8852	0.8862	0.8872	0.8882	0.8892	0.8902	0.8912
34.5	0.8825	0.8835	0.8845	0.8855	0.8865	0.8875	0.8885	0.8895	0.8905	0.8915
35.0	0.8829	0.8839	0.8849	0.8858	0.8868	0.8878	0.8888	0.8898	0.8908	0.8918
35.5	0.8832	0.8842	0.8852	0.8862	0.8872	0.8881	0.8891	0.8901	0.8911	0.8921
36.0	0.8835	0.8845	0.8855	0.8865	0.8875	0.8885	0.8895	0.8904	0.8914	0.8924
36.5	0.8838	0.8848	0.8858	0.8868	0.8878	0.8888	0.8898	0.8908	0.8918	0.8928
37.0	0.8841	0.8851	0.8861	0.8871	0.8881	0.8891	0.8901	0.8911	0.8921	0.8931
37.5	0.8845	0.8854	0.8864	0.8874	0.8884	0.8894	0.8904	0.8914	0.8924	0.8934
38.0	0.8848	0.8858	0.8868	0.8877	0.8887	0.8897	0.8907	0.8917	0.8927	0.8937
38.5	0.8851	0.8861	0.8871	0.8881	0.8891	0.8900	0.8910	0.8920	0.8930	0.8940
39.0	0.8854	0.8864	0.8874	0.8884	0.8894	0.8904	0.8914	0.8923	0.8933	0.8943
39.5	0.8857	0.8867	0.8877	0.8887	0.8897	0.8907	0.8917	0.8927	0.8936	0.8946
40.0	0.8860	0.8870	0.8880	0.8890	0.8900	0.8910	0.8920	0.8930	0.8940	0.8950
40.5	0.8864	0.8873	0.8883	0.8893	0.8903	0.8913	0.8923	0.8933	0.8943	0.8953
41.0	0.8867	0.8877	0.8886	0.8896	0.8906	0.8916	0.8926	0.8936	0.8946	0.8956
41.5	0.8870	0.8880	0.8890	0.8900	0.8909	0.8919	0.8929	0.8939	0.8949	0.8959
42.0	0.8873	0.8883	0.8893	0.8903	0.8913	0.8922	0.8932	0.8942	0.8952	0.8962
42.5	0.8876	0.8886	0.8896	0.8906	0.8916	0.8926	0.8936	0.8945	0.8955	0.8965
43.0	0.8879	0.8889	0.8899	0.8909	0.8919	0.8929	0.8939	0.8949	0.8958	0.8968
43.5	0.8882	0.8892	0.8902	0.8912	0.8922	0.8932	0.8942	0.8952	0.8962	0.8971
44.0	0.8886	0.8895	0.8905	0.8915	0.8925	0.8935	0.8945	0.8955	0.8965	0.8975
44.5	0.8889	0.8899	0.8908	0.8918	0.8928	0.8938	0.8948	0.8958	0.8968	0.8978
45.0	0.8892	0.8902	0.8912	0.8922	0.8931	0.8941	0.8951	0.8961	0.8971	0.8981
45.5	0.8895	0.8905	0.8915	0.8925	0.8935	0.8944	0.8954	0.8964	0.8974	0.8984
46.0	0.8898	0.8908	0.8918	0.8928	0.8938	0.8948	0.8957	0.8967	0.8977	0.8987
46.5	0.8901	0.8911	0.8921	0.8931	0.8941	0.8951	0.8961	0.8970	0.8980	0.8990
47.0	0.8904	0.8914	0.8924	0.8934	0.8944	0.8954	0.8964	0.8974	0.8983	0.8993
47.5	0.8907	0.8917	0.8927	0.8937	0.8947	0.8957	0.8967	0.8977	0.8987	0.8996
48.0	0.8911	0.8921	0.8930	0.8940	0.8950	0.8960	0.8970	0.8980	0.8990	0.8999
48.5	0.8914	0.8924	0.8933	0.8943	0.8953	0.8963	0.8973	0.8983	0.8993	0.9003
49.0	0.8917	0.8927	0.8937	0.8946	0.8956	0.8966	0.8976	0.8986	0.8996	0.9006
49.5	0.8920	0.8930	0.8940	0.8950	0.8959	0.8969	0.8979	0.8989	0.8999	0.9009
50.0	0.8923	0.8933	0.8943	0.8953	0.8963	0.8972	0.8982	0.8992	0.9002	0.9012

