Compendio de Propiedades
Diagramas de Propiedades de Compuestos Inorgánicos

Objetivo

El presente de trabajo, pretende concentrar la mayor cantidad posible de diagramas que son necesarios para las diversas actividades de la química y que se encuentran presentes en infinidad de bases de datos, lo que muchas veces hace casi imposible localizarlos.

Orden de la Información

La misma se ordena en orden alfabético, según el símbolo químico del elemento más representativo. Por ejemplo, el Cloruro de Sodio, cuya fórmula química es NaCl, podrá encontrarse dentro de la letra N.

Convocatoria

Extiendo una cordial invitación a todos aquellos que quieran participar de ésta tarea "titánica", ya sea colaborando con el aporte de datos, así como entregar su aporte en concentrar los mismos en cada documento.

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Neuquén, Neuquén, Argentina.
Versión Primera - Mayo de 2010.

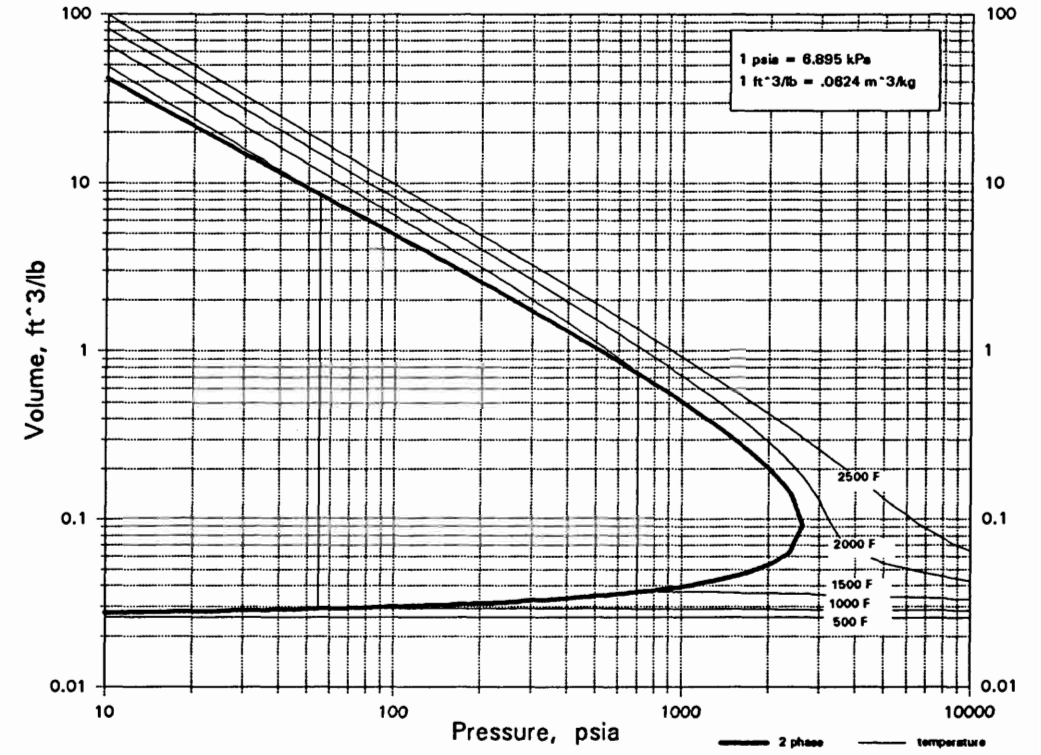
Éste trabajo está dedicado a mi esposa,
Erica, la razón por la que soy.

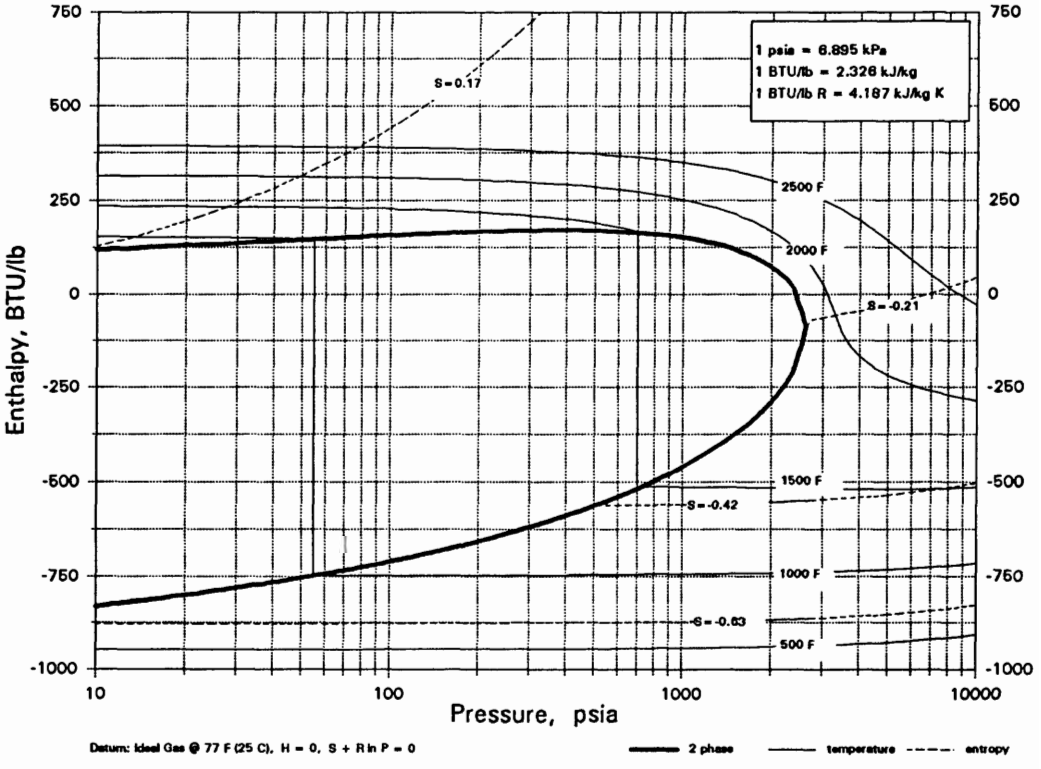
Otros Títulos a Publicar o Publicados

Afinidades Electrónicas y Protónicas de Compuestos Inorgánicos.
Atacabilidad de Compuestos Inorgánicos.
Calor de Vaporización, de Fusión y de Sublimación de Compuestos Inorgánicos.
Capacidad Calorífica de Compuestos Inorgánicos.
Conductividad Térmica de Compuestos Inorgánicos.
Constantes Crioscópicas de Compuestos Inorgánicos.
Constantes Dieléctricas de Compuestos Inorgánicos.
Constantes Críticas de Compuestos Inorgánicos.
Constantes de la Ecuación de Beattie-Bridgman de Compuestos Inorgánicos.
Constantes de la Ecuación de Benedict-Webb-Rubin de Compuestos Inorgánicos.
Constantes de la Ecuación de Van der Waals de Compuestos Inorgánicos.
Densidades de Compuestos Inorgánicos.
Diagramas de Propiedades de Compuestos Inorgánicos – A.
Diagramas de Propiedades de Compuestos Inorgánicos – B.
Diagramas de Propiedades de Compuestos Inorgánicos – C.
Diagramas de Propiedades de Compuestos Inorgánicos – E.
Diagramas de Propiedades de Compuestos Inorgánicos – F.
Diagramas de Propiedades de Compuestos Inorgánicos – G.
Diagramas de Propiedades de Compuestos Inorgánicos – H.
Diagramas de Propiedades de Compuestos Inorgánicos – I.
Diagramas de Propiedades de Compuestos Inorgánicos – K.
Diagramas de Propiedades de Compuestos Inorgánicos – L.
Diagramas de Propiedades de Compuestos Inorgánicos – M.
Diagramas de Propiedades de Compuestos Inorgánicos – N.
Diagramas de Propiedades de Compuestos Inorgánicos – O.
Diagramas de Propiedades de Compuestos Inorgánicos – P.
Diagramas de Propiedades de Compuestos Inorgánicos – R.
Diagramas de Propiedades de Compuestos Inorgánicos – S.
Diagramas de Propiedades de Compuestos Inorgánicos – T.
Diagramas de Propiedades de Compuestos Inorgánicos – U.
Diagramas de Propiedades de Compuestos Inorgánicos – V.
Diagramas de Propiedades de Compuestos Inorgánicos – W.
Diagramas de Propiedades de Compuestos Inorgánicos – X.
Diagramas de Propiedades de Compuestos Inorgánicos – Y.
Diagramas de Propiedades de Compuestos Inorgánicos – Z.
Efecto Joule-Thomson de Compuestos Inorgánicos.
Entalpías, Energías Libres y Entropías de Formación de Compuestos Inorgánicos.
Índices de Refracción de Compuestos Inorgánicos.
Longitud y Ángulos de Enlaces de Compuestos Inorgánicos.
Momentos Dipolares de Compuestos Inorgánicos.
Movilidades Iónicas de Compuestos Inorgánicos.
Tablas de Presiones/Tensiones de Vapor de Compuestos Inorgánicos.
Presiones de Disociación de Compuestos Inorgánicos.
Presiones Parciales de Soluciones de Compuestos Inorgánicos.

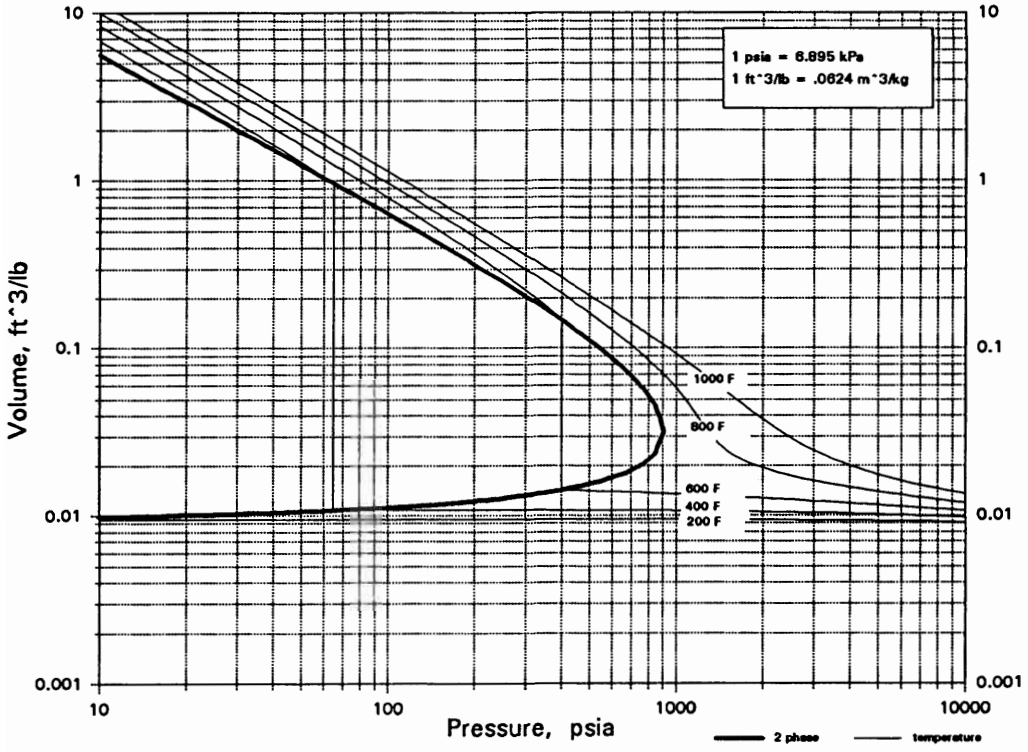
Propiedades a Saturación y Recalentadas de Compuestos Inorgánicos.
Resistencias Eléctricas, Conductividades, Resistividades, etc., de Compuestos Inorgánicos.
Resistencia Mecánica, Módulos, etc., de Compuestos Inorgánicos.
Solubilidades de Compuestos Inorgánicos.
Tablas de Temperatura, Presión, Composición, Coeficientes de Actividad de Sistemas Binarios de Compuestos Inorgánicos.
Tensiones Superficiales de Compuestos Inorgánicos.
Viscosidades de Compuestos Inorgánicos.

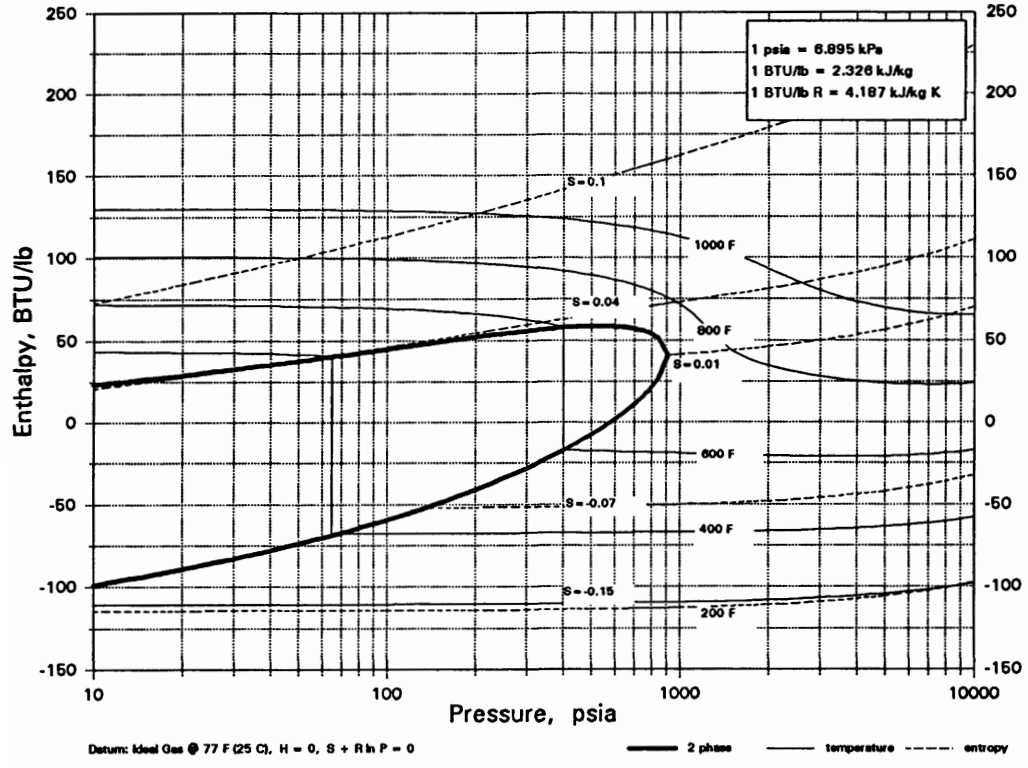
S SULFUR


1 psia = 6.895 kPa
1 ft^3/lb = .0624 m^3/kg
Volume, ft^3/lb
Pressure, psia
2500 F
2000 F
1500 F
1000 F
500 F
2 phase
temperature

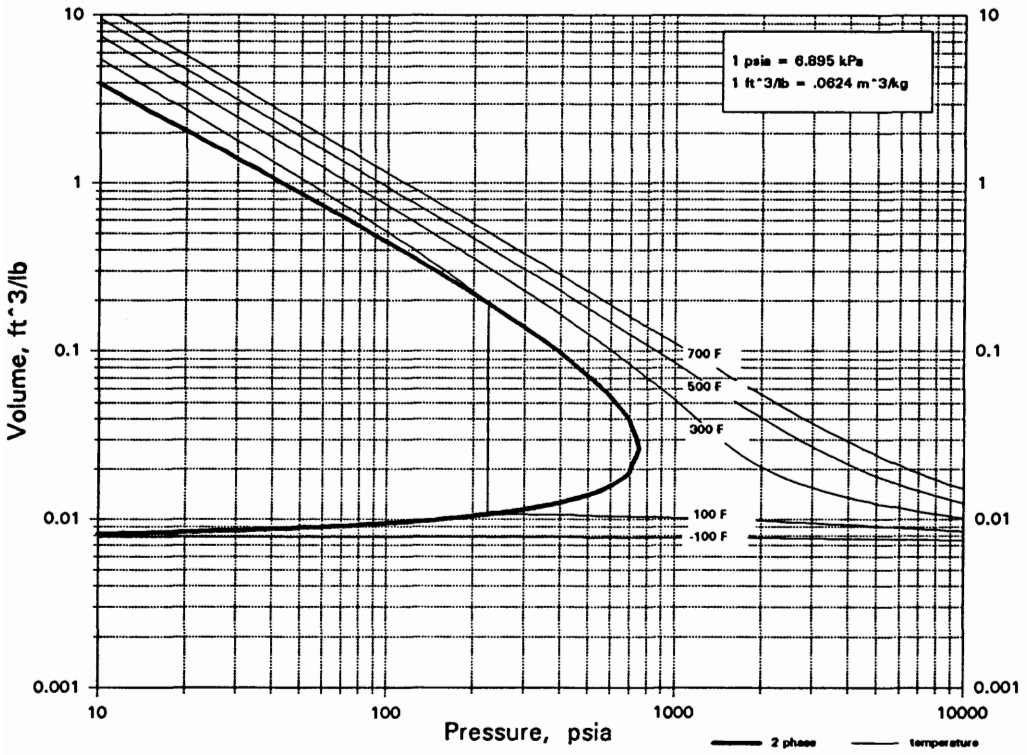

1 psia = 6.895 kPa
1 BTU/lb = 2.326 kJ/kg
1 BTU/lb R = 4.187 kJ/kg K
Enthalpy, BTU/lb
Pressure, psia
S = 0.17
S = -0.21
S = -0.42
S = -0.63
2500 F
2000 F
1500 F
1000 F
500 F
Datum: Ideal Gas @ 77 F (25 C), H = 0, S + R ln P = 0
2 phase
temperature
entropy