Table 53
* Density Reduction to 15°C

ASTM-IP

0.880 - 0.889
25 - 50 °C

Observed Temperature °C	Observed Density									
	0.880	0.881	0.882	0.883	0.884	0.885	0.886	0.887	0.888	0.889
	Corresponding Density 15°C									
25.0	0.8864	0.8874	0.8884	0.8894	0.8904	0.8914	0.8924	0.8934	0.8944	0.8954
25.5	0.8868	0.8878	0.8887	0.8897	0.8907	0.8917	0.8927	0.8937	0.8947	0.8957
26.0	0.8871	0.8881	0.8891	0.8901	0.8911	0.8921	0.8931	0.8941	0.8950	0.8960
26.5	0.8874	0.8884	0.8894	0.8904	0.8914	0.8924	0.8934	0.8944	0.8954	0.8964
27.0	0.8877	0.8887	0.8897	0.8907	0.8917	0.8927	0.8937	0.8947	0.8957	0.8967
27.5	0.8880	0.8890	0.8900	0.8910	0.8920	0.8930	0.8940	0.8950	0.8960	0.8970
28.0	0.8884	0.8893	0.8903	0.8913	0.8923	0.8933	0.8943	0.8953	0.8963	0.8973
28.5	0.8887	0.8897	0.8907	0.8917	0.8927	0.8936	0.8946	0.8956	0.8966	0.8976
29.0	0.8890	0.8900	0.8910	0.8920	0.8930	0.8940	0.8950	0.8960	0.8970	0.8979
29.5	0.8893	0.8903	0.8913	0.8923	0.8933	0.8943	0.8953	0.8963	0.8973	0.8983
30.0	0.8896	0.8906	0.8916	0.8926	0.8936	0.8946	0.8956	0.8966	0.8976	0.8986
30.5	0.8899	0.8909	0.8919	0.8929	0.8939	0.8949	0.8959	0.8969	0.8979	0.8989
31.0	0.8903	0.8913	0.8923	0.8932	0.8942	0.8952	0.8962	0.8972	0.8982	0.8992
31.5	0.8906	0.8916	0.8926	0.8936	0.8946	0.8956	0.8965	0.8975	0.8985	0.8995
32.0	0.8909	0.8919	0.8929	0.8939	0.8949	0.8959	0.8969	0.8979	0.8989	0.8998
32.5	0.8912	0.8922	0.8932	0.8942	0.8952	0.8962	0.8972	0.8982	0.8992	0.9002
33.0	0.8915	0.8925	0.8935	0.8945	0.8955	0.8965	0.8975	0.8985	0.8995	0.9005
33.5	0.8918	0.8928	0.8938	0.8948	0.8958	0.8968	0.8978	0.8988	0.8998	0.9008
34.0	0.8922	0.8932	0.8942	0.8951	0.8961	0.8971	0.8981	0.8991	0.9001	0.9011
34.5	0.8925	0.8935	0.8945	0.8955	0.8965	0.8974	0.8984	0.8994	0.9004	0.9014
35.0	0.8928	0.8938	0.8948	0.8958	0.8968	0.8978	0.8988	0.8997	0.9007	0.9017
35.5	0.8931	0.8941	0.8951	0.8961	0.8971	0.8981	0.8991	0.9001	0.9011	0.9021
36.0	0.8934	0.8944	0.8954	0.8964	0.8974	0.8984	0.8994	0.9004	0.9014	0.9024
36.5	0.8937	0.8947	0.8957	0.8967	0.8977	0.8987	0.8997	0.9007	0.9017	0.9027
37.0	0.8941	0.8951	0.8960	0.8970	0.8980	0.8990	0.9000	0.9010	0.9020	0.9030
37.5	0.8944	0.8954	0.8964	0.8974	0.8983	0.8993	0.9003	0.9013	0.9023	0.9033
38.0	0.8947	0.8957	0.8967	0.8977	0.8987	0.8996	0.9006	0.9016	0.9026	0.9036
38.5	0.8950	0.8960	0.8970	0.8980	0.8990	0.9000	0.9010	0.9019	0.9029	0.9039
39.0	0.8953	0.8963	0.8973	0.8983	0.8993	0.9003	0.9013	0.9023	0.9033	0.9043
39.5	0.8956	0.8966	0.8976	0.8986	0.8996	0.9006	0.9016	0.9026	0.9036	0.9046
40.0	0.8959	0.8969	0.8979	0.8989	0.8999	0.9009	0.9019	0.9029	0.9039	0.9049
40.5	0.8963	0.8973	0.8982	0.8992	0.9002	0.9012	0.9022	0.9032	0.9042	0.9052
41.0	0.8966	0.8976	0.8986	0.8995	0.9005	0.9015	0.9025	0.9035	0.9045	0.9055
41.5	0.8969	0.8979	0.8989	0.8999	0.9008	0.9018	0.9028	0.9038	0.9048	0.9058
42.0	0.8972	0.8982	0.8992	0.9002	0.9012	0.9022	0.9032	0.9042	0.9051	0.9061
42.5	0.8975	0.8985	0.8995	0.9005	0.9015	0.9025	0.9035	0.9045	0.9055	0.9065
43.0	0.8978	0.8988	0.8998	0.9008	0.9018	0.9028	0.9038	0.9048	0.9058	0.9068
43.5	0.8981	0.8991	0.9001	0.9011	0.9021	0.9031	0.9041	0.9051	0.9061	0.9071
44.0	0.8985	0.8994	0.9004	0.9014	0.9024	0.9034	0.9044	0.9054	0.9064	0.9074
44.5	0.8988	0.8997	0.9007	0.9017	0.9027	0.9037	0.9047	0.9057	0.9067	0.9077
45.0	0.8991	0.9001	0.9011	0.9020	0.9030	0.9040	0.9050	0.9060	0.9070	0.9080
45.5	0.8994	0.9004	0.9014	0.9024	0.9034	0.9044	0.9053	0.9063	0.9073	0.9083
46.0	0.8997	0.9007	0.9017	0.9027	0.9037	0.9047	0.9057	0.9067	0.9077	0.9086
46.5	0.9000	0.9010	0.9020	0.9030	0.9040	0.9050	0.9060	0.9070	0.9080	0.9090
47.0	0.9003	0.9013	0.9023	0.9033	0.9043	0.9053	0.9063	0.9073	0.9083	0.9093
47.5	0.9006	0.9016	0.9026	0.9036	0.9046	0.9056	0.9066	0.9076	0.9086	0.9096
48.0	0.9009	0.9019	0.9029	0.9039	0.9049	0.9059	0.9069	0.9079	0.9089	0.9099
48.5	0.9013	0.9022	0.9032	0.9042	0.9052	0.9062	0.9072	0.9082	0.9092	0.9102
49.0	0.9016	0.9026	0.9036	0.9046	0.9055	0.9065	0.9075	0.9085	0.9095	0.9105
49.5	0.9019	0.9029	0.9039	0.9049	0.9059	0.9069	0.9078	0.9088	0.9098	0.9108
50.0	0.9022	0.9032	0.9042	0.9052	0.9062	0.9072	0.9082	0.9092	0.9102	0.9111

Table 53
* Density Reduction to 15°C

ASTM-IP

0.890 - 0.899
25 - 50 °C

Observed Temperature °C	Observed Density									
	0.890	0.891	0.892	0.893	0.894	0.895	0.896	0.897	0.898	0.899
	Corresponding Density 15°C									
25.0	0.8964	0.8974	0.8984	0.8994	0.9004	0.9014	0.9024	0.9034	0.9044	0.9054
25.5	0.8967	0.8977	0.8987	0.8997	0.9007	0.9017	0.9027	0.9037	0.9047	0.9057
26.0	0.8970	0.8980	0.8990	0.9000	0.9010	0.9020	0.9030	0.9040	0.9050	0.9060
26.5	0.8974	0.8984	0.8993	0.9003	0.9013	0.9023	0.9033	0.9043	0.9053	0.9063
27.0	0.8977	0.8987	0.8997	0.9007	0.9017	0.9027	0.9037	0.9047	0.9057	0.9067
27.5	0.8980	0.8990	0.9000	0.9010	0.9020	0.9030	0.9040	0.9050	0.9060	0.9070
28.0	0.8983	0.8993	0.9003	0.9013	0.9023	0.9033	0.9043	0.9053	0.9063	0.9073