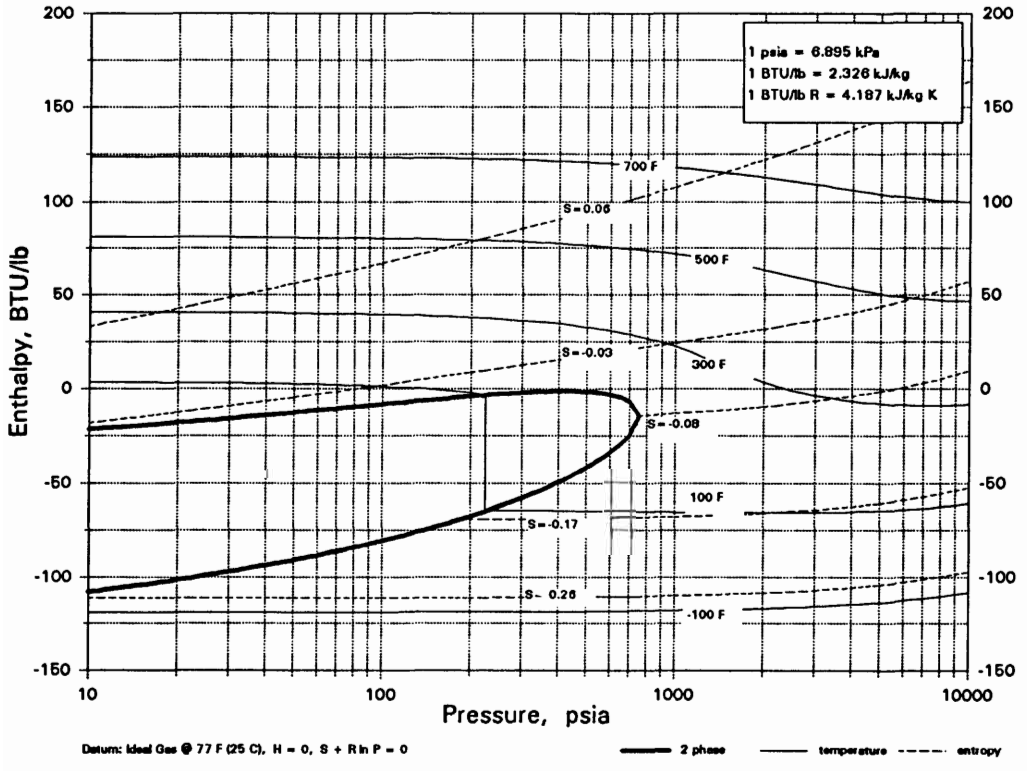
S2Cl2 SULFUR MONOCHLORIDE



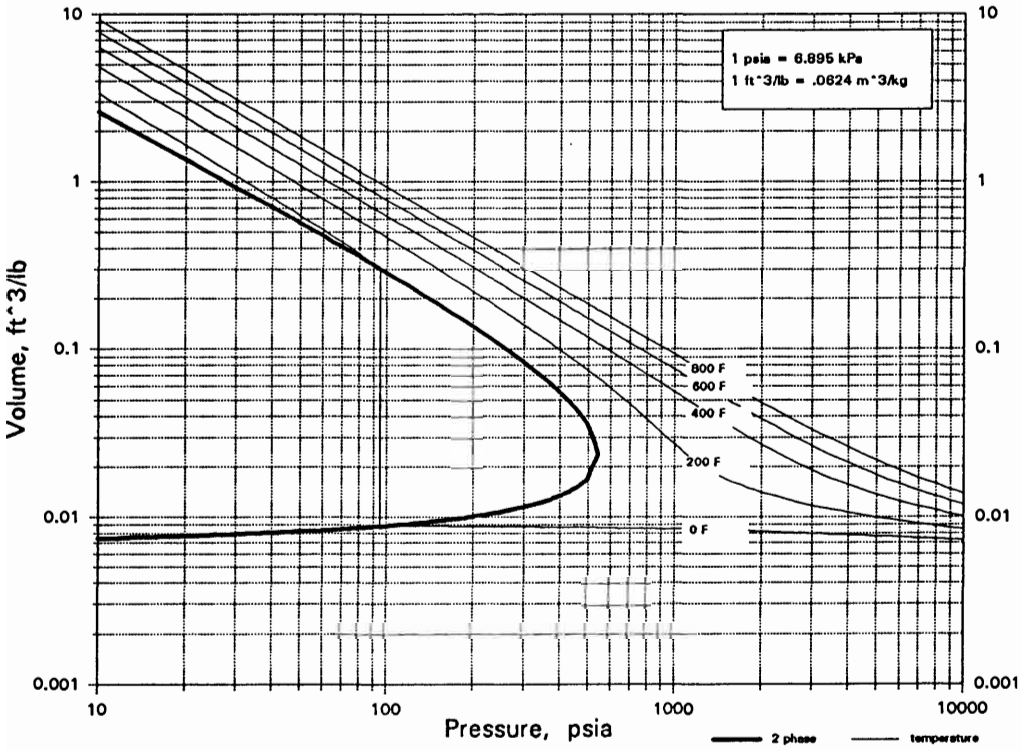


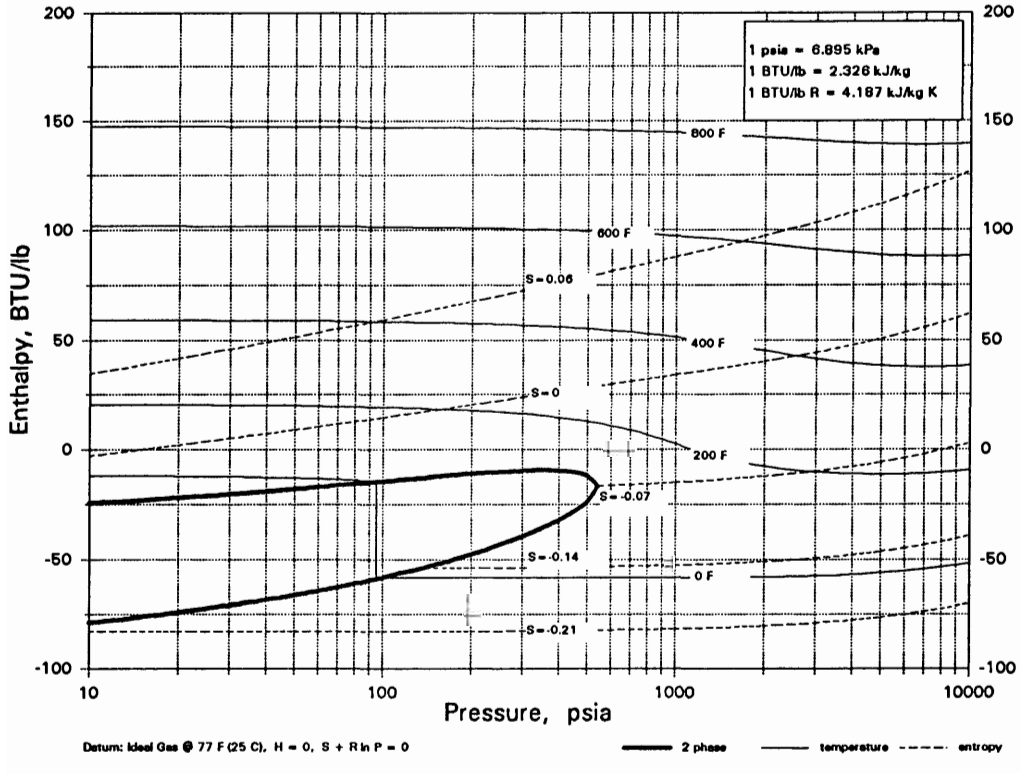
SF4 SULFUR TETRAFLUORIDE



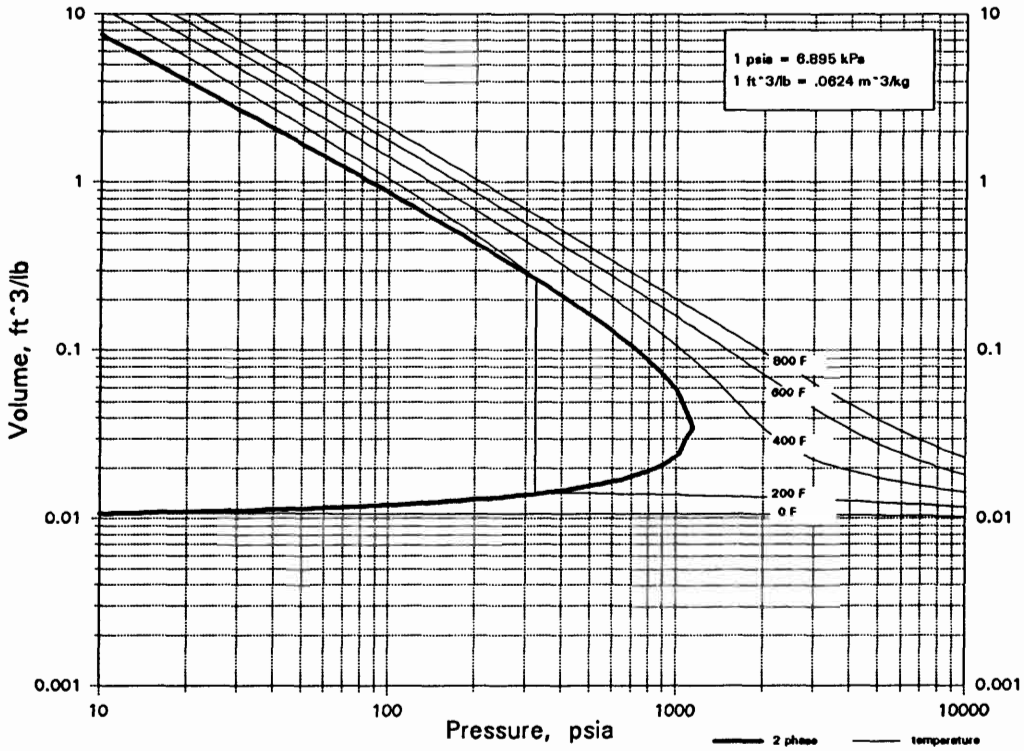


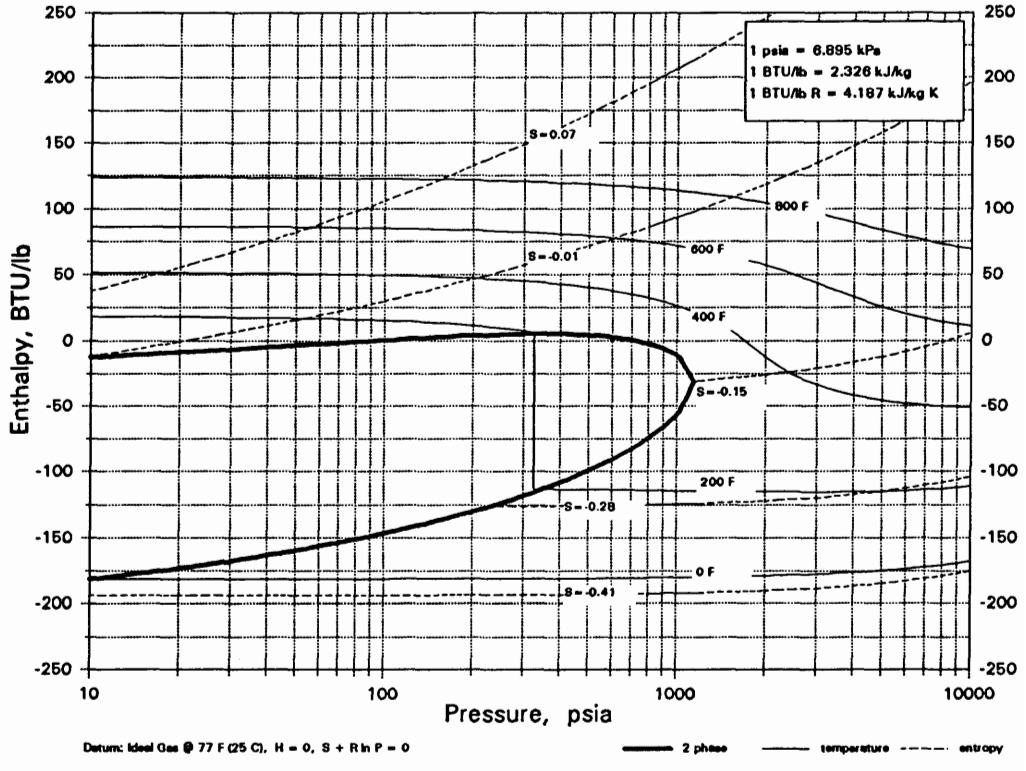
SF6 SULFUR HEXAFLUORIDE



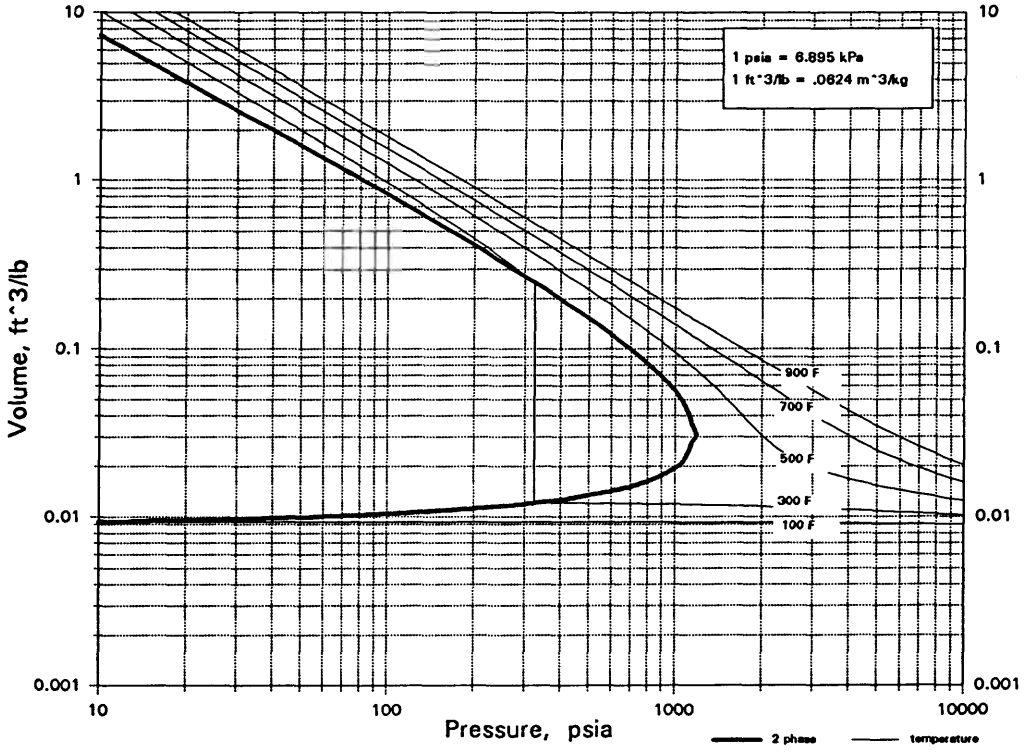


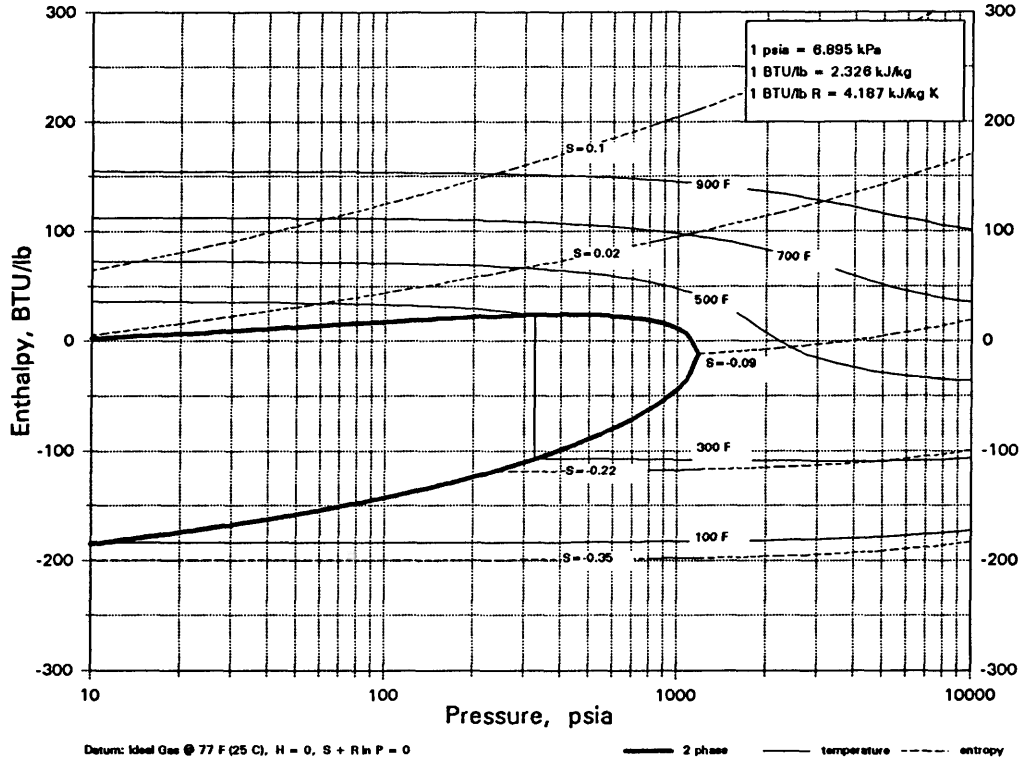
SO2 SULFUR DIOXIDE



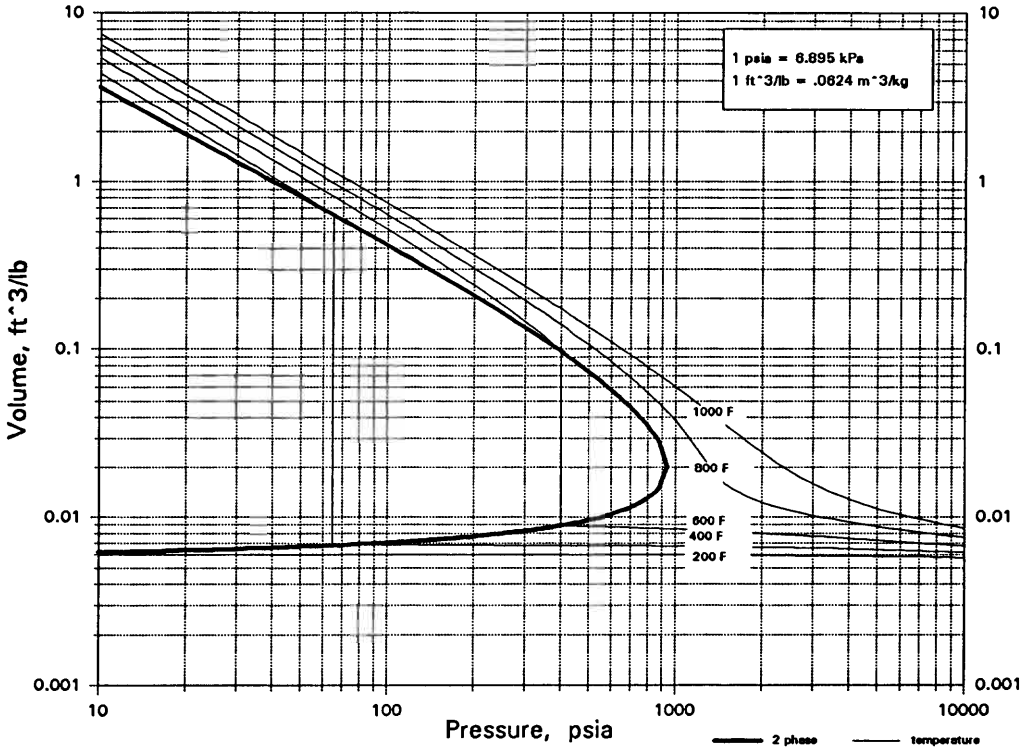


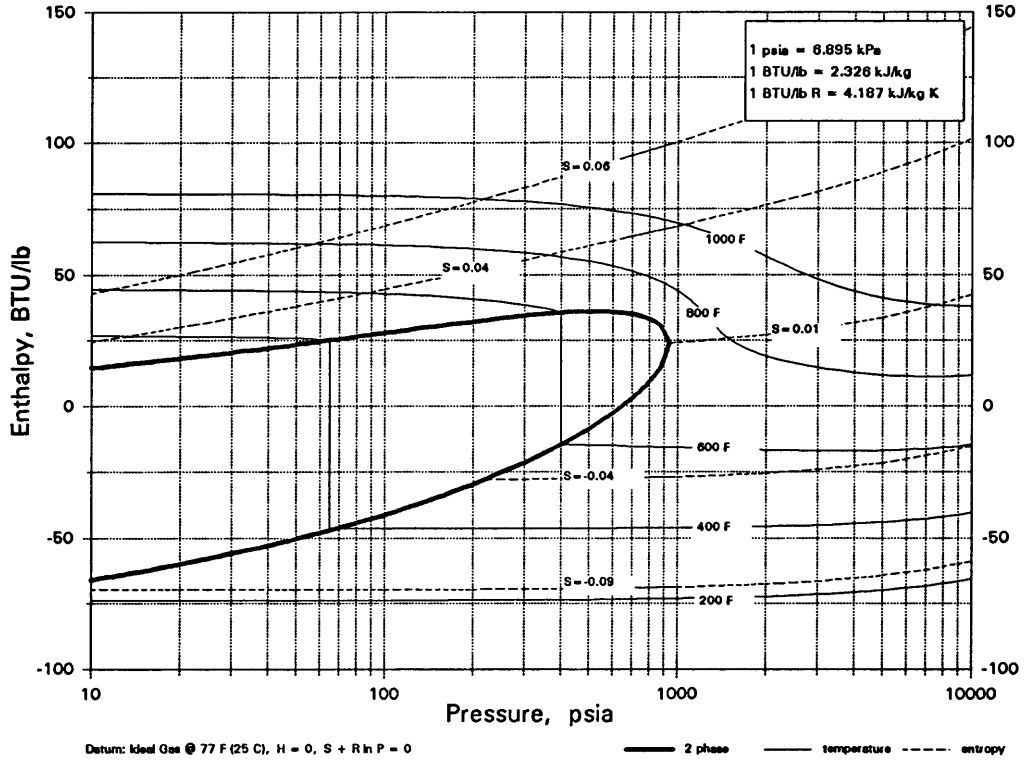
SO3 SULFUR TRIOXIDE



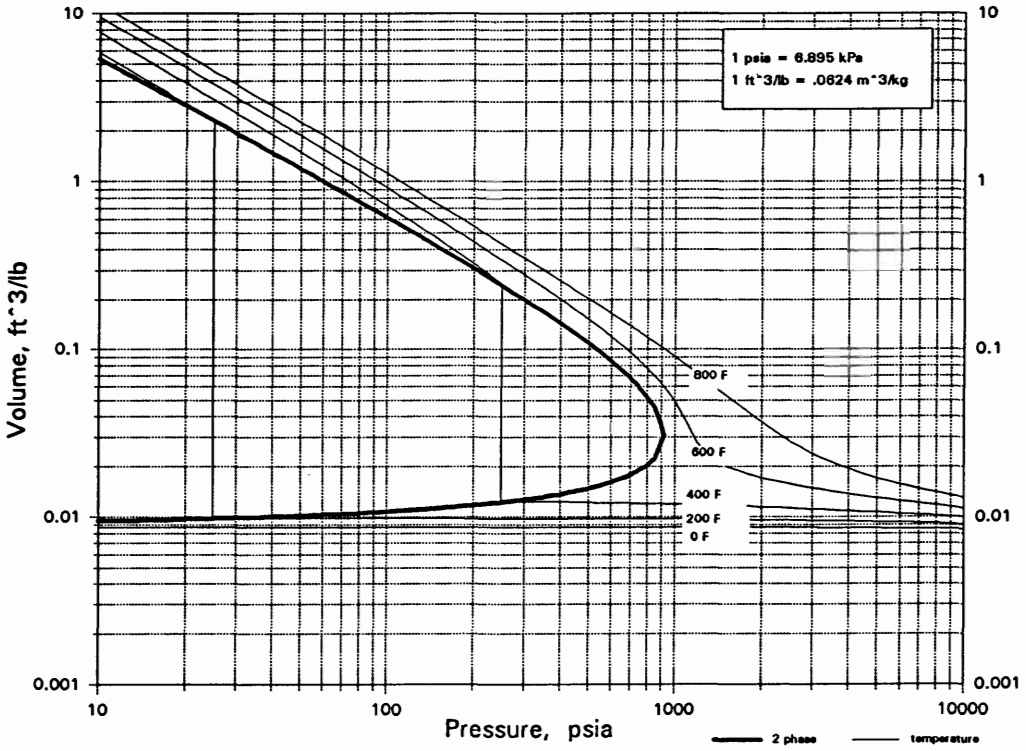


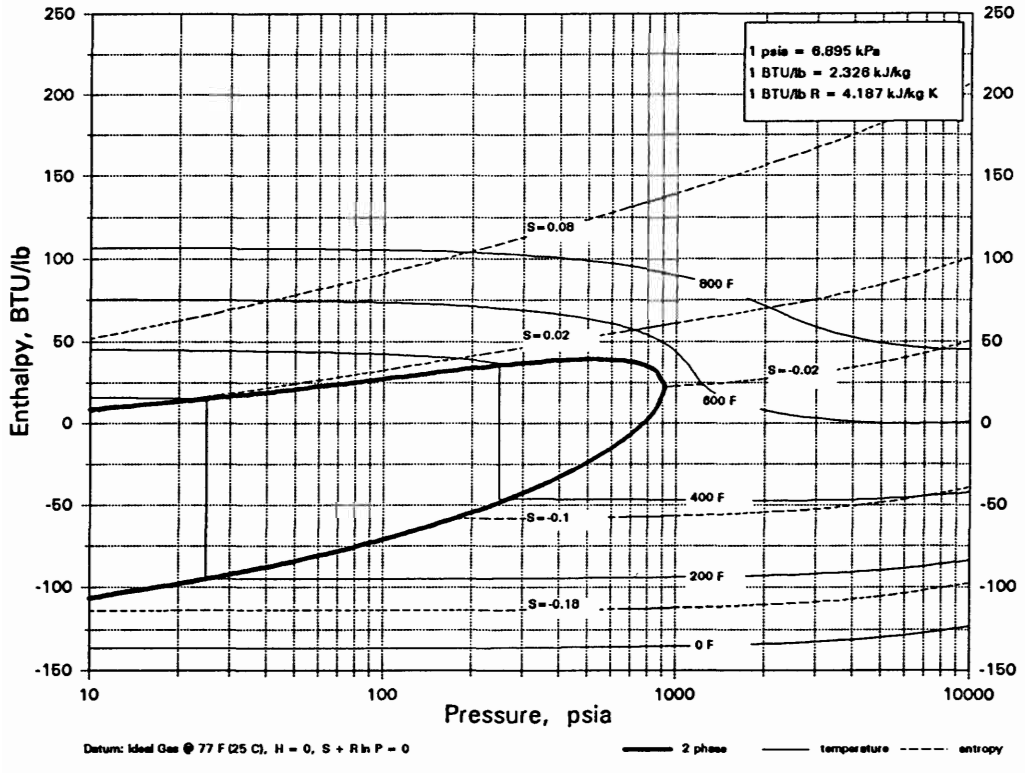
SOBr2 THIONYL BROMIDE



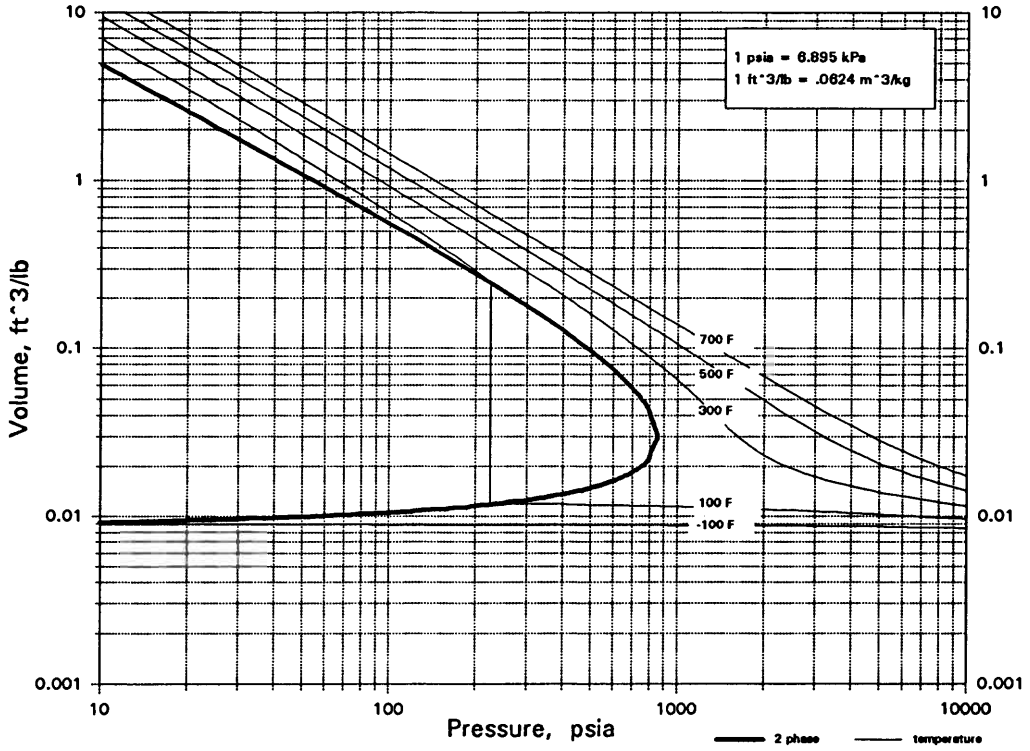


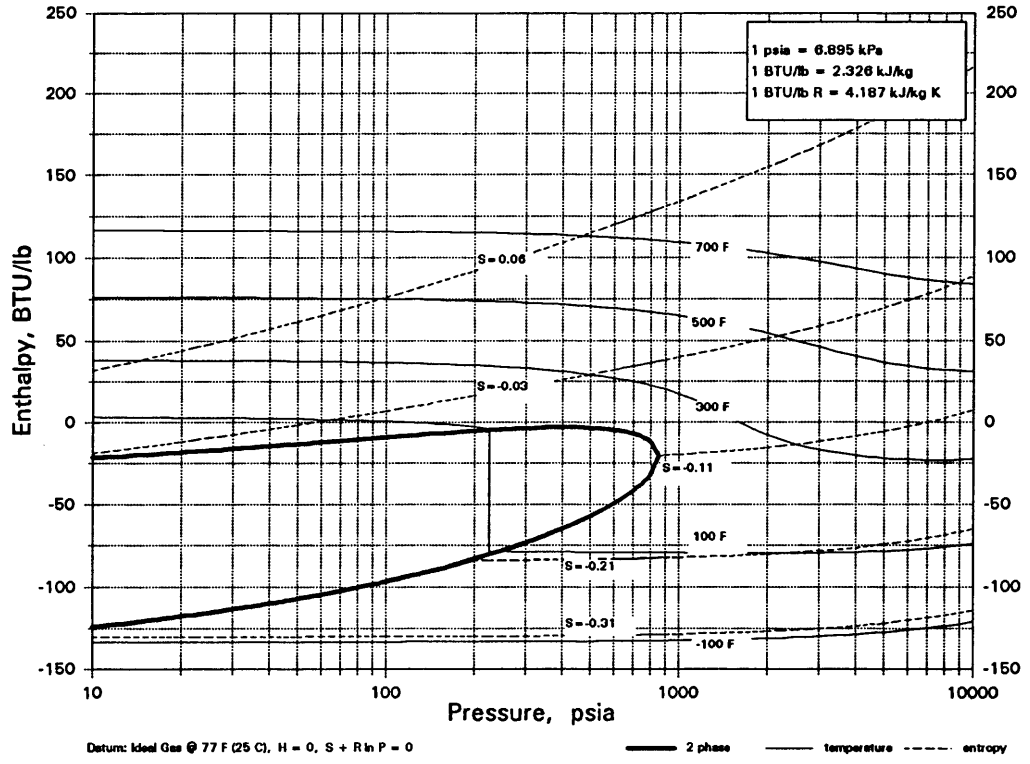
SOCl2 THIONYL CHLORIDE



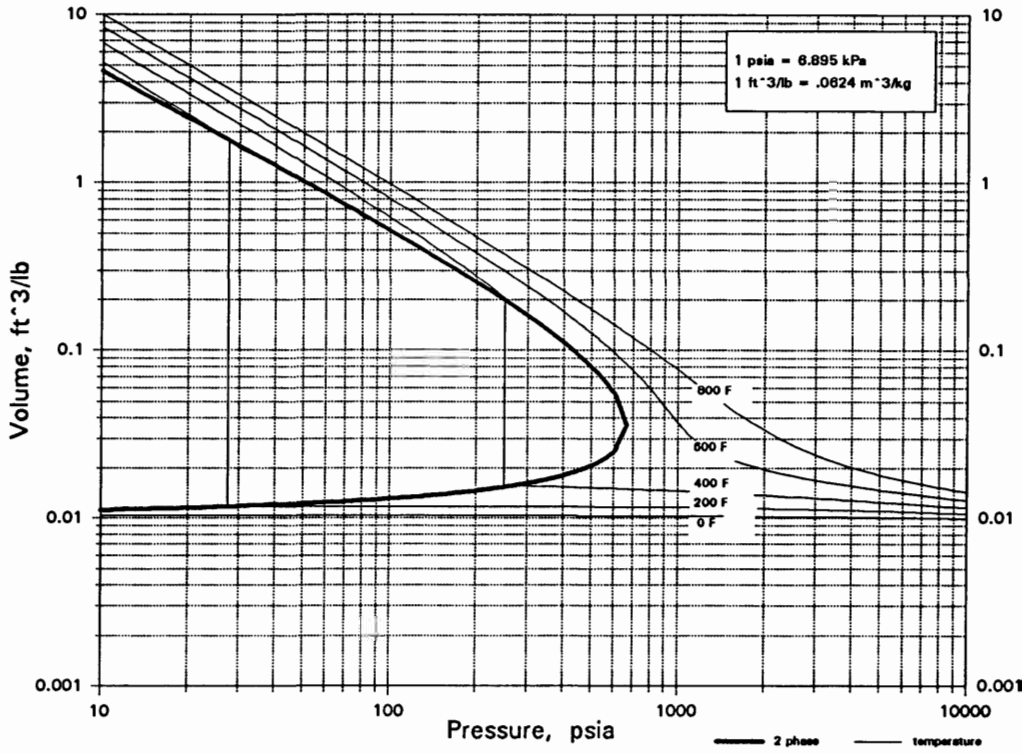


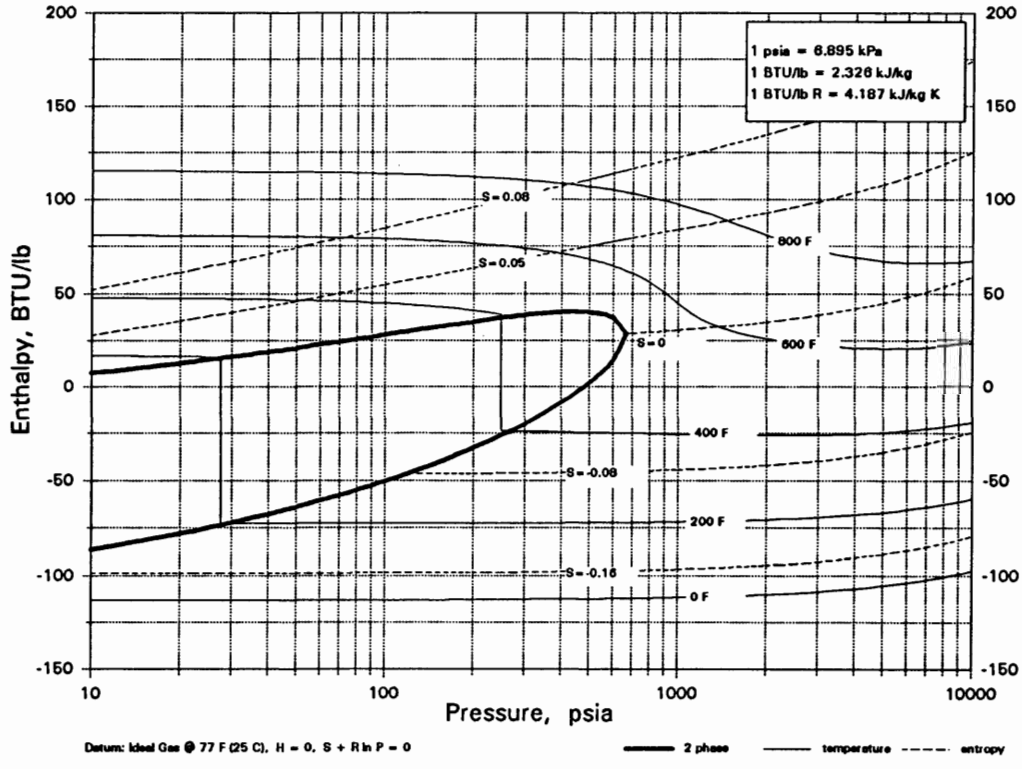
SOF2 SULFUROUS OXYFLUORIDE

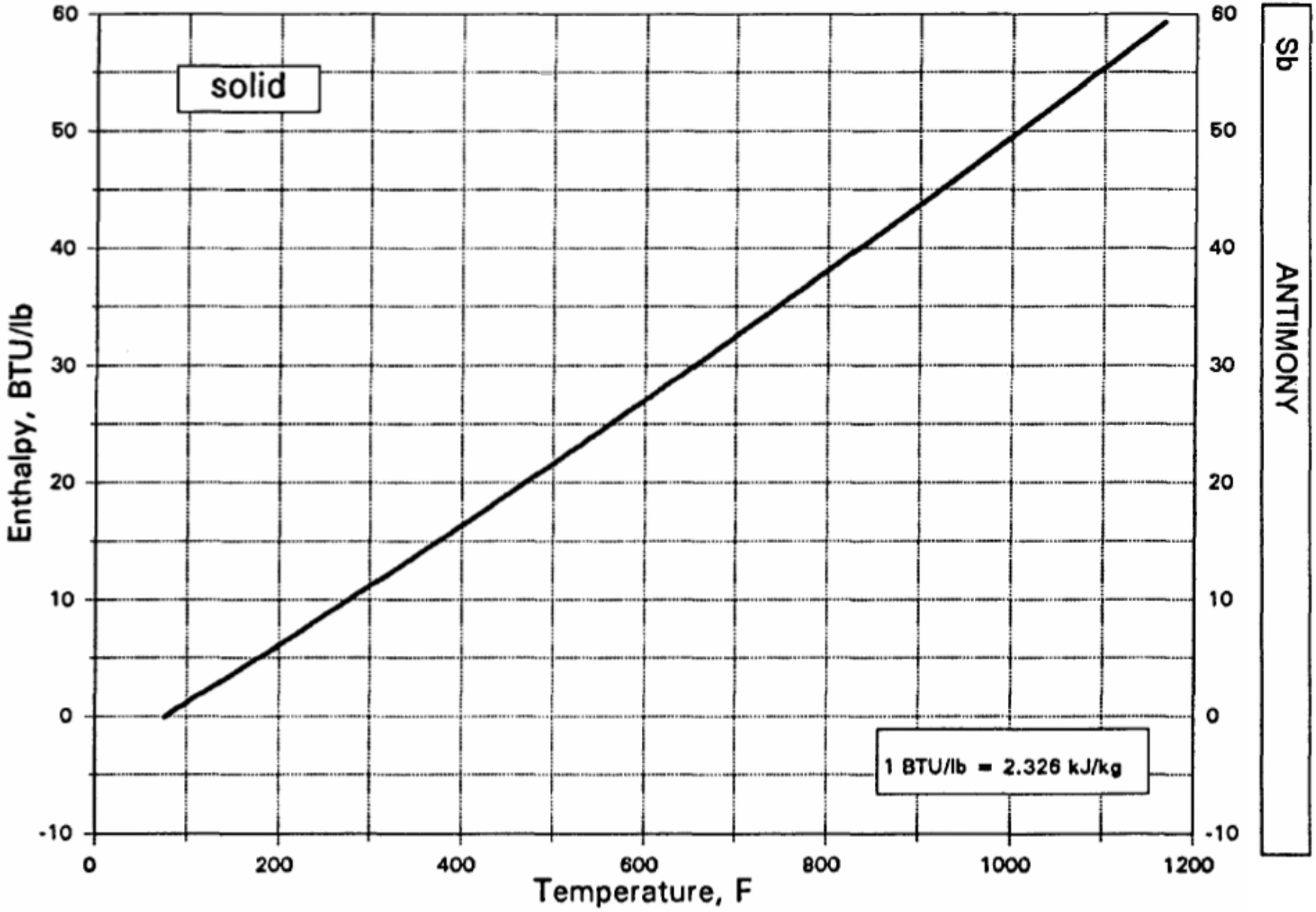


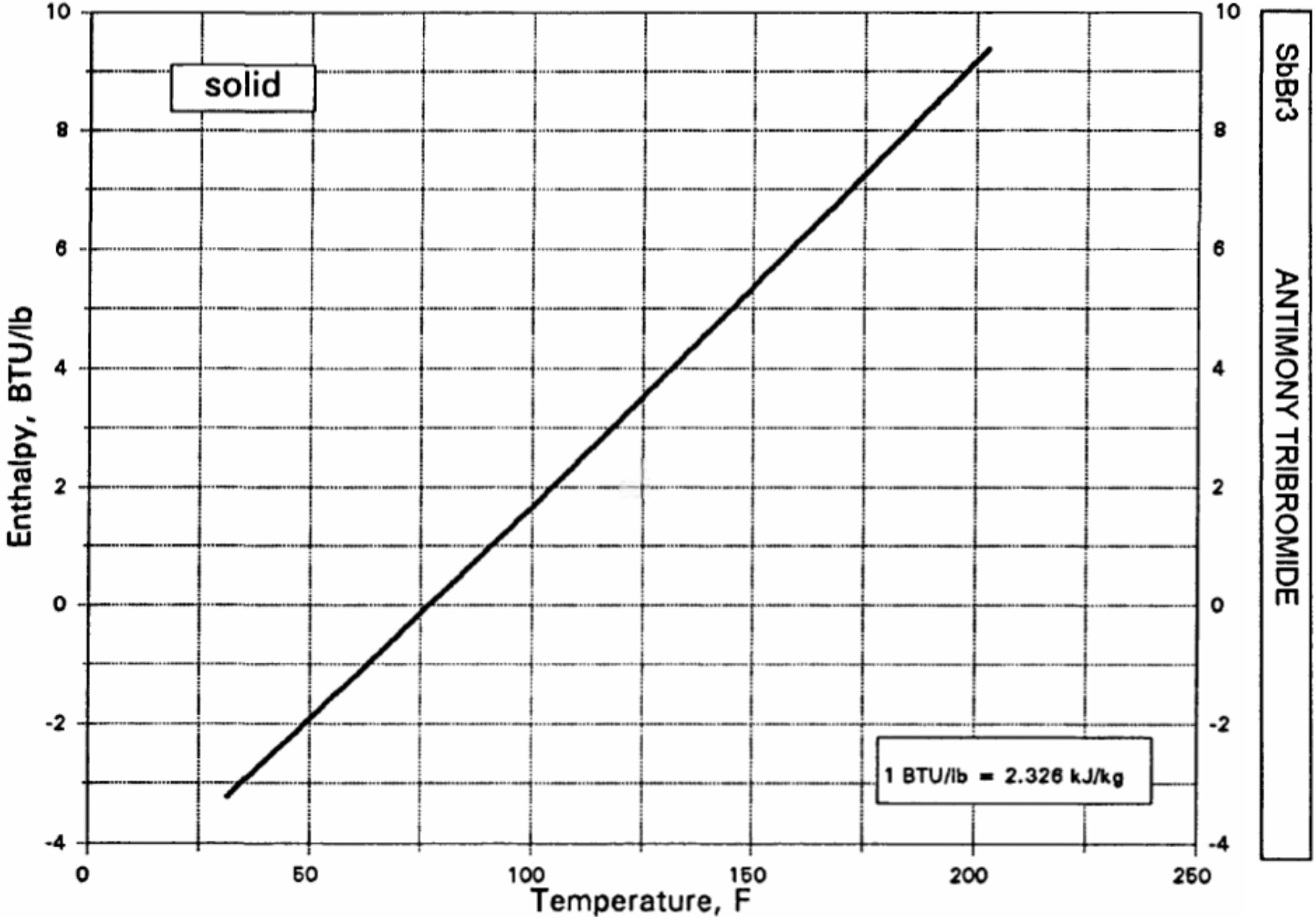


SO2Cl2 SULFURYL CHLORIDE

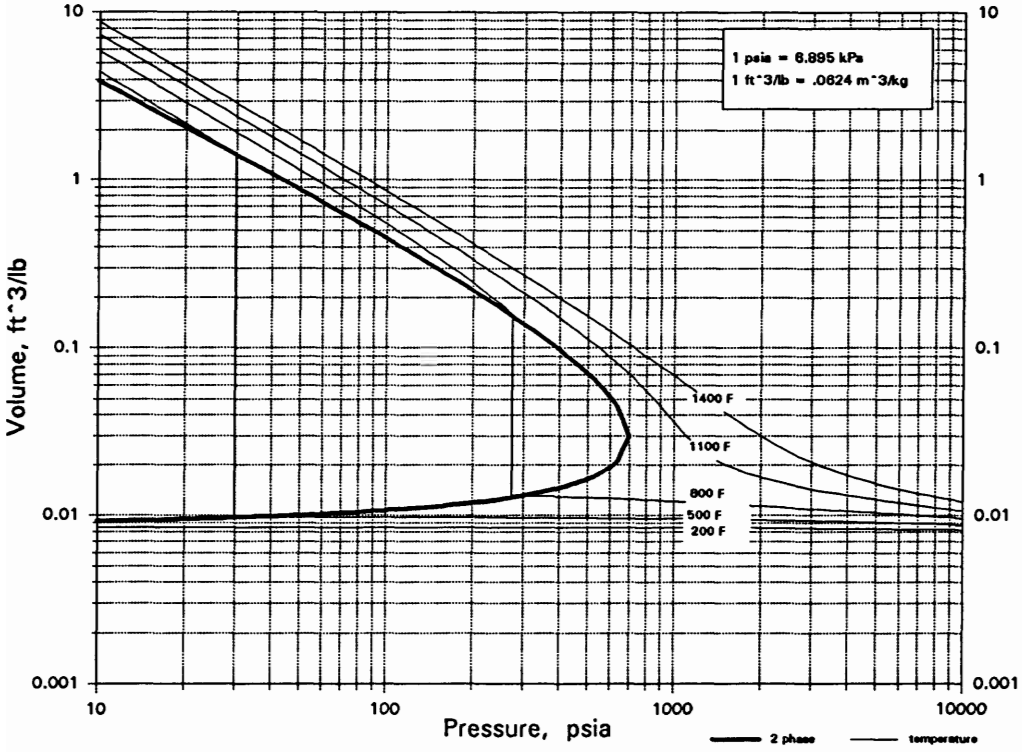


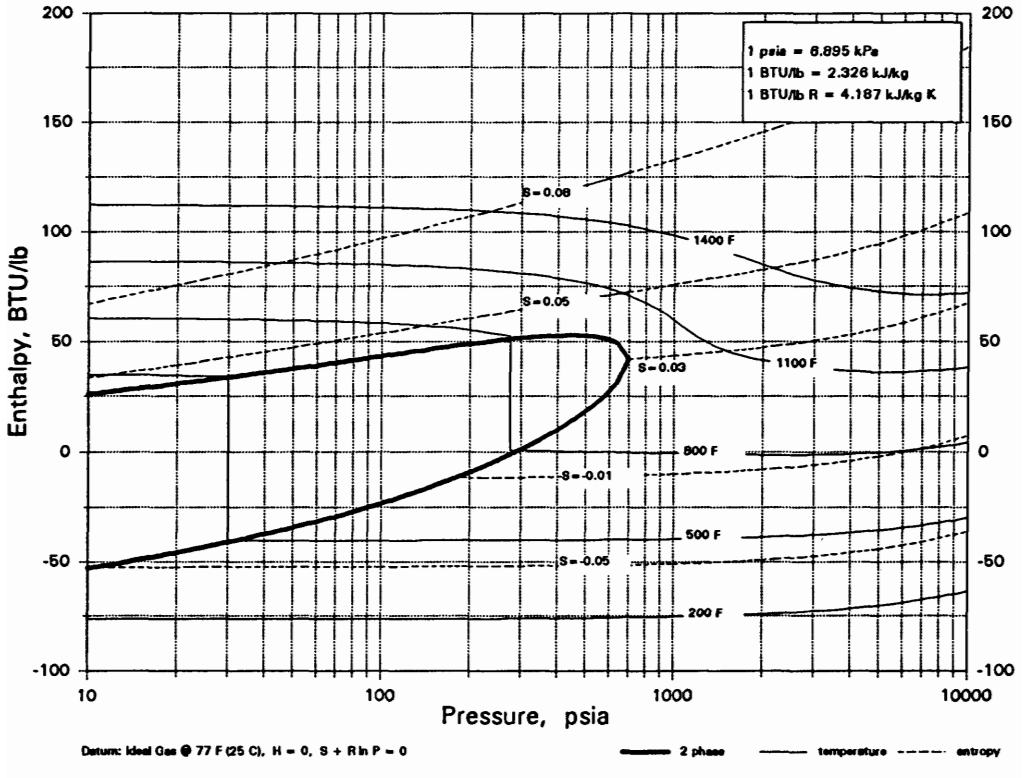



Sb
ANTIMONY
solid
Enthalpy, BTU/lb
Temperature, F
60
50
40
30
20
10
0
-10
0
200
400
600
800
1000
1200
1 BTU/lb = 2.326 kJ/kg