28.5	0.8986	0.8996	0.9006	0.9016	0.9026	0.9036	0.9046	0.9056	0.9066	0.9076
29.0	0.8989	0.8999	0.9009	0.9019	0.9029	0.9039	0.9049	0.9059	0.9069	0.9079
29.5	0.8993	0.9003	0.9012	0.9022	0.9032	0.9042	0.9052	0.9062	0.9072	0.9082
30.0	0.8996	0.9006	0.9016	0.9026	0.9036	0.9046	0.9056	0.9066	0.9076	0.9086
30.5	0.8999	0.9009	0.9019	0.9029	0.9039	0.9049	0.9059	0.9069	0.9079	0.9089
31.0	0.9002	0.9012	0.9022	0.9032	0.9042	0.9052	0.9062	0.9072	0.9082	0.9092
31.5	0.9005	0.9015	0.9025	0.9035	0.9045	0.9055	0.9065	0.9075	0.9085	0.9095
32.0	0.9008	0.9018	0.9028	0.9038	0.9048	0.9058	0.9068	0.9078	0.9088	0.9098
32.5	0.9012	0.9022	0.9031	0.9041	0.9051	0.9061	0.9071	0.9081	0.9091	0.9101
33.0	0.9015	0.9025	0.9035	0.9045	0.9055	0.9065	0.9075	0.9085	0.9095	0.9105
33.5	0.9018	0.9028	0.9038	0.9048	0.9058	0.9068	0.9078	0.9088	0.9098	0.9108
34.0	0.9021	0.9031	0.9041	0.9051	0.9061	0.9071	0.9081	0.9091	0.9101	0.9111
34.5	0.9024	0.9034	0.9044	0.9054	0.9064	0.9074	0.9084	0.9094	0.9104	0.9114
35.0	0.9027	0.9037	0.9047	0.9057	0.9067	0.9077	0.9087	0.9097	0.9107	0.9117
35.5	0.9030	0.9040	0.9050	0.9060	0.9070	0.9080	0.9090	0.9100	0.9110	0.9120
36.0	0.9034	0.9044	0.9054	0.9064	0.9074	0.9084	0.9094	0.9103	0.9113	0.9123
36.5	0.9037	0.9047	0.9057	0.9067	0.9077	0.9087	0.9097	0.9107	0.9117	0.9127
37.0	0.9040	0.9050	0.9060	0.9070	0.9080	0.9090	0.9100	0.9110	0.9120	0.9130
37.5	0.9043	0.9053	0.9063	0.9073	0.9083	0.9093	0.9103	0.9113	0.9123	0.9133
38.0	0.9046	0.9056	0.9066	0.9076	0.9086	0.9096	0.9106	0.9116	0.9126	0.9136
38.5	0.9049	0.9059	0.9069	0.9079	0.9089	0.9099	0.9109	0.9119	0.9129	0.9139
39.0	0.9053	0.9063	0.9072	0.9082	0.9092	0.9102	0.9112	0.9122	0.9132	0.9142
39.5	0.9056	0.9066	0.9076	0.9086	0.9096	0.9106	0.9116	0.9125	0.9135	0.9145
40.0	0.9059	0.9069	0.9079	0.9089	0.9099	0.9109	0.9119	0.9129	0.9139	0.9149
40.5	0.9062	0.9072	0.9082	0.9092	0.9102	0.9112	0.9122	0.9132	0.9142	0.9152
41.0	0.9065	0.9075	0.9085	0.9095	0.9105	0.9115	0.9125	0.9135	0.9145	0.9155
41.5	0.9068	0.9078	0.9088	0.9098	0.9108	0.9118	0.9128	0.9138	0.9148	0.9158
42.0	0.9071	0.9081	0.9091	0.9101	0.9111	0.9121	0.9131	0.9141	0.9151	0.9161
42.5	0.9075	0.9085	0.9094	0.9104	0.9114	0.9124	0.9134	0.9144	0.9154	0.9164
43.0	0.9078	0.9088	0.9098	0.9108	0.9118	0.9127	0.9137	0.9147	0.9157	0.9167
43.5	0.9081	0.9091	0.9101	0.9111	0.9121	0.9131	0.9141	0.9151	0.9161	0.9170
44.0	0.9084	0.9094	0.9104	0.9114	0.9124	0.9134	0.9144	0.9154	0.9164	0.9174
44.5	0.9087	0.9097	0.9107	0.9117	0.9127	0.9137	0.9147	0.9157	0.9167	0.9177