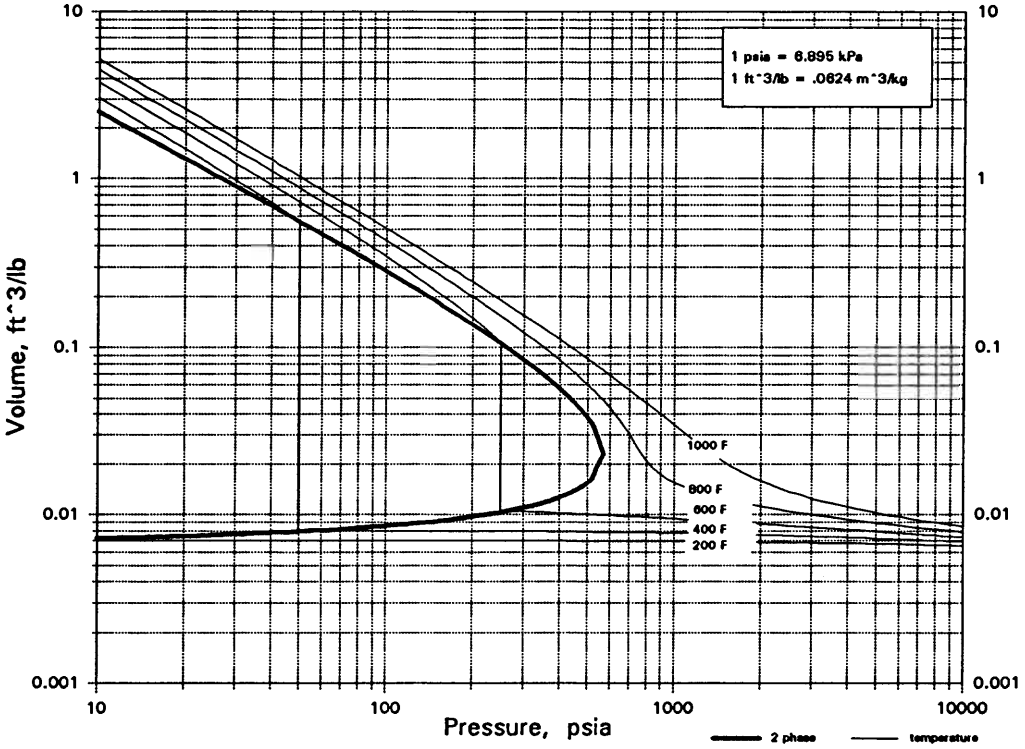

SbBr3
ANTIMONY TRIBROMIDE
solid
Enthalpy, BTU/lb
Temperature, F
1 BTU/lb = 2.326 kJ/kg
10
8
6
4
2
0
-2
-4
0
50
100
150
200
250

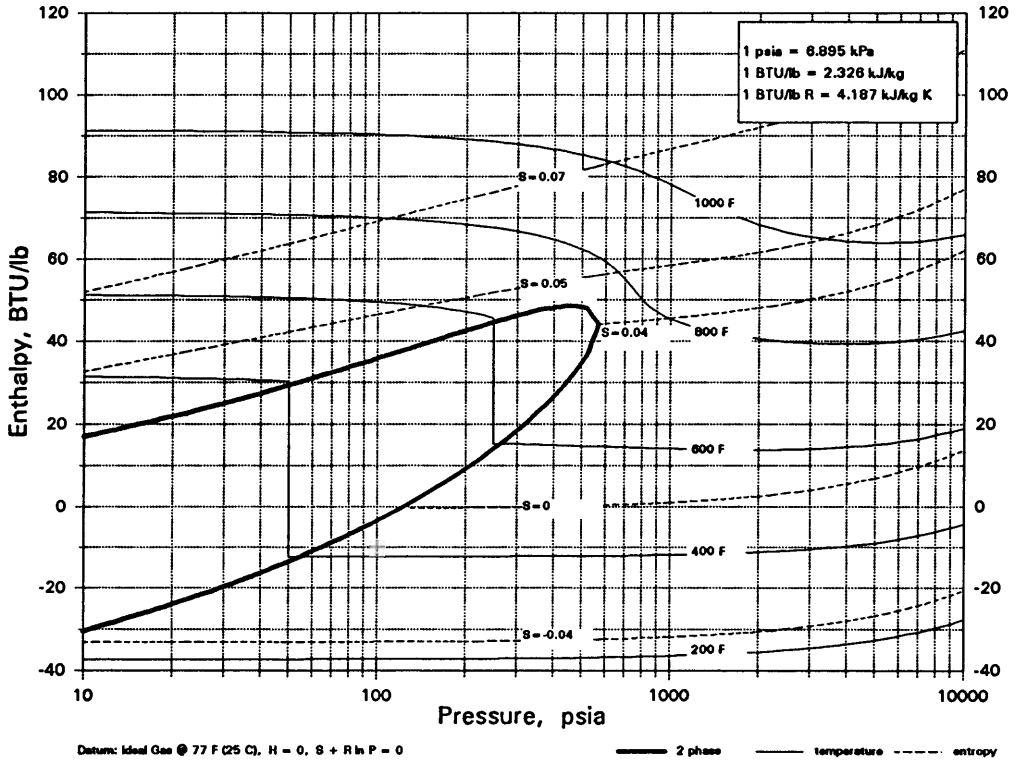
SbCl3 ANTIMONY TRICHLORIDE



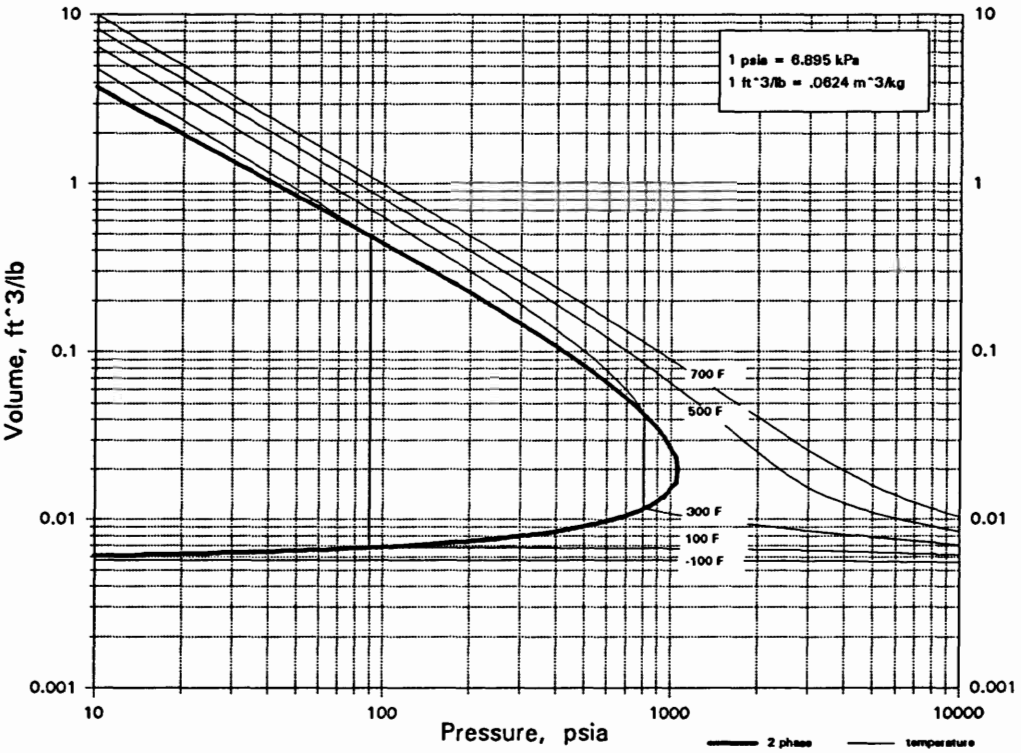


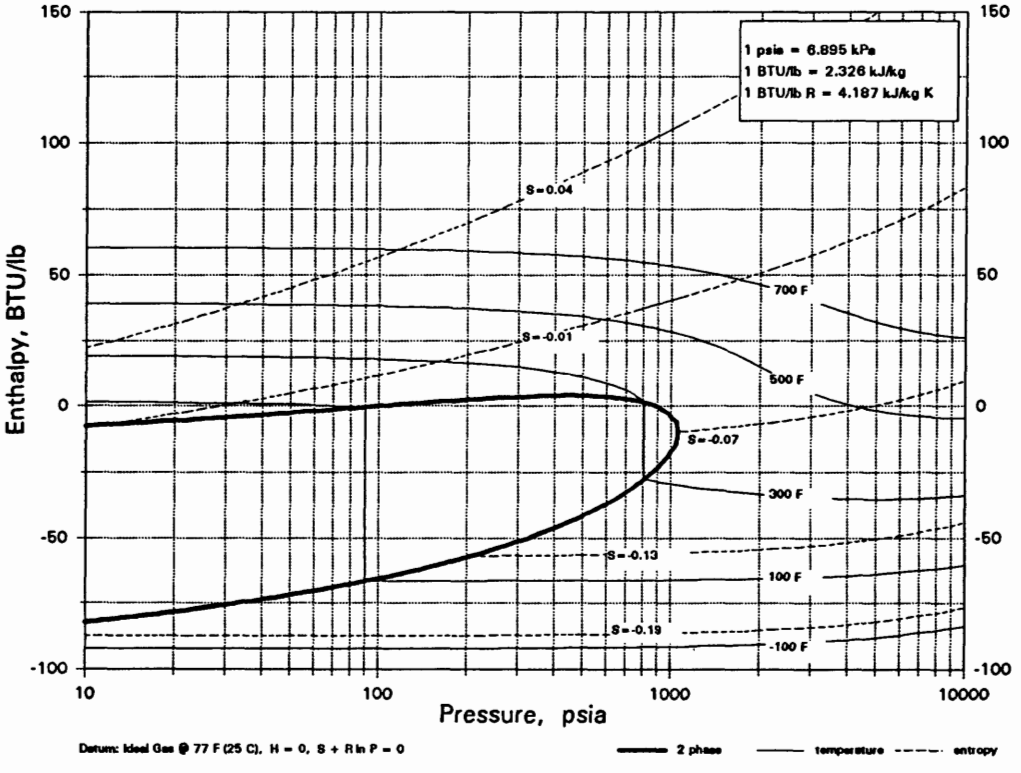
SbCl5 ANTIMONY PENTACHLORIDE

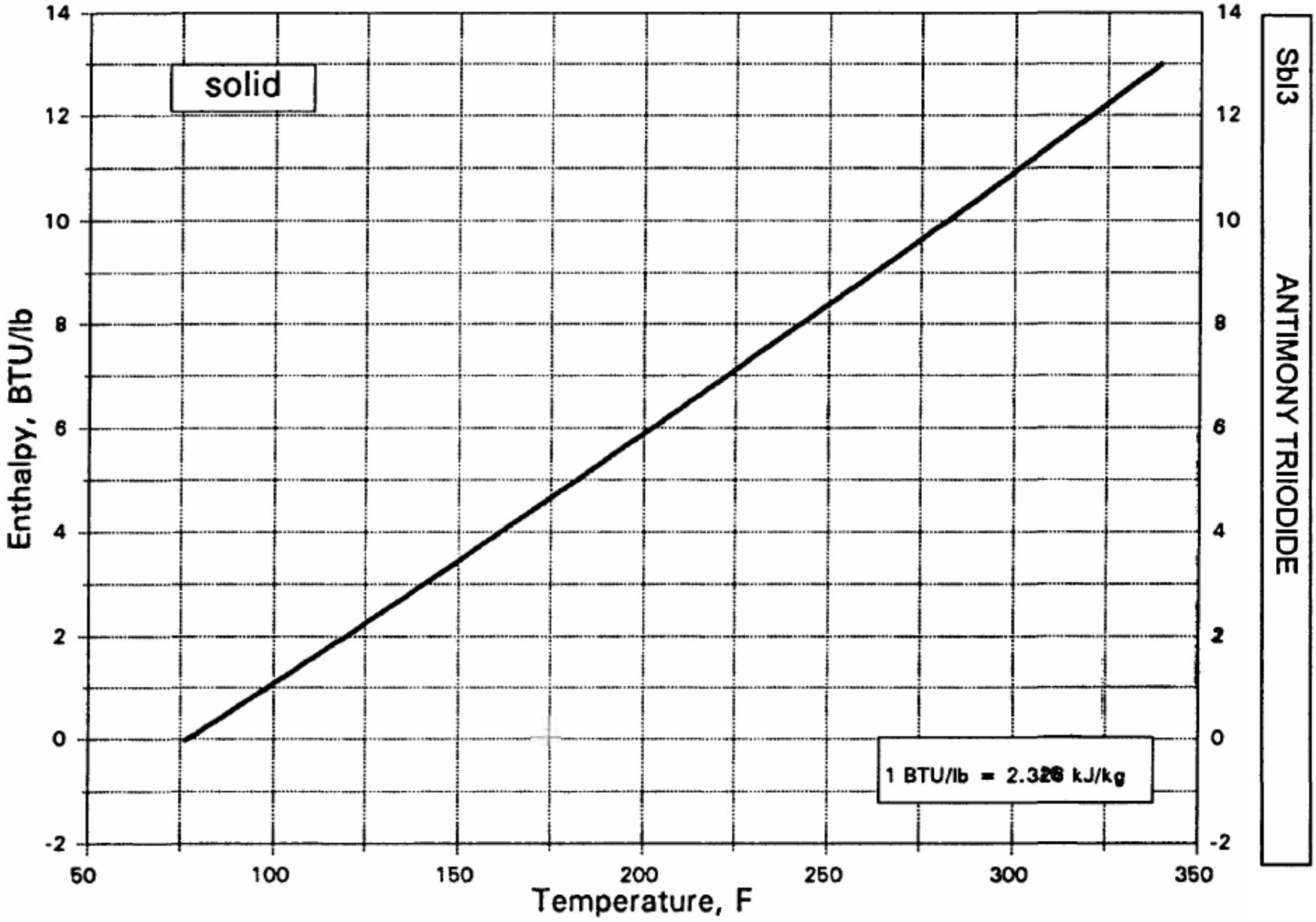


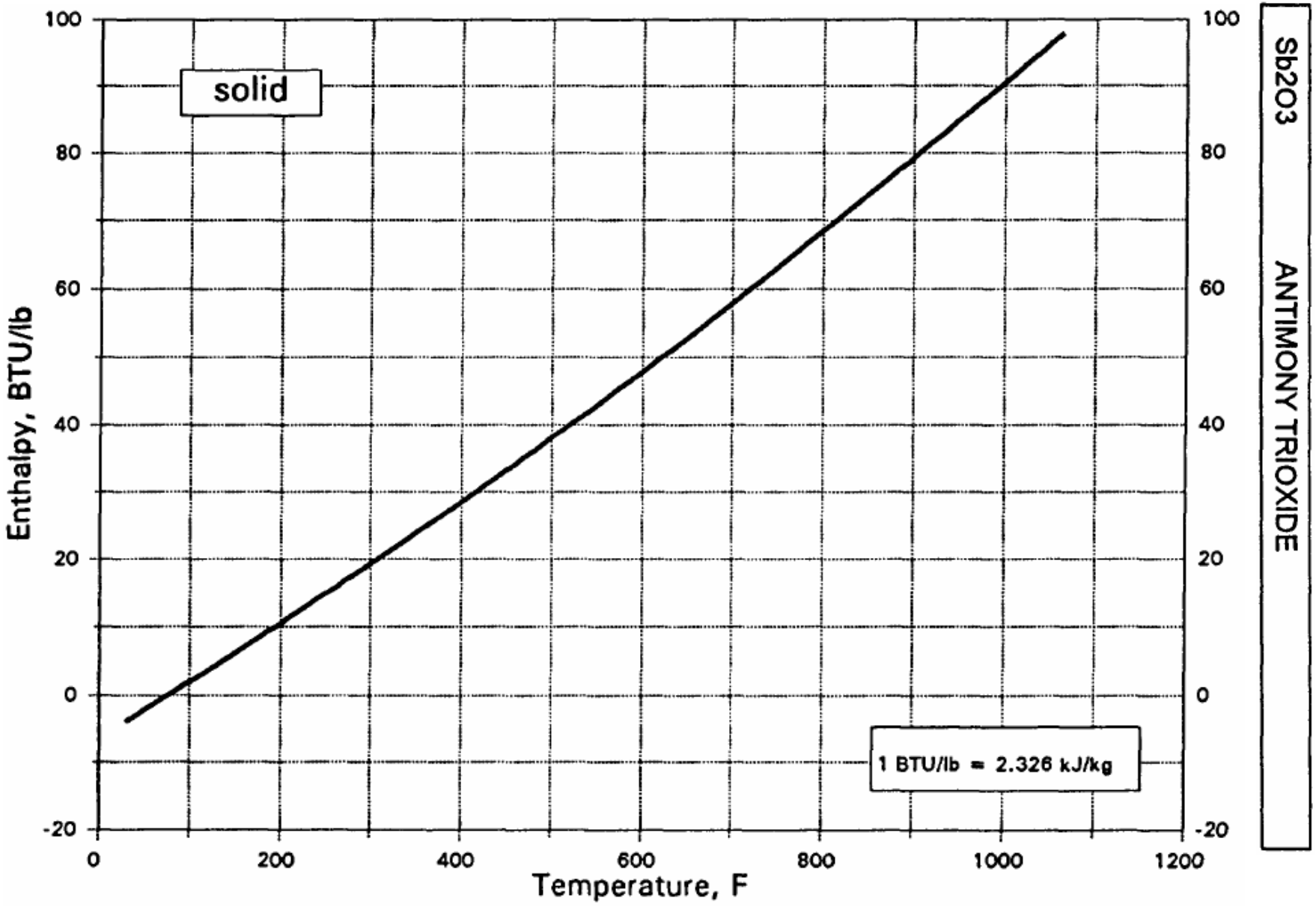


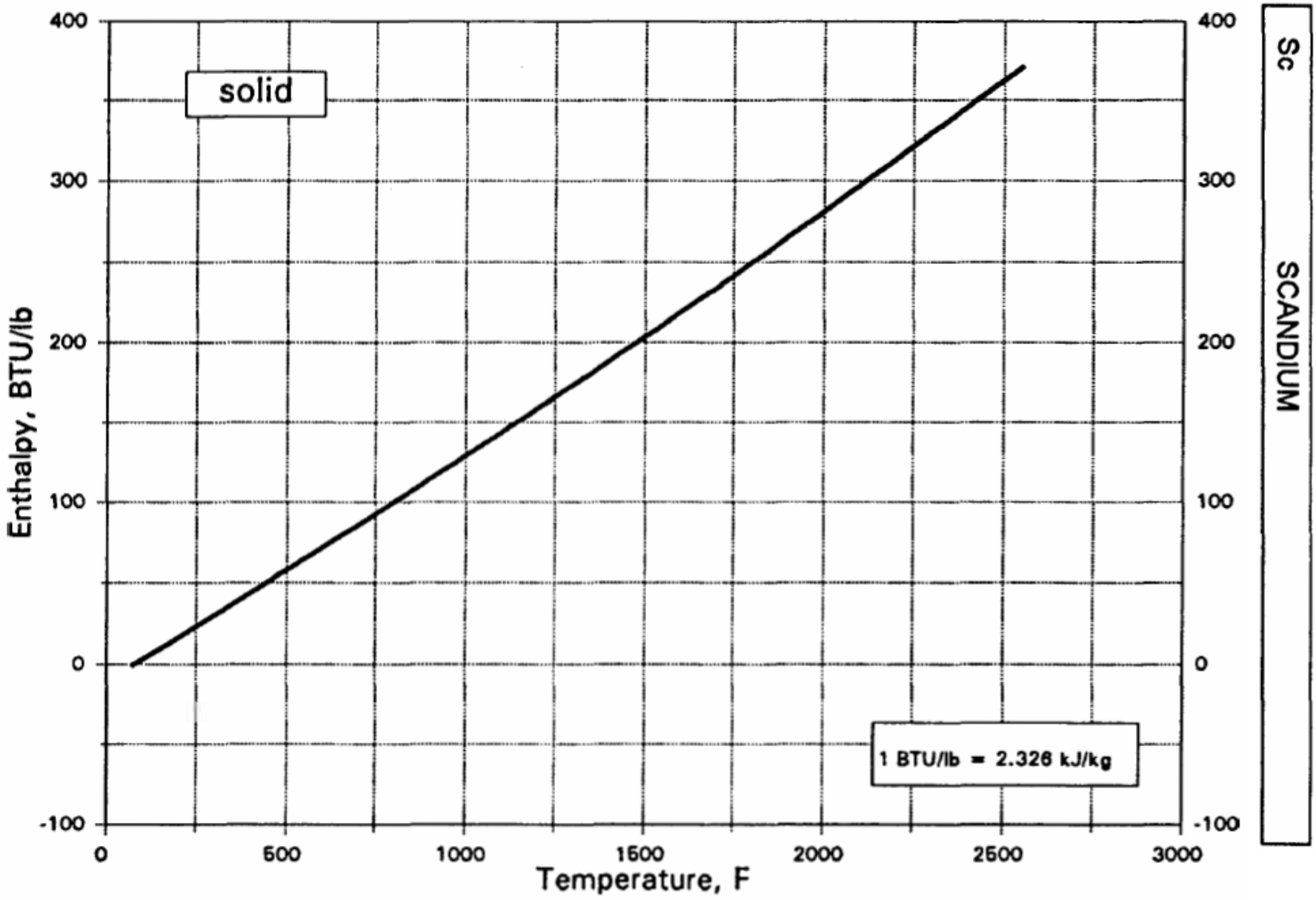
SbH3 STIBINE

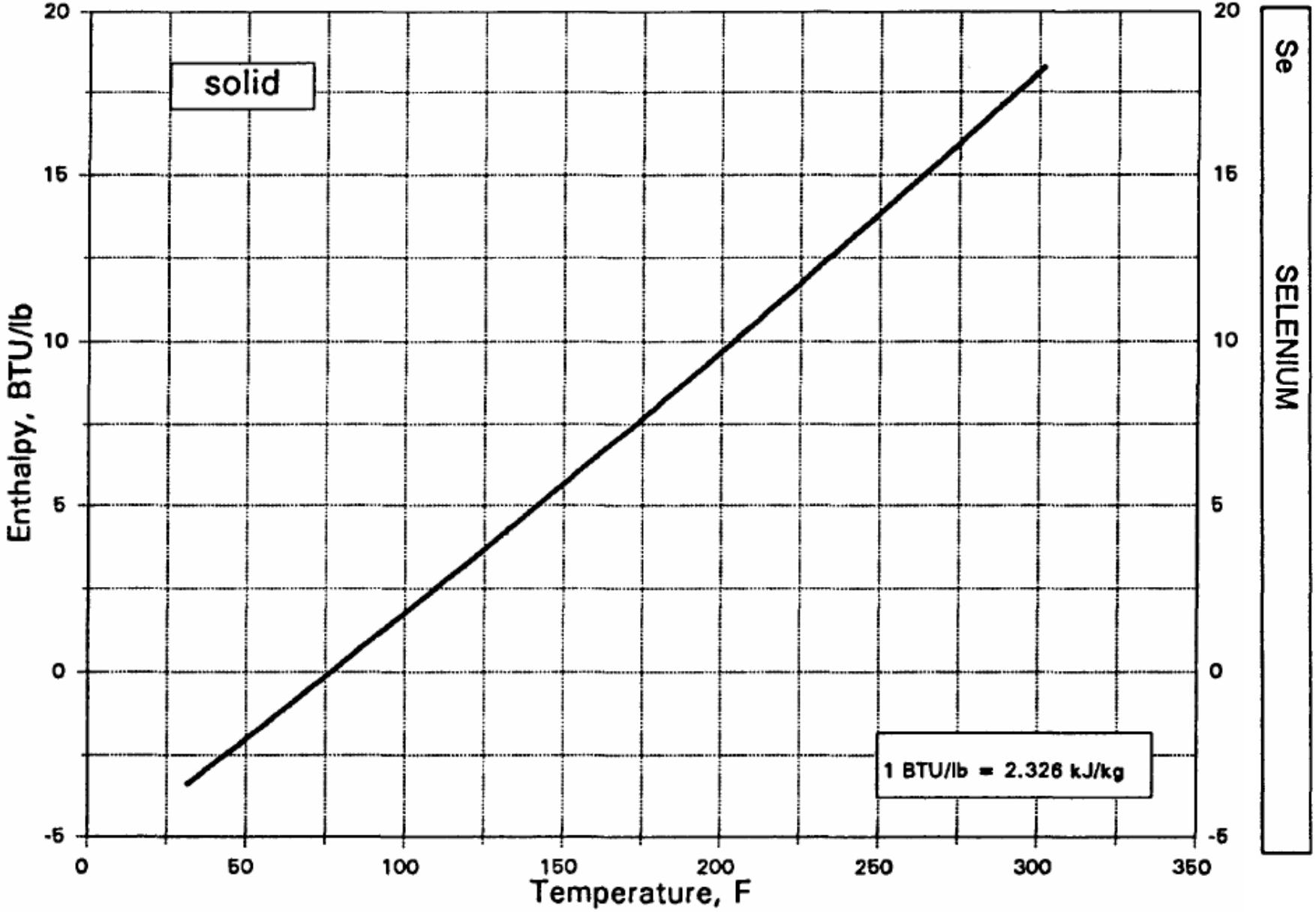




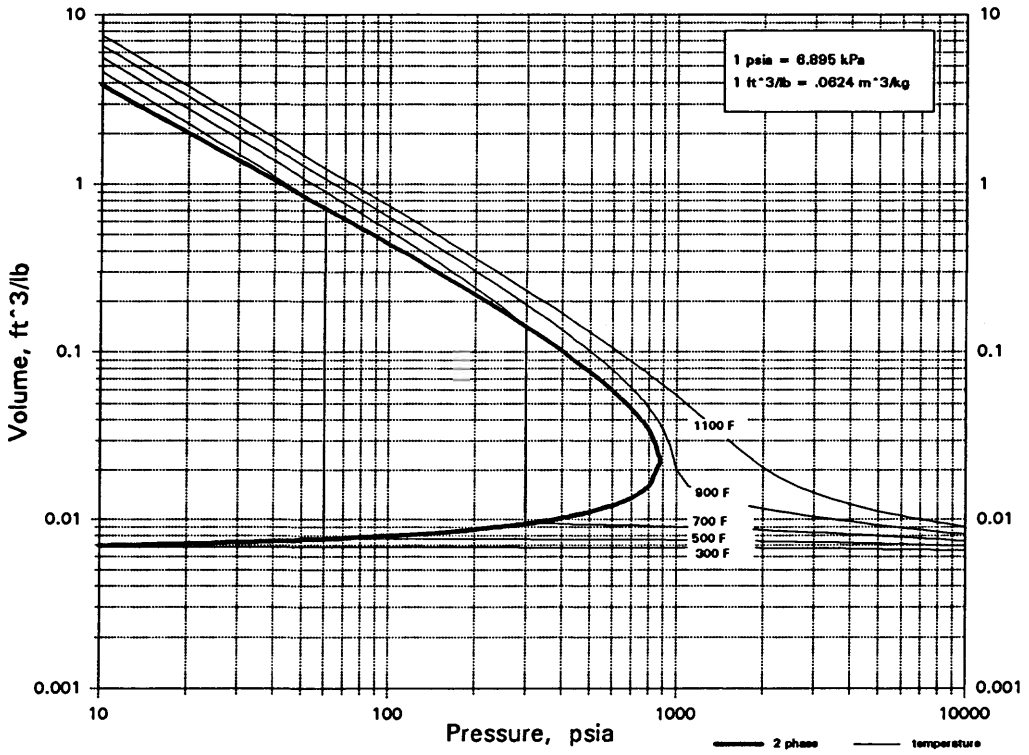

solid
Enthalpy, BTU/lb
Temperature, F
14
12
10
8
6
4
2
0
-2
50
100
150
200
250
300
350
1 BTU/lb = 2.326 kJ/kg
SbI3
ANTIMONY TRIIODIDE

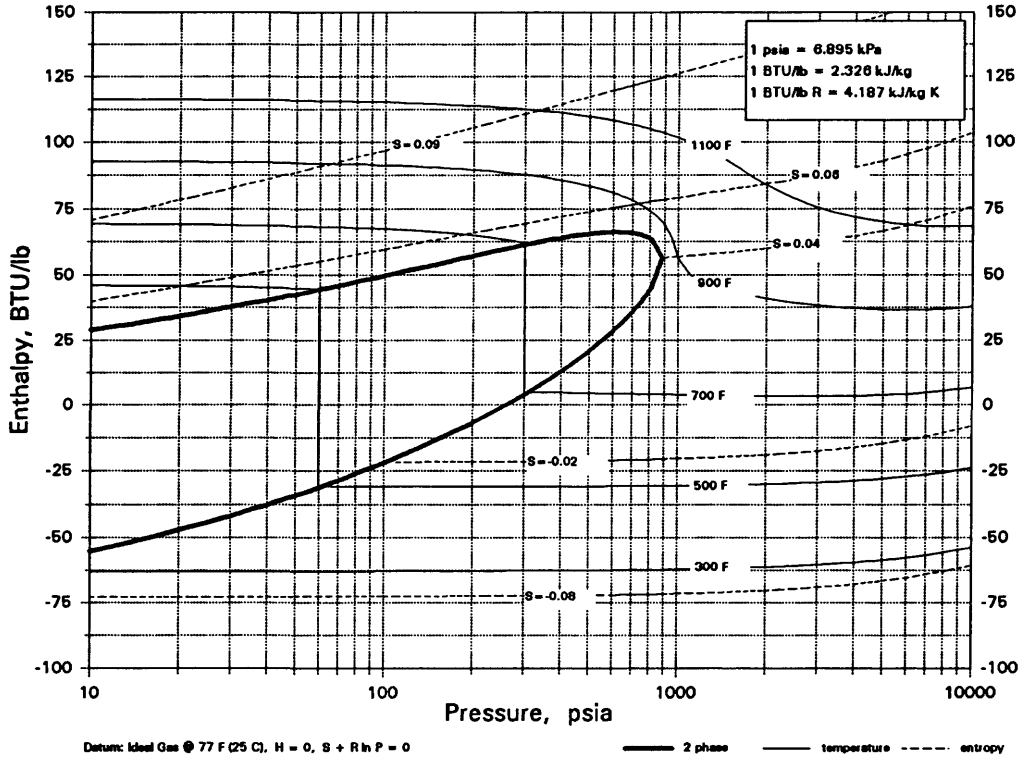

Sb2O3
ANTIMONY TRIOXIDE
solid
Enthalpy, BTU/lb
Temperature, F
100
80
60
40
20
0
-20
0
200
400
600
800
1000
1200
1 BTU/lb = 2.326 kJ/kg


solid
400
300
200
100
0
-100
Enthalpy, BTU/lb
0
500
1000
1500
2000
2500
3000
Temperature, F
1 BTU/lb = 2.326 kJ/kg
Sc
SCANDIUM

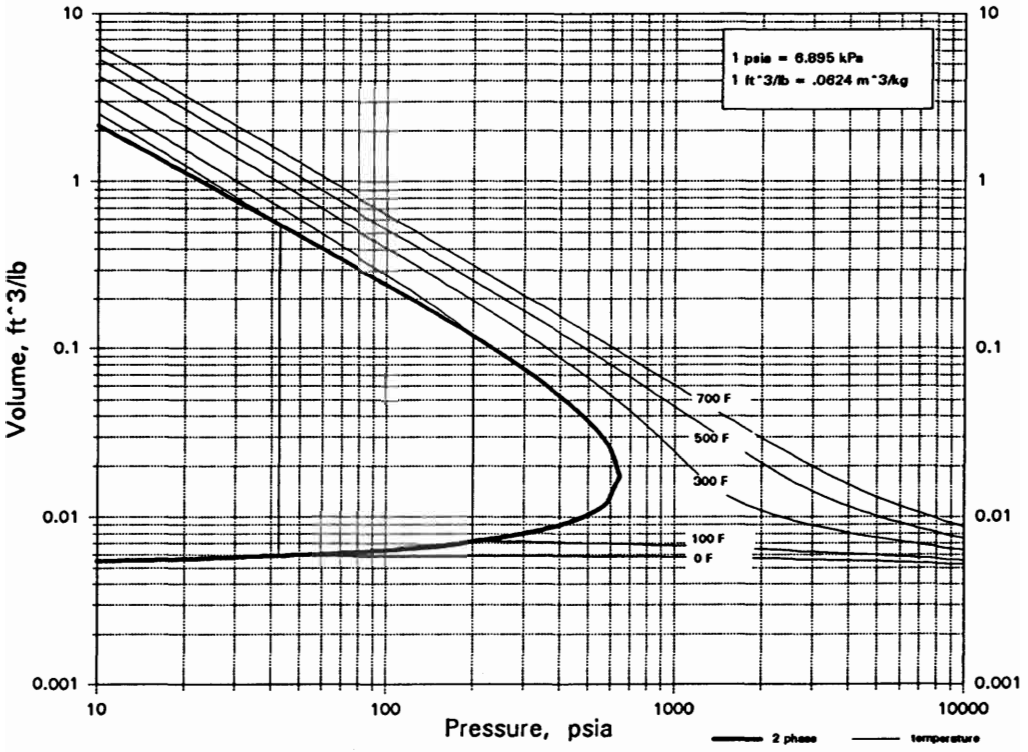

solid
Enthalpy, BTU/lb
Temperature, F
20
15
10
5
0
-5
0
50
100
150
200
250
300
350
1 BTU/lb = 2.326 kJ/kg
Se
SELENIUM