45.0	0.9090	0.9100	0.9110	0.9120	0.9130	0.9140	0.9150	0.9160	0.9170	0.9180
45.5	0.9093	0.9103	0.9113	0.9123	0.9133	0.9143	0.9153	0.9163	0.9173	0.9183
46.0	0.9096	0.9106	0.9116	0.9126	0.9136	0.9146	0.9156	0.9166	0.9176	0.9186
46.5	0.9099	0.9109	0.9119	0.9129	0.9139	0.9149	0.9159	0.9169	0.9179	0.9189
47.0	0.9103	0.9113	0.9123	0.9133	0.9143	0.9152	0.9162	0.9172	0.9182	0.9192
47.5	0.9106	0.9116	0.9126	0.9136	0.9146	0.9156	0.9166	0.9176	0.9185	0.9195
48.0	0.9109	0.9119	0.9129	0.9139	0.9149	0.9159	0.9169	0.9179	0.9189	0.9199
48.5	0.9112	0.9122	0.9132	0.9142	0.9152	0.9162	0.9172	0.9182	0.9192	0.9202
49.0	0.9115	0.9125	0.9135	0.9145	0.9155	0.9165	0.9175	0.9185	0.9195	0.9205
49.5	0.9118	0.9128	0.9138	0.9148	0.9158	0.9168	0.9178	0.9188	0.9198	0.9208
50.0	0.9121	0.9131	0.9141	0.9151	0.9161	0.9171	0.9181	0.9191	0.9201	0.9211

Table 53
* Density Reduction to 15°C

ASTM-IP	Observed Density									
	25 - 50 °C									
	0.900	0.901	0.902	0.903	0.904	0.905	0.906	0.907	0.908	0.909
	Corresponding Density 15°C									
25.0	0.9064	0.9074	0.9084	0.9094	0.9104	0.9114	0.9124	0.9134	0.9144	0.9154
25.5	0.9067	0.9077	0.9087	0.9097	0.9107	0.9117	0.9127	0.9137	0.9147	0.9157
26.0	0.9070	0.9080	0.9090	0.9100	0.9110	0.9120	0.9130	0.9140	0.9150	0.9160
26.5	0.9073	0.9083	0.9093	0.9103	0.9113	0.9123	0.9133	0.9143	0.9153	0.9163
27.0	0.9077	0.9087	0.9096	0.9106	0.9116	0.9126	0.9136	0.9146	0.9156	0.9166
27.5	0.9080	0.9090	0.9100	0.9110	0.9120	0.9130	0.9140	0.9150	0.9160	0.9170
28.0	0.9083	0.9093	0.9103	0.9113	0.9123	0.9133	0.9143	0.9153	0.9163	0.9173
28.5	0.9086	0.9096	0.9106	0.9116	0.9126	0.9136	0.9146	0.9156	0.9166	0.9176
29.0	0.9089	0.9099	0.9109	0.9119	0.9129	0.9139	0.9149	0.9159	0.9169	0.9179
29.5	0.9092	0.9102	0.9112	0.9122	0.9132	0.9142	0.9152	0.9162	0.9172	0.9182
30.0	0.9096	0.9106	0.9116	0.9125	0.9135	0.9145	0.9155	0.9165	0.9175	0.9185
30.5	0.9099	0.9109	0.9119	0.9129	0.9139	0.9149	0.9159	0.9169	0.9179	0.9189
31.0	0.9102	0.9112	0.9122	0.9132	0.9142	0.9152	0.9162	0.9172	0.9182	0.9192
31.5	0.9105	0.9115	0.9125	0.9135	0.9145	0.9155	0.9165	0.9175	0.9185	0.9195
32.0	0.9108	0.9118	0.9128	0.9138	0.9148	0.9158	0.9168	0.9178	0.9188	0.9198
32.5	0.9111	0.9121	0.9131	0.9141	0.9151	0.9161	0.9171	0.9181	0.9191	0.9201
33.0	0.9114	0.9124	0.9134	0.9144	0.9154	0.9164	0.9174	0.9184	0.9194	0.9204
33.5	0.9118	0.9128	0.9138	0.9148	0.9158	0.9168	0.9178	0.9188	0.9197	0.9207
34.0	0.9121	0.9131	0.9141	0.9151	0.9161	0.9171	0.9181	0.9191	0.9201	0.9211