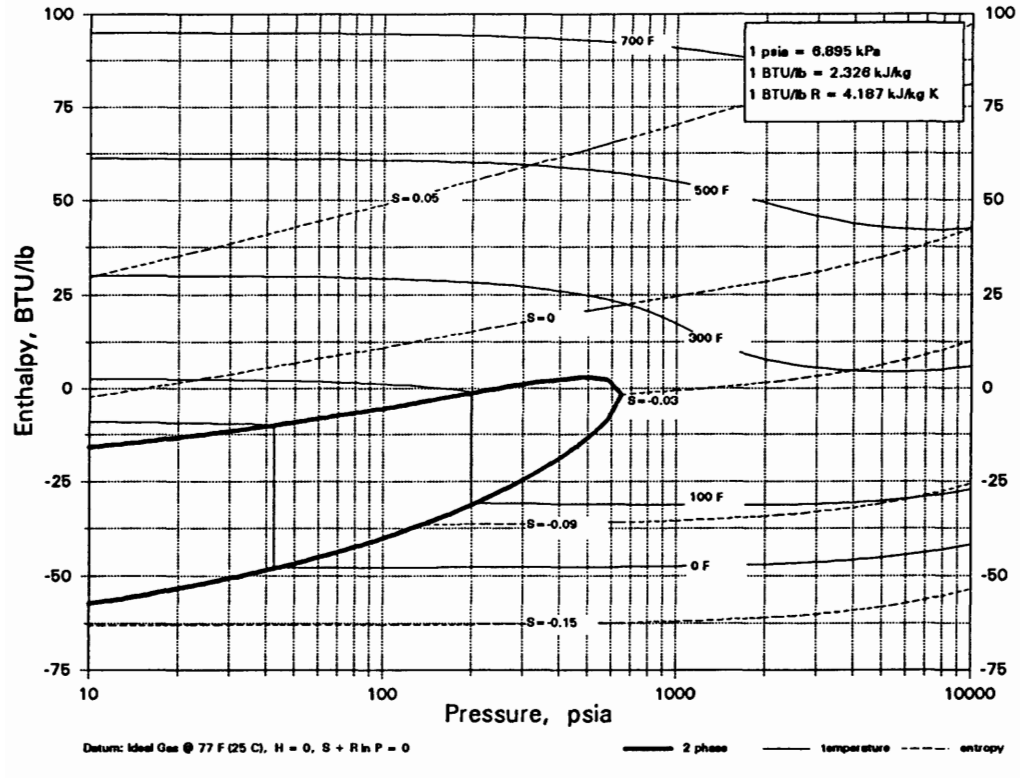
SeCl4	SELENIUM TETRACHLORIDE



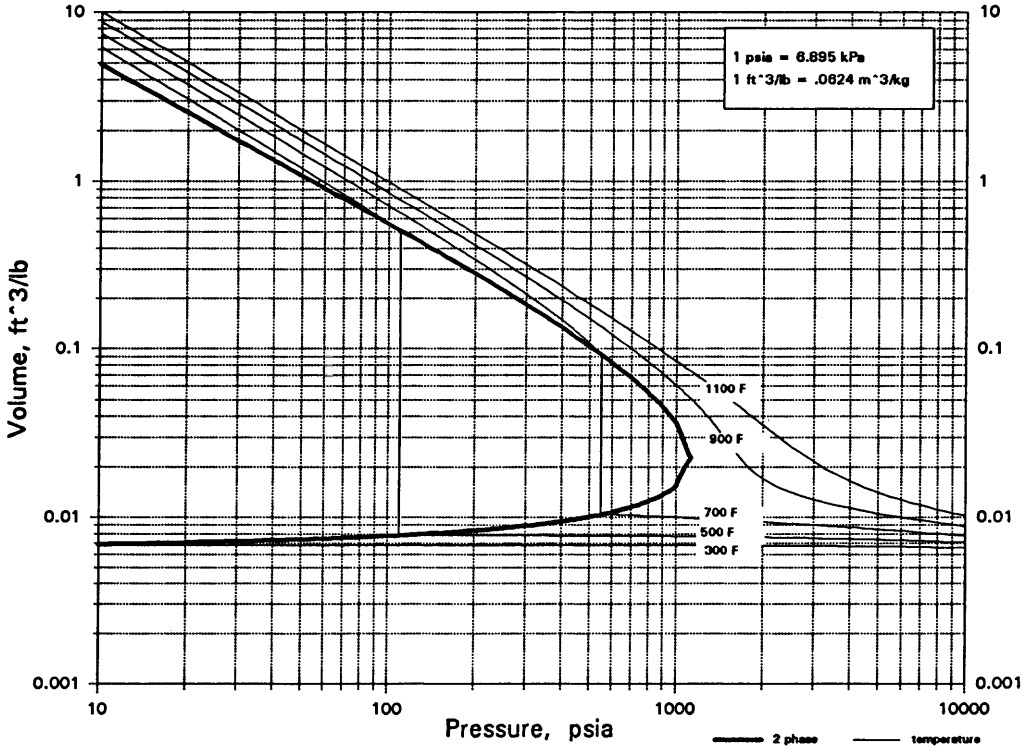


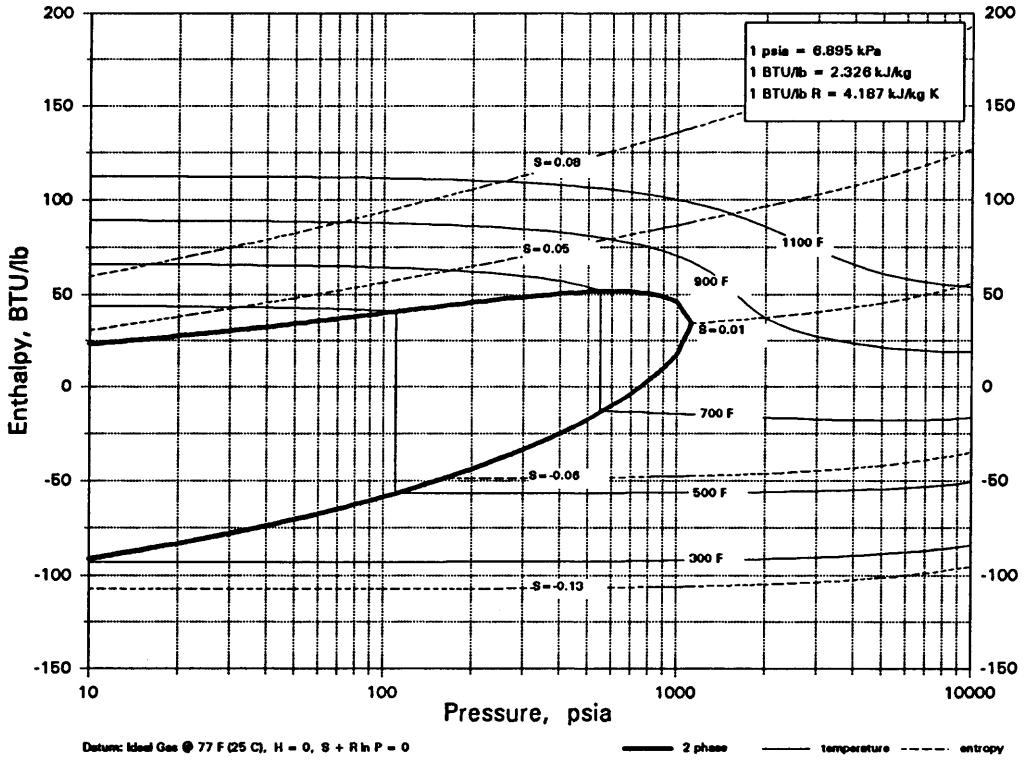
SeF6 SELENIUM HEXAFLUORIDE

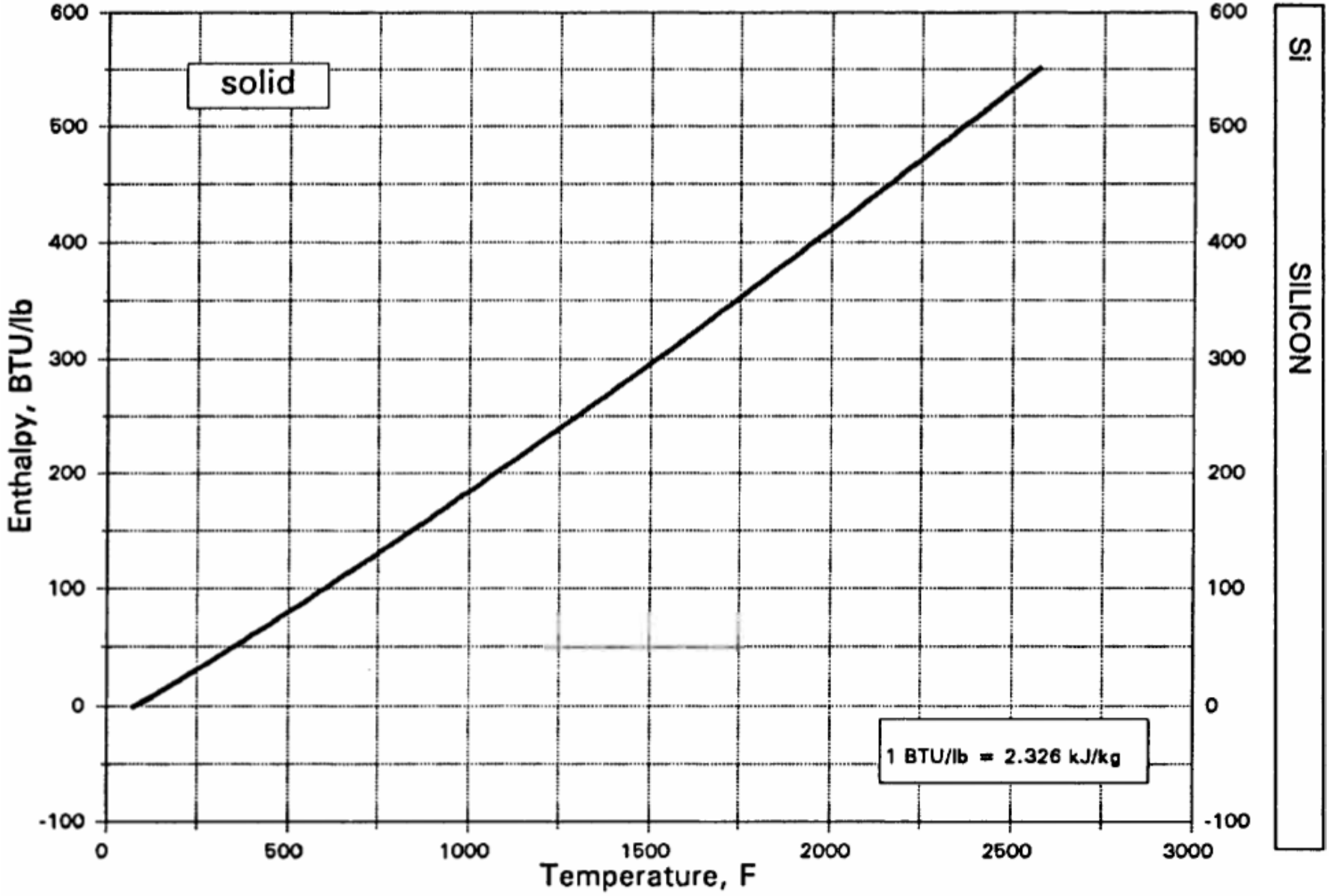




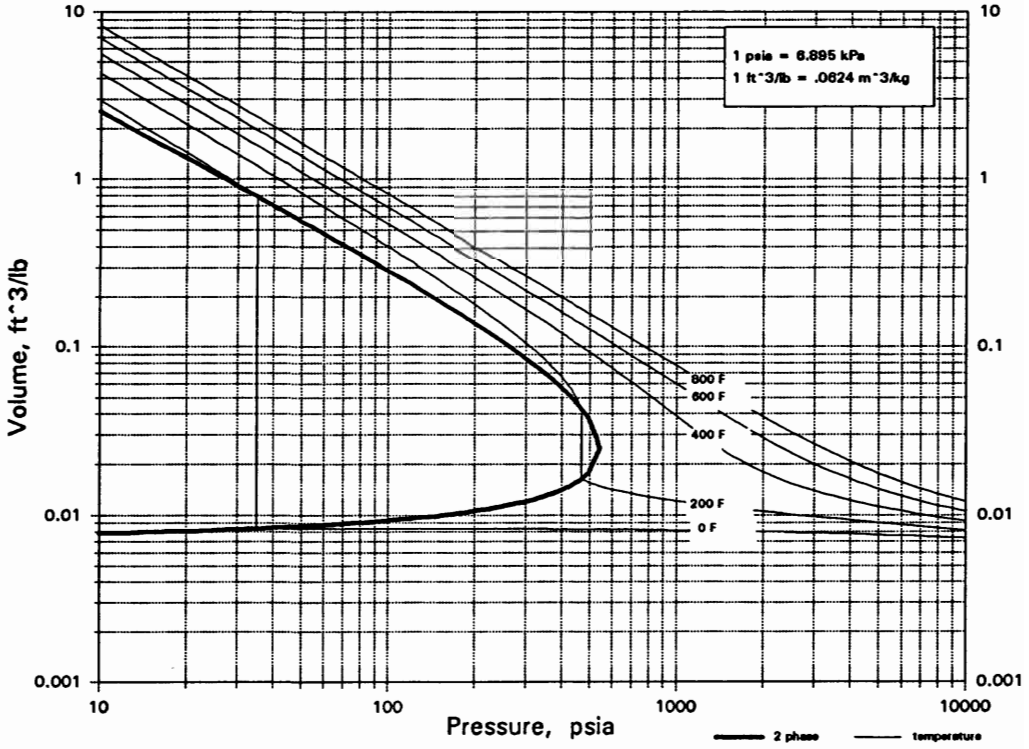
SeOCl2 SELENIUM OXYCHLORIDE

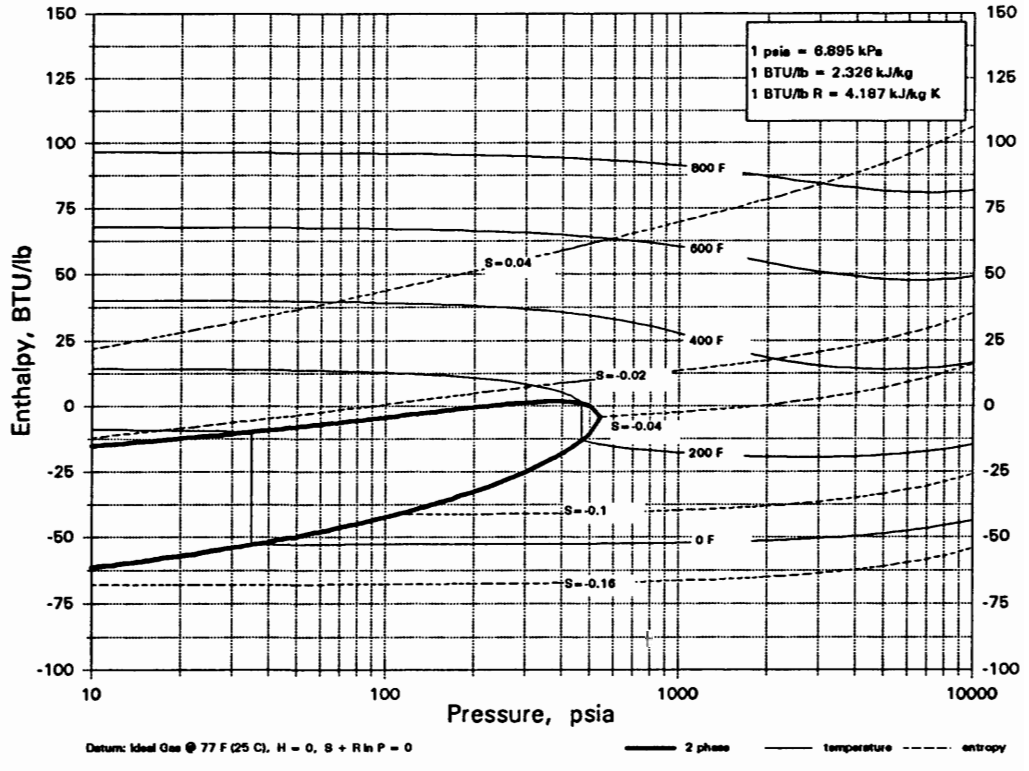




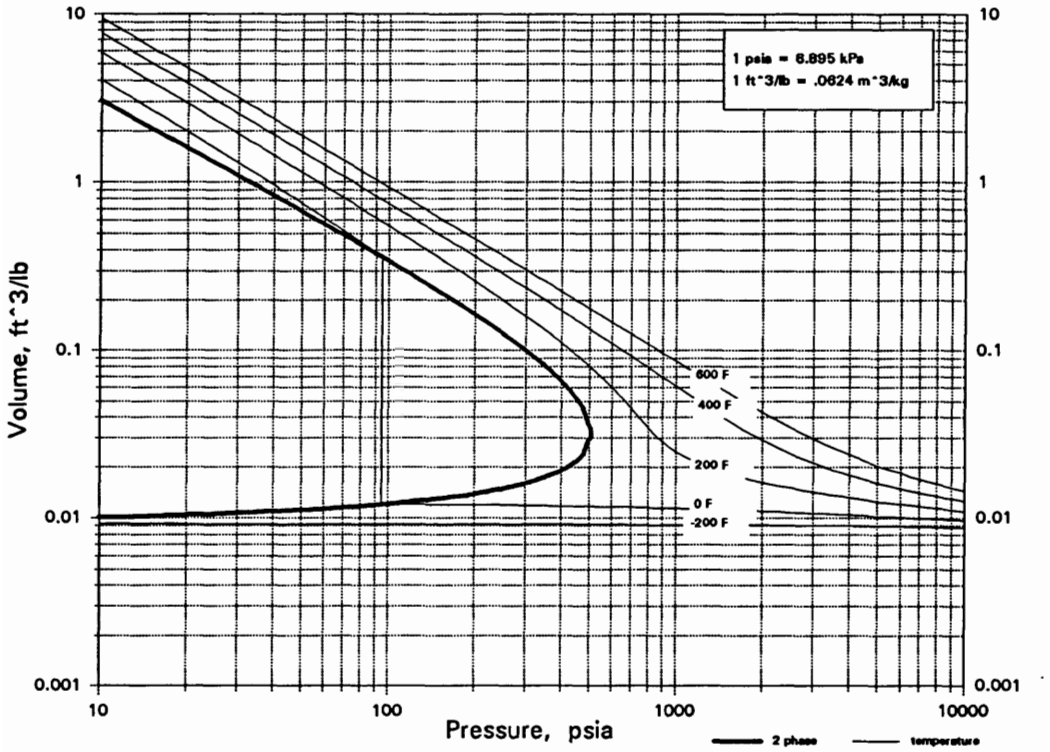

solid
Enthalpy, BTU/lb
Temperature, F
600
500
400
300
200
100
0
-100
0
500
1000
1500
2000
2500
3000
1 BTU/lb = 2.326 kJ/kg
Si
SILICON

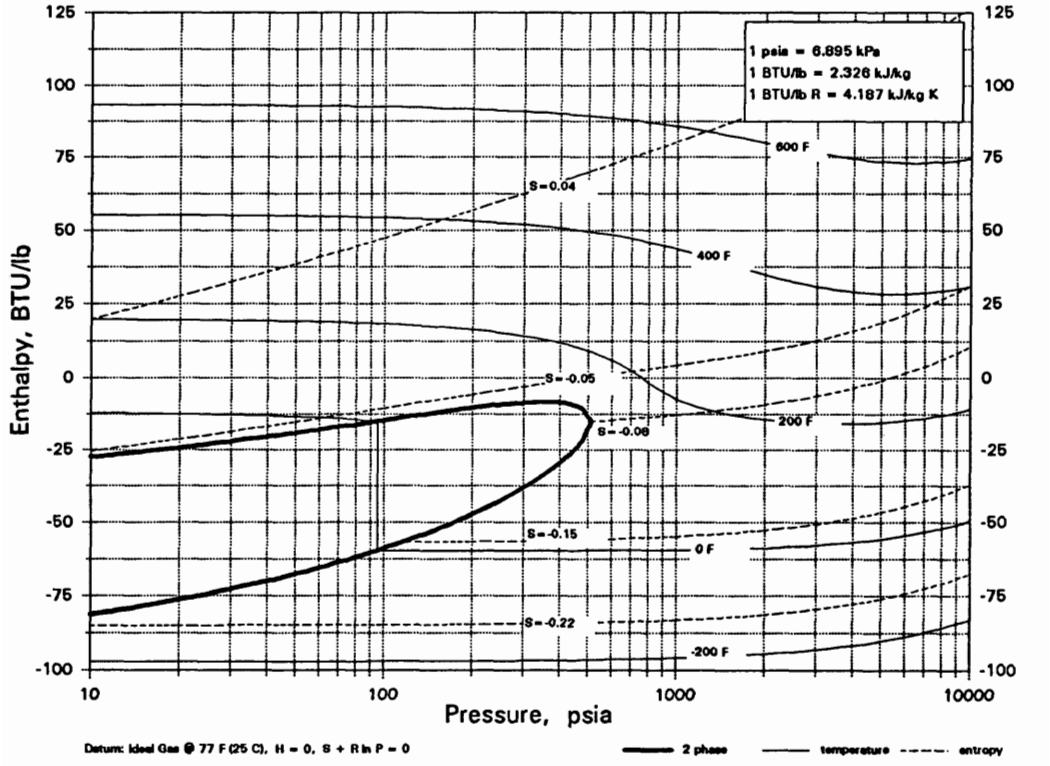
SiBrF3 TRIFLUOROBROMOSILANE



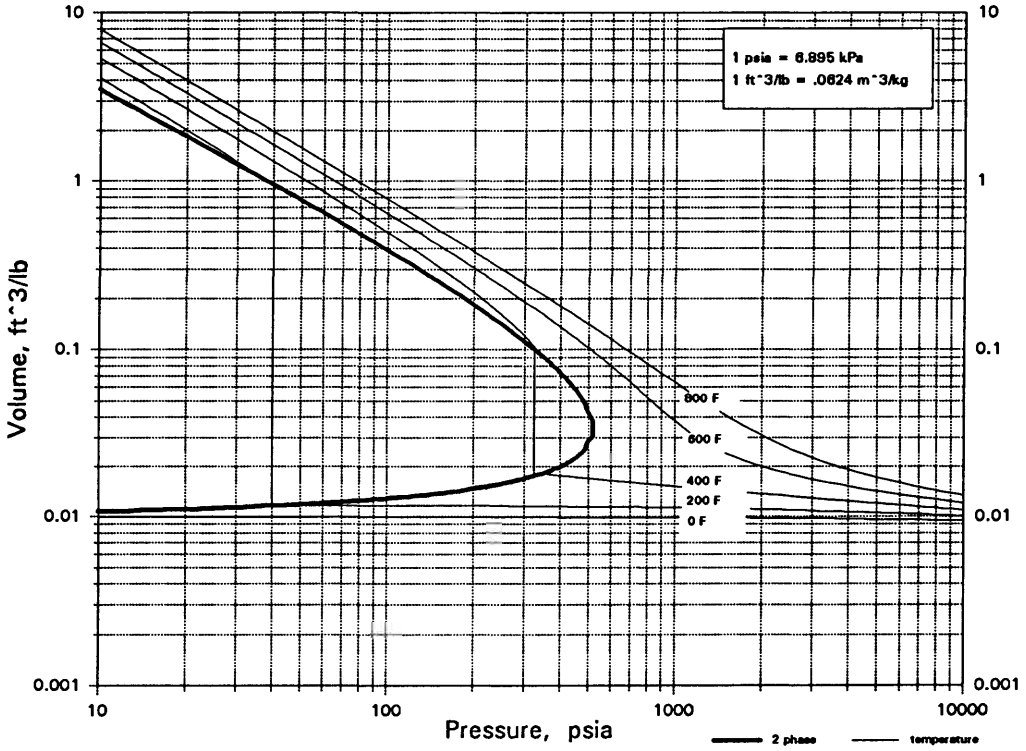


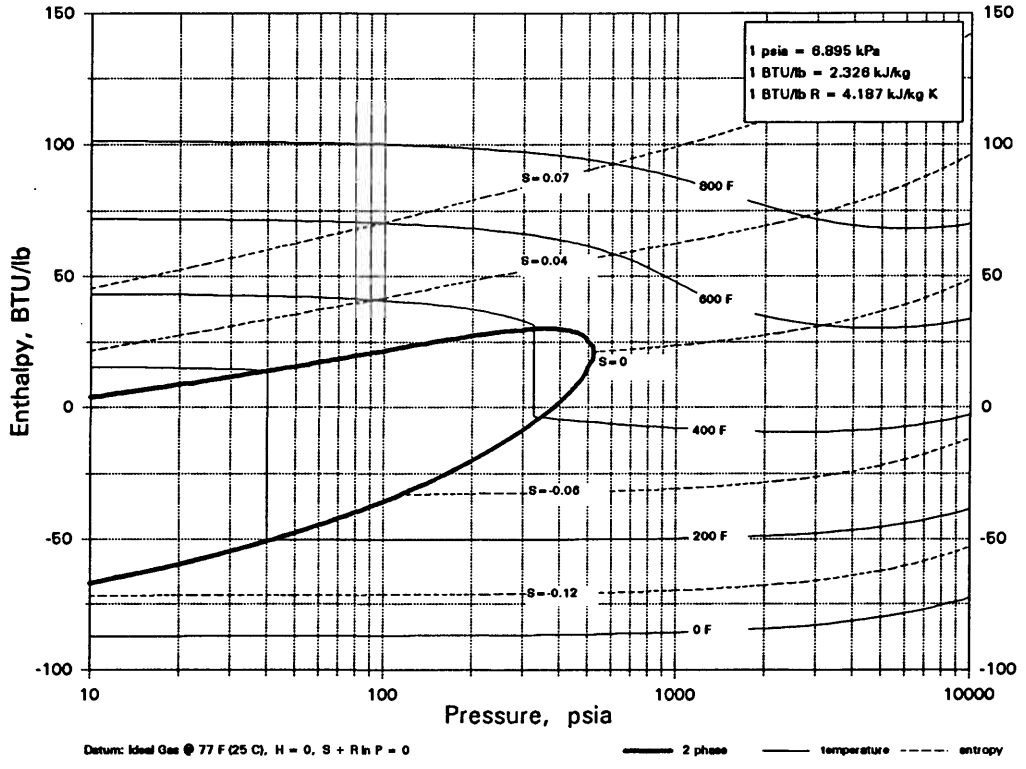
SiClF3 TRIFLUOROCHLOROSILANE



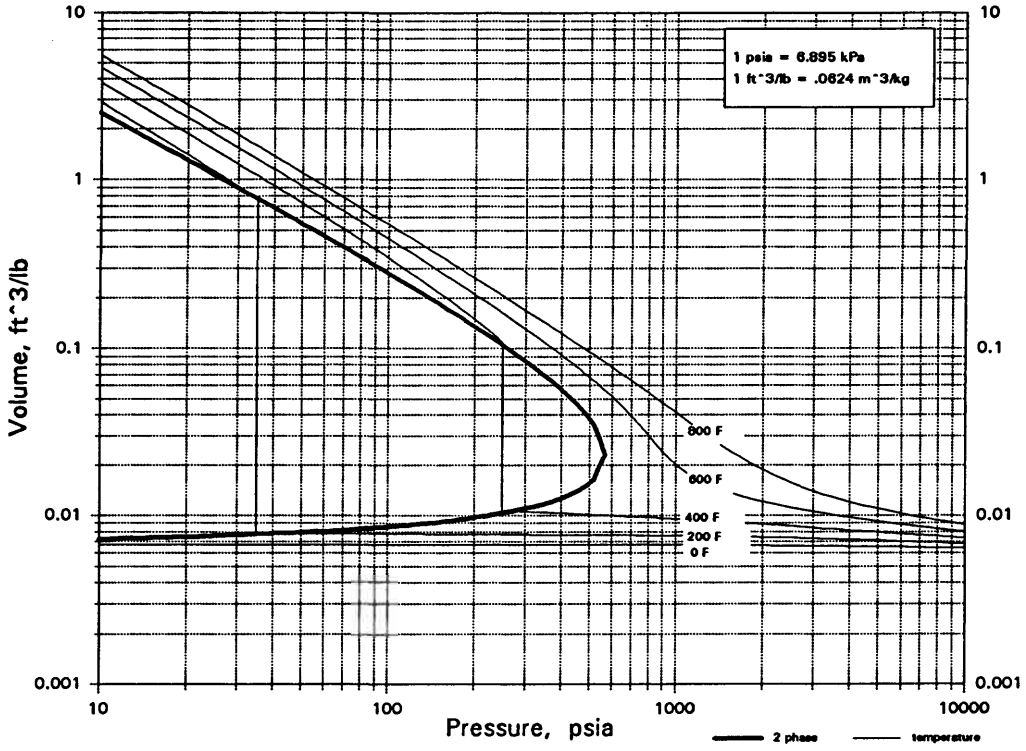


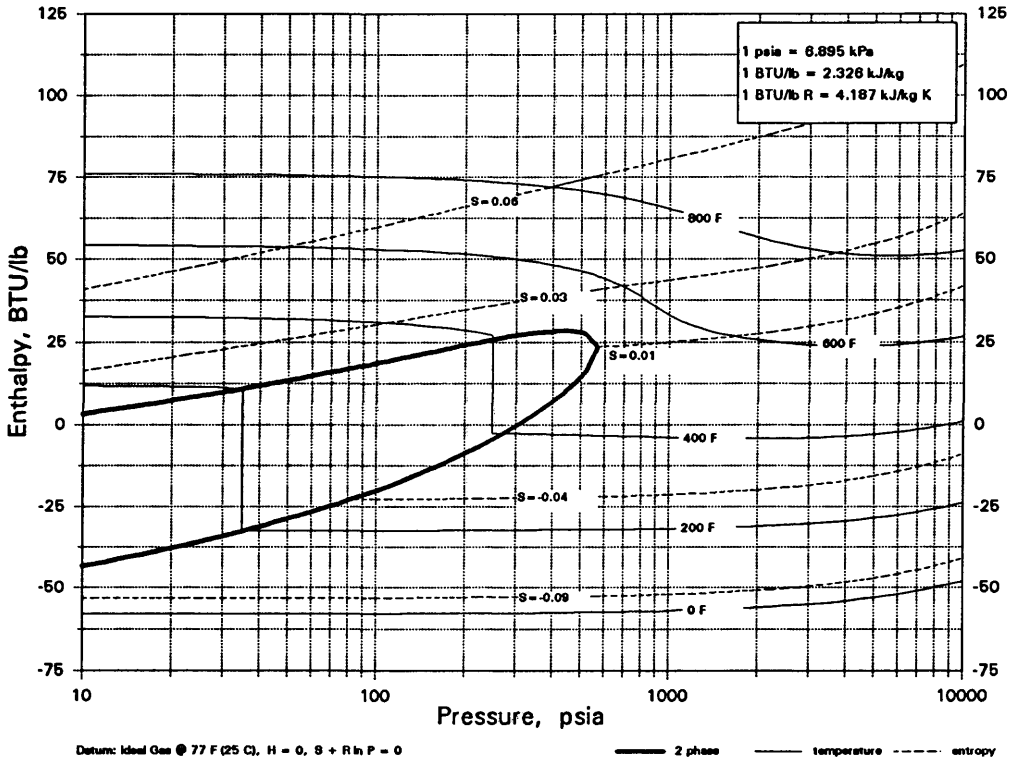
SiCl4 SILICON TETRACHLORIDE



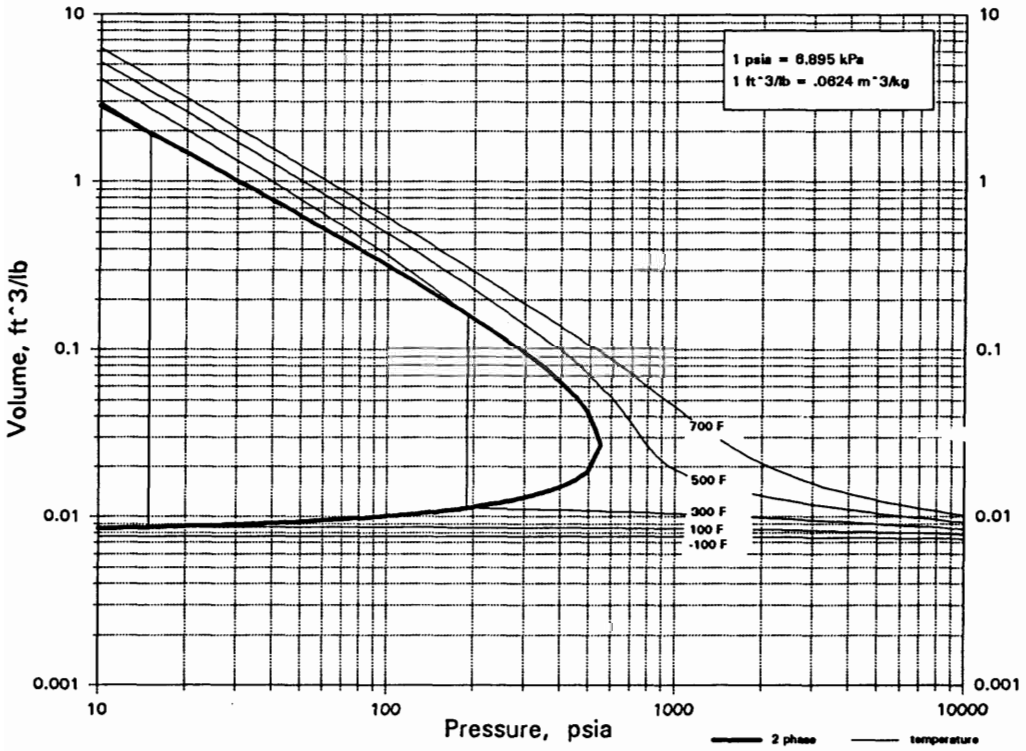


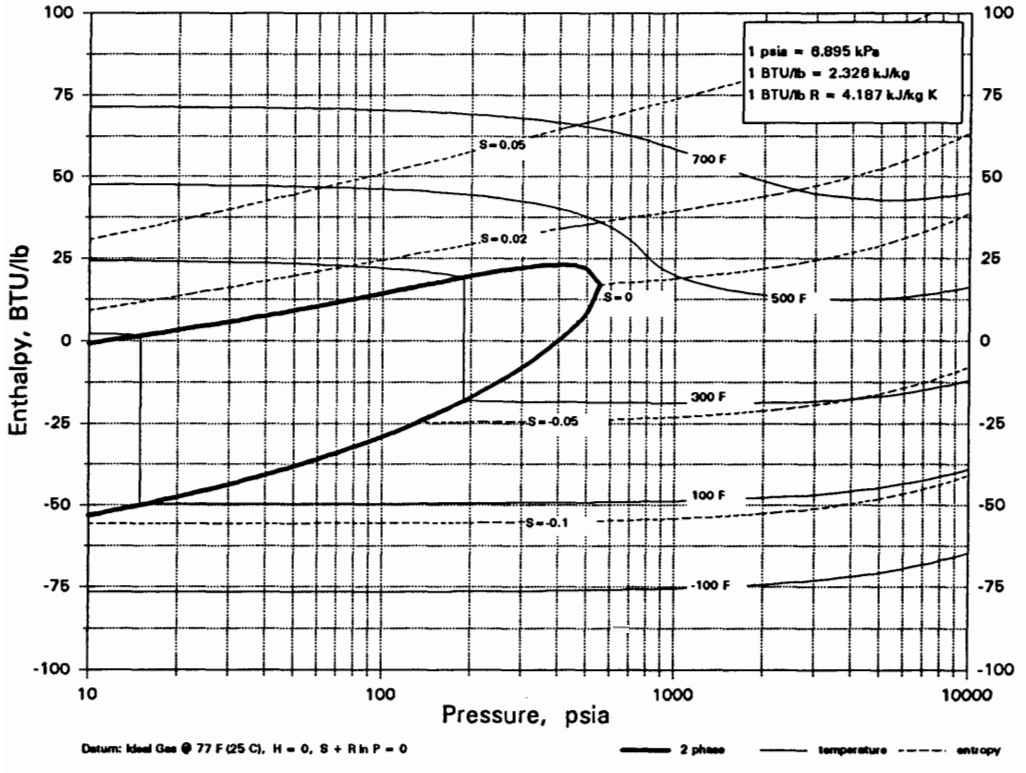
SiBr2ClF	DIBROMOCHLOROFLUOROSILANE



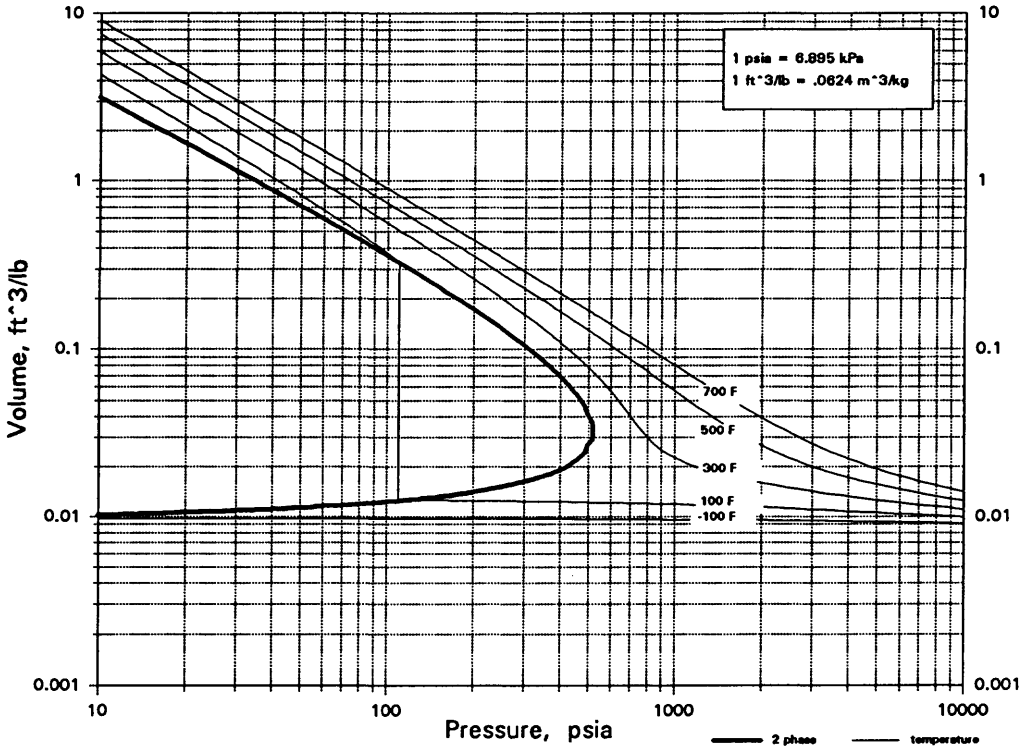


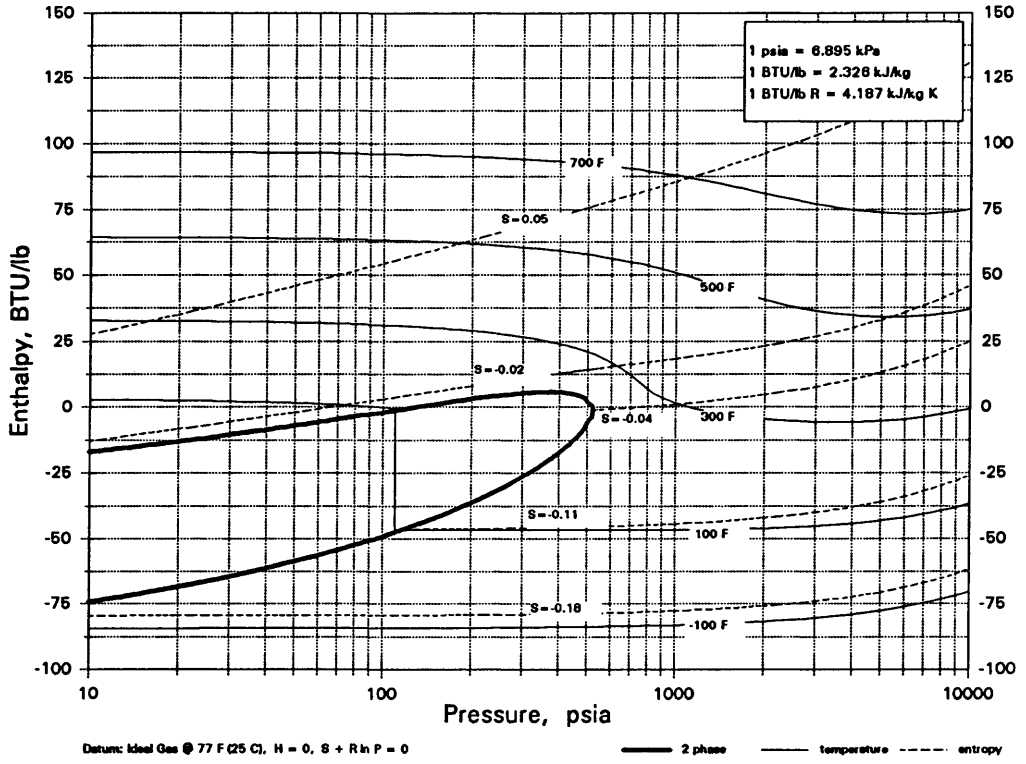
SiBrCl2F BROMODICHLOROFLUOROSILANE



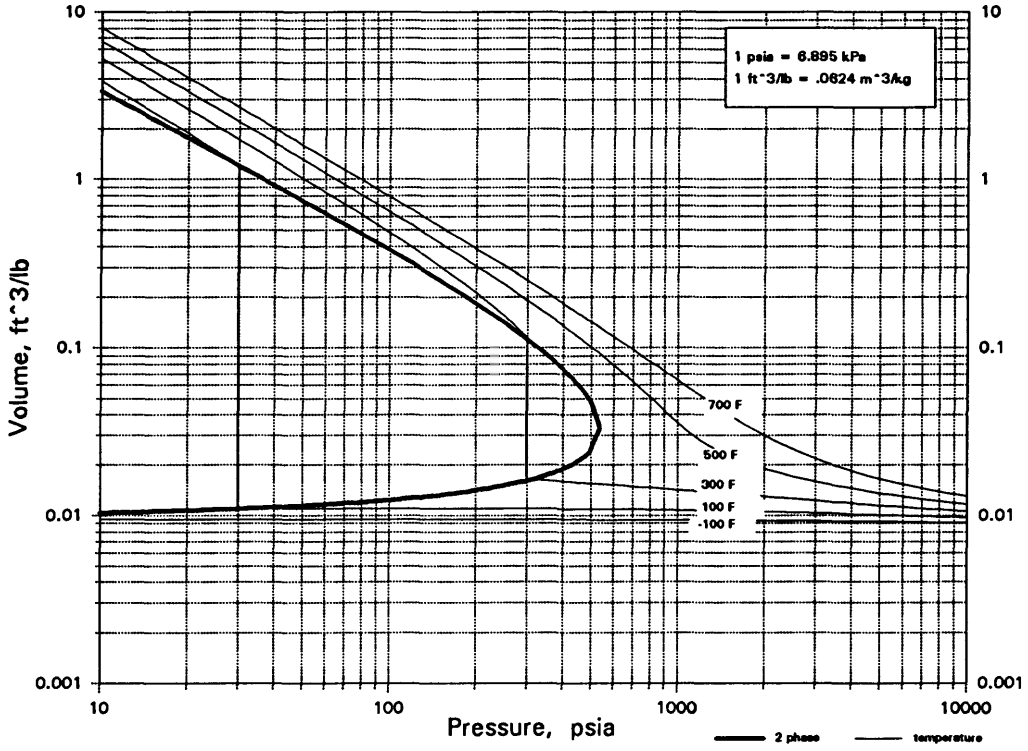


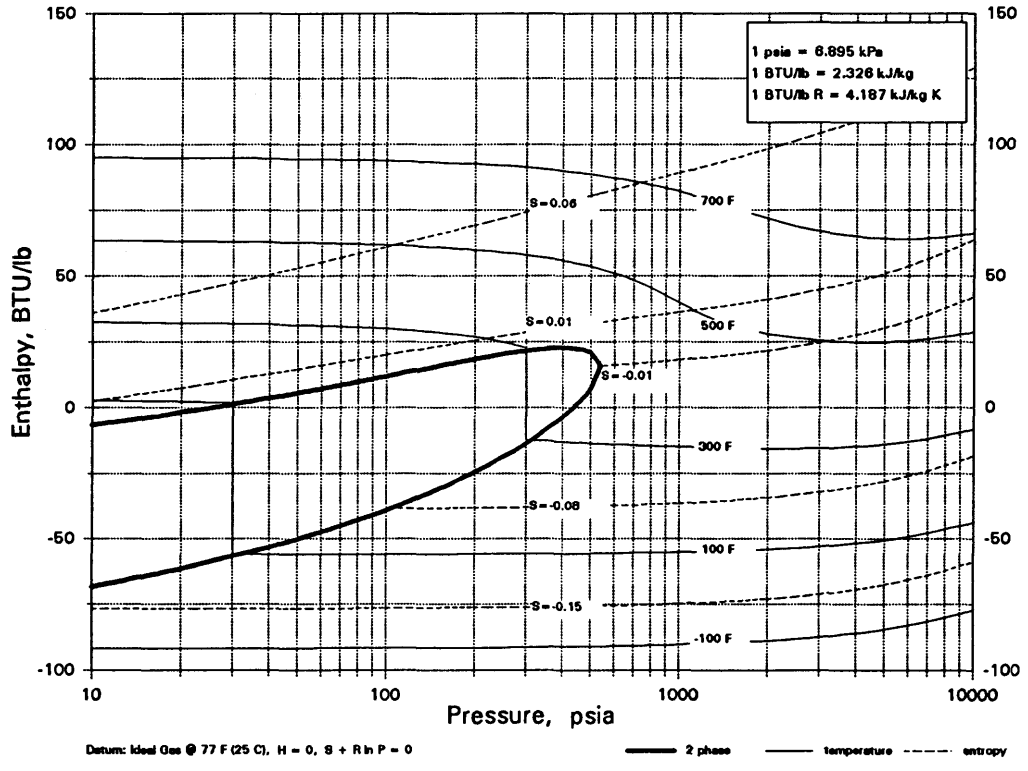
SiCl2F2 DICHLORODIFLUOROSILANE



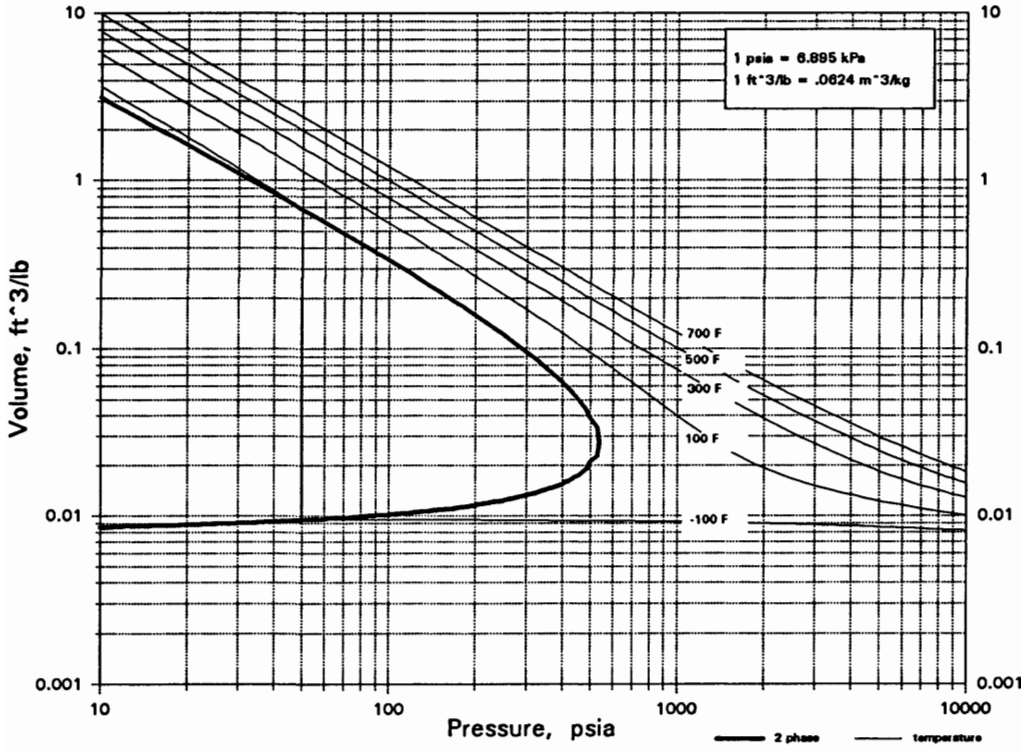