34.5	0.9124	0.9134	0.9144	0.9154	0.9164	0.9174	0.9184	0.9194	0.9204	0.9214
35.0	0.9127	0.9137	0.9147	0.9157	0.9167	0.9177	0.9187	0.9197	0.9207	0.9217
35.5	0.9130	0.9140	0.9150	0.9160	0.9170	0.9180	0.9190	0.9200	0.9210	0.9220
36.0	0.9133	0.9143	0.9153	0.9163	0.9173	0.9183	0.9193	0.9203	0.9213	0.9223
36.5	0.9137	0.9147	0.9157	0.9166	0.9176	0.9186	0.9196	0.9206	0.9216	0.9226
37.0	0.9140	0.9150	0.9160	0.9170	0.9180	0.9190	0.9200	0.9210	0.9219	0.9229
37.5	0.9143	0.9153	0.9163	0.9173	0.9183	0.9193	0.9203	0.9213	0.9223	0.9233
38.0	0.9146	0.9156	0.9166	0.9176	0.9186	0.9196	0.9206	0.9216	0.9226	0.9236
38.5	0.9149	0.9159	0.9169	0.9179	0.9189	0.9199	0.9209	0.9219	0.9229	0.9239
39.0	0.9152	0.9162	0.9172	0.9182	0.9192	0.9202	0.9212	0.9222	0.9232	0.9242
39.5	0.9155	0.9165	0.9175	0.9185	0.9195	0.9205	0.9215	0.9225	0.9235	0.9245
40.0	0.9159	0.9169	0.9178	0.9188	0.9198	0.9208	0.9218	0.9228	0.9238	0.9248
40.5	0.9162	0.9172	0.9182	0.9192	0.9202	0.9212	0.9221	0.9231	0.9241	0.9251
41.0	0.9165	0.9175	0.9185	0.9195	0.9205	0.9215	0.9225	0.9235	0.9245	0.9255
41.5	0.9168	0.9178	0.9188	0.9198	0.9208	0.9218	0.9228	0.9238	0.9248	0.9258
42.0	0.9171	0.9181	0.9191	0.9201	0.9211	0.9221	0.9231	0.9241	0.9251	0.9261
42.5	0.9174	0.9184	0.9194	0.9204	0.9214	0.9224	0.9234	0.9244	0.9254	0.9264
43.0	0.9177	0.9187	0.9197	0.9207	0.9217	0.9227	0.9237	0.9247	0.9257	0.9267
43.5	0.9180	0.9190	0.9200	0.9210	0.9220	0.9230	0.9240	0.9250	0.9260	0.9270
44.0	0.9184	0.9194	0.9203	0.9213	0.9223	0.9233	0.9243	0.9253	0.9263	0.9273
44.5	0.9187	0.9197	0.9207	0.9217	0.9227	0.9236	0.9246	0.9256	0.9266	0.9276
45.0	0.9190	0.9200	0.9210	0.9220	0.9230	0.9240	0.9250	0.9260	0.9269	0.9279
45.5	0.9193	0.9203	0.9213	0.9223	0.9233	0.9243	0.9253	0.9263	0.9273	0.9283
46.0	0.9196	0.9206	0.9216	0.9226	0.9236	0.9246	0.9256	0.9266	0.9276	0.9286
46.5	0.9199	0.9209	0.9219	0.9229	0.9239	0.9249	0.9259	0.9269	0.9279	0.9289
47.0	0.9202	0.9212	0.9222	0.9232	0.9242	0.9252	0.9262	0.9272	0.9282	0.9292
47.5	0.9205	0.9215	0.9225	0.9235	0.9245	0.9255	0.9265	0.9275	0.9285	0.9295
48.0	0.9208	0.9218	0.9228	0.9238	0.9248	0.9258	0.9268	0.9278	0.9288	0.9298
48.5	0.9212	0.9222	0.9231	0.9241	0.9251	0.9261	0.9271	0.9281	0.9291	0.9301
49.0	0.9215	0.9225	0.9235	0.9245	0.9255	0.9264	0.9274	0.9284	0.9294	0.9304
49.5	0.9218	0.9228	0.9238	0.9248	0.9258	0.9268	0.9278	0.9287	0.9297	0.9307
50.0	0.9221	0.9231	0.9241	0.9251	0.9261	0.9271	0.9281	0.9291	0.9300	0.9310