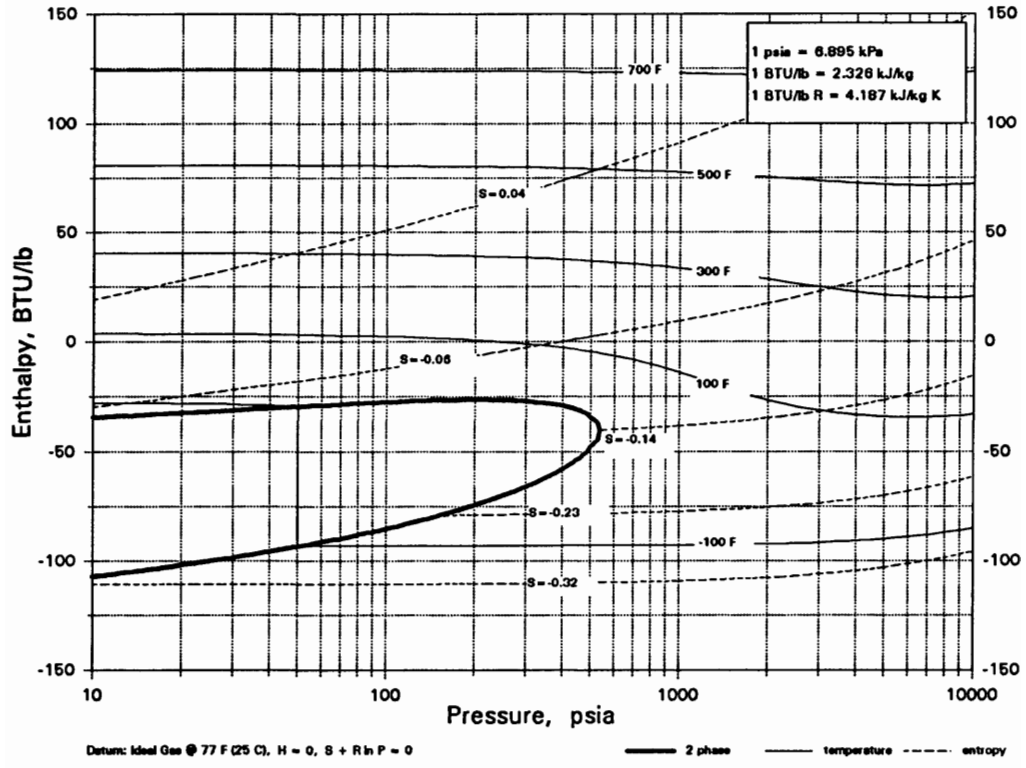
SiCl3F TRICHLOROFLUOROSILANE



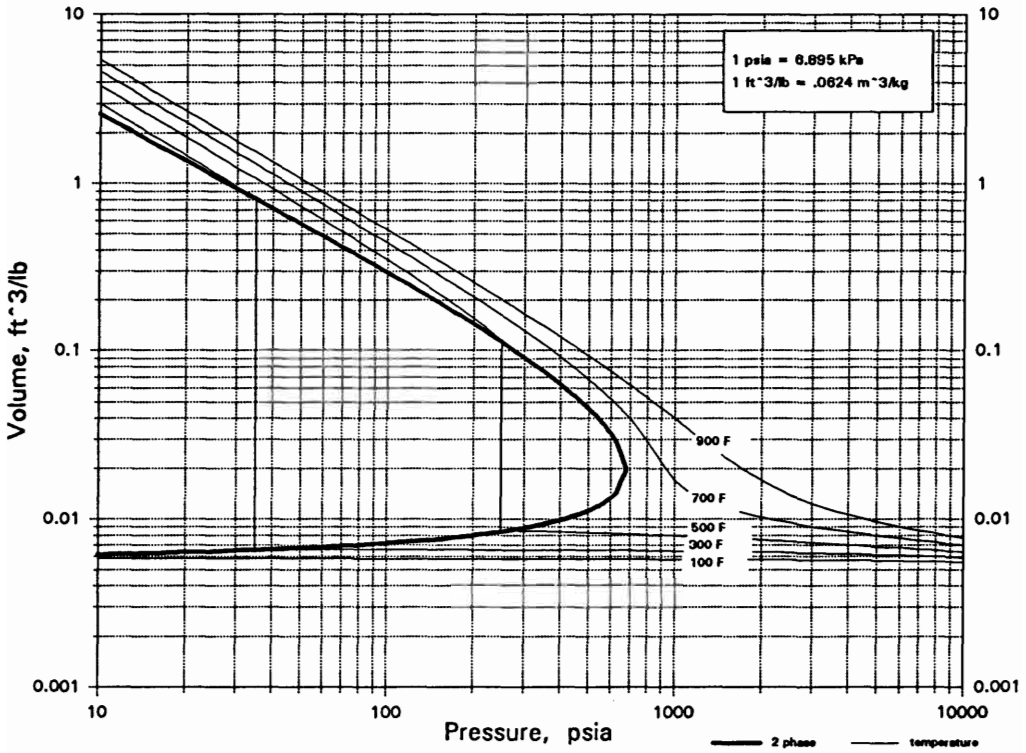


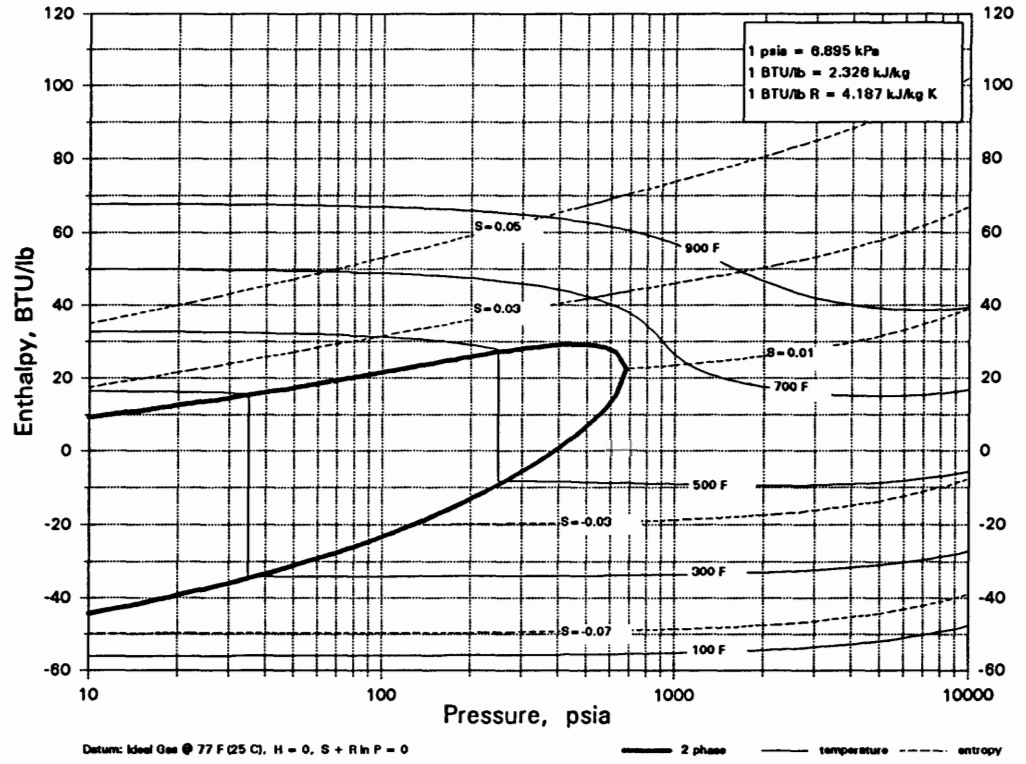
SiF4 SILICON TETRAFLUORIDE



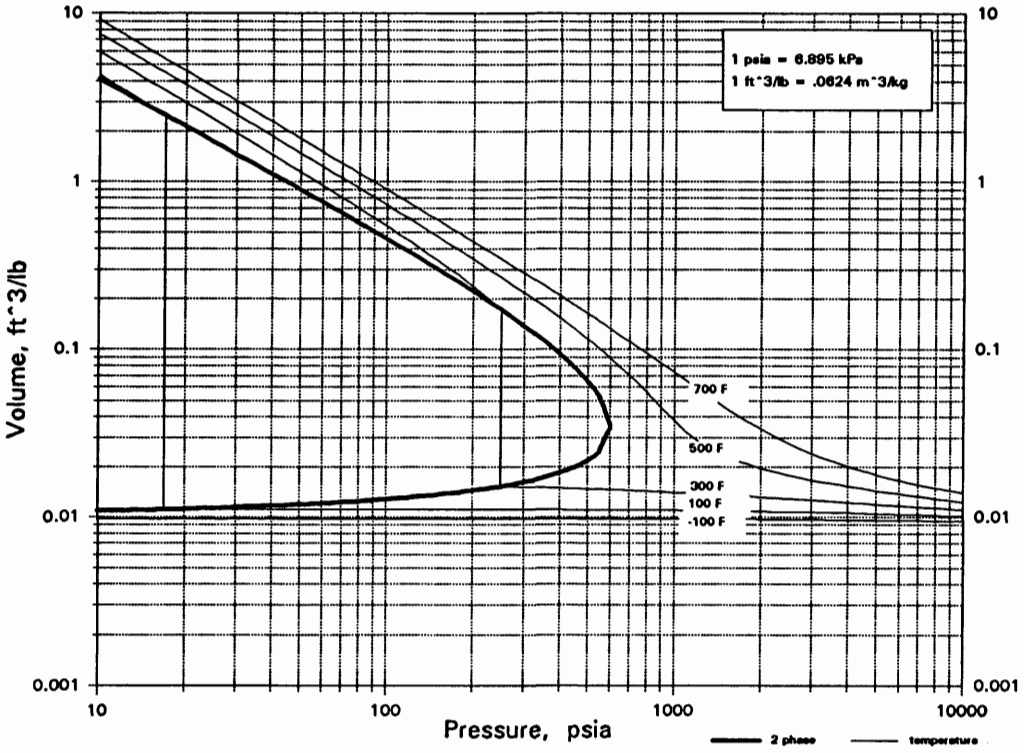


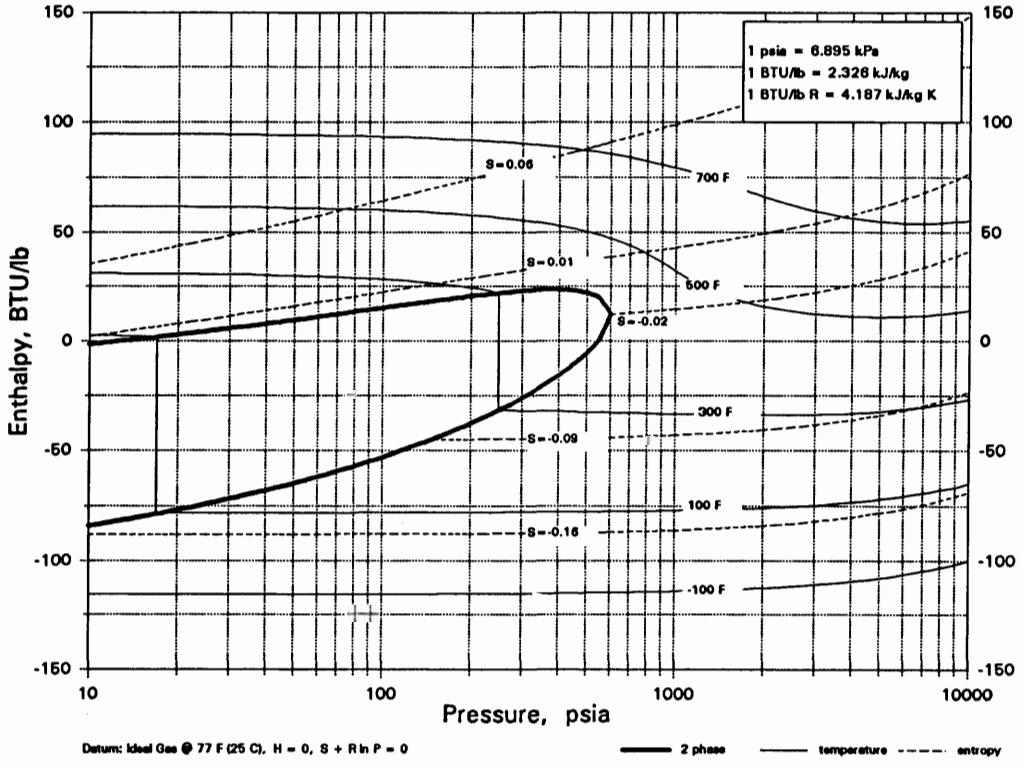
SiHBr3 TRIBROMOSILANE



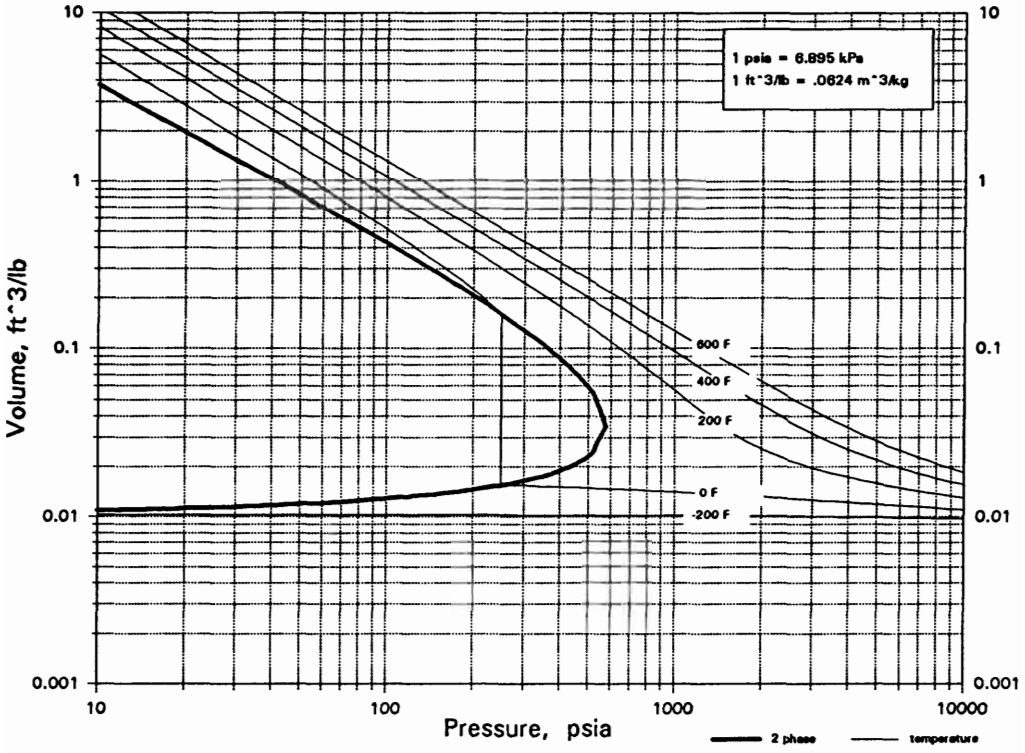


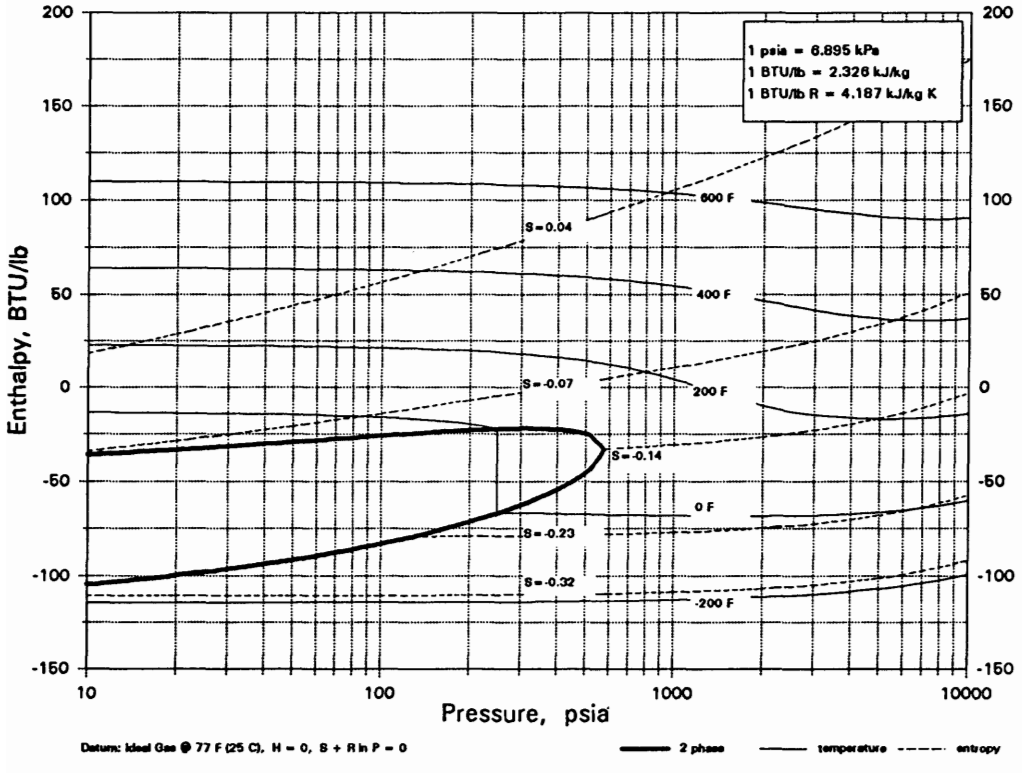
SiHCl3 TRICHLOROSILANE



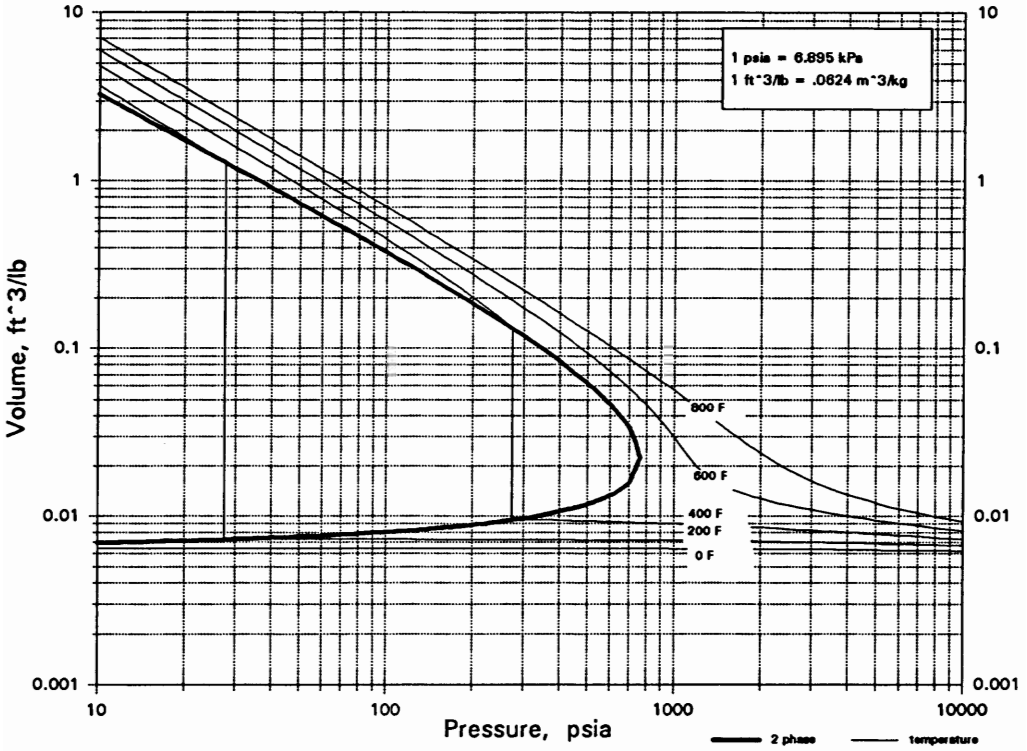


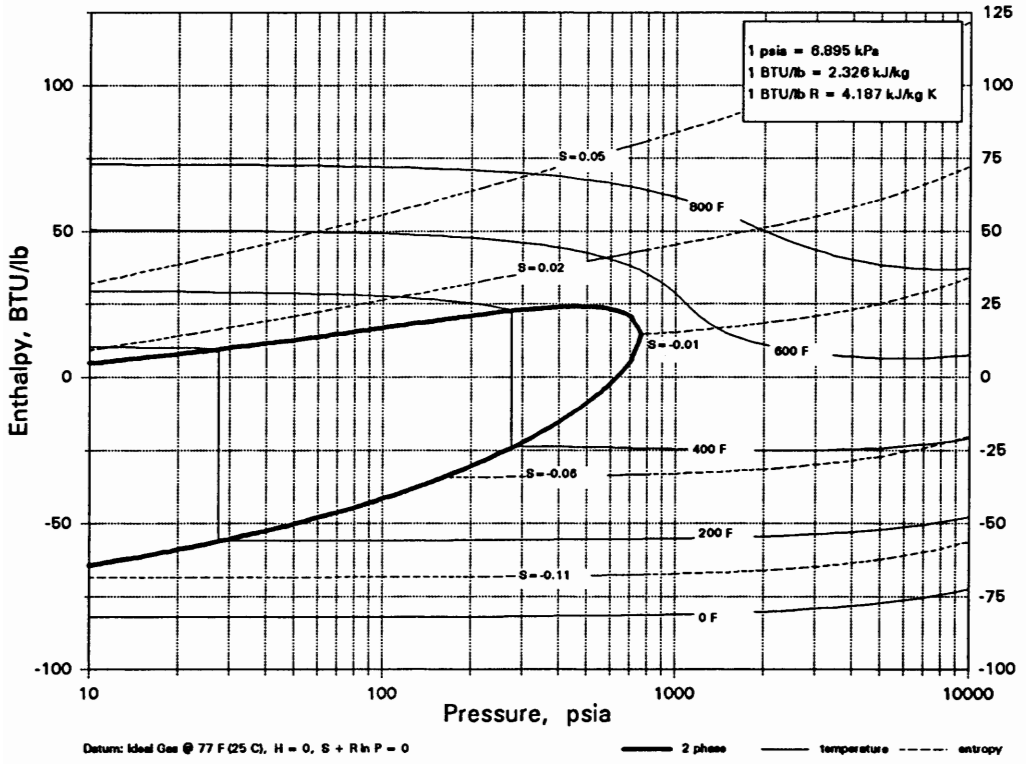
SiHF3 TRIFLUOROSILANE



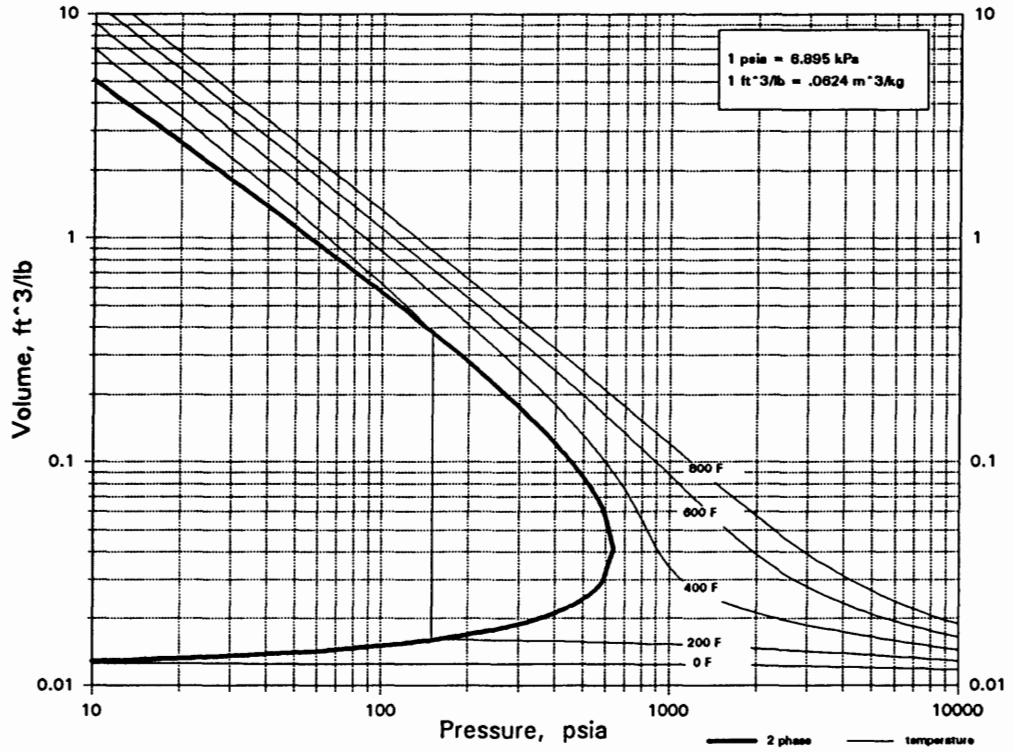


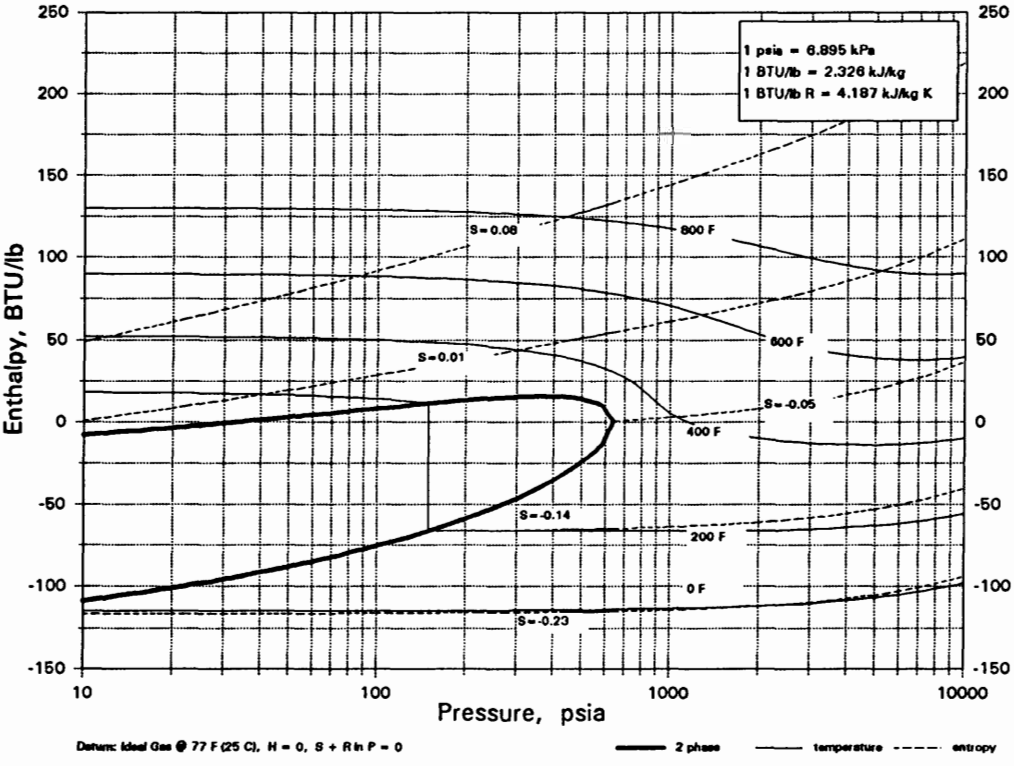
SiH2Br2 DIBROMOSILANE



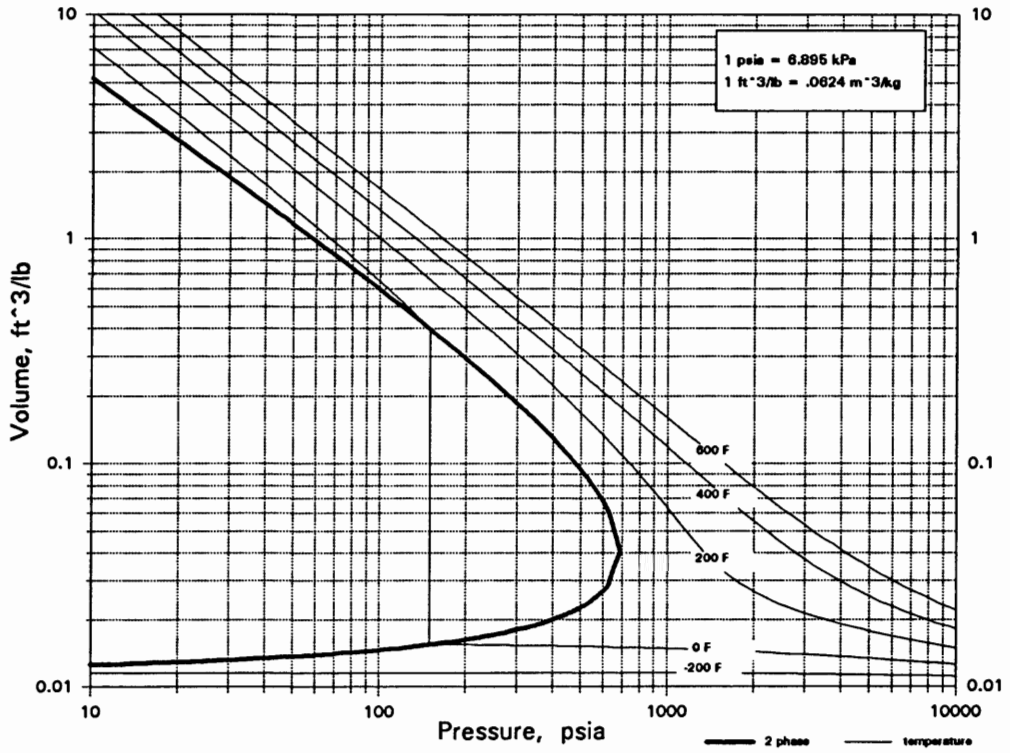


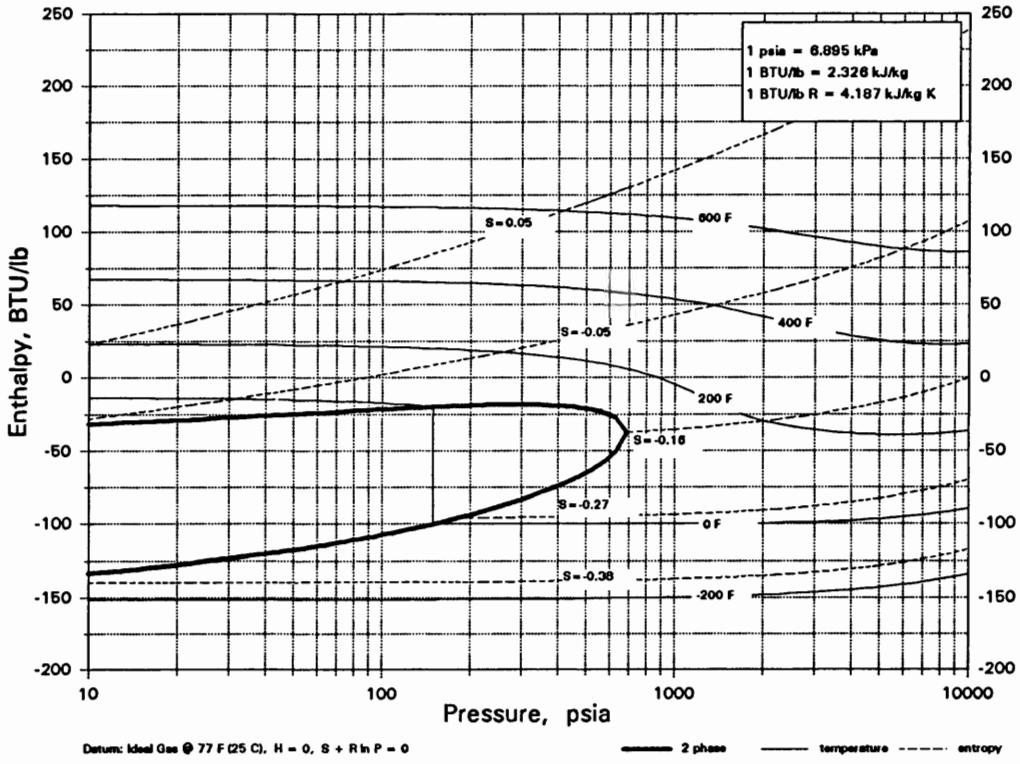
SiH2Cl2 DICHLOROSILANE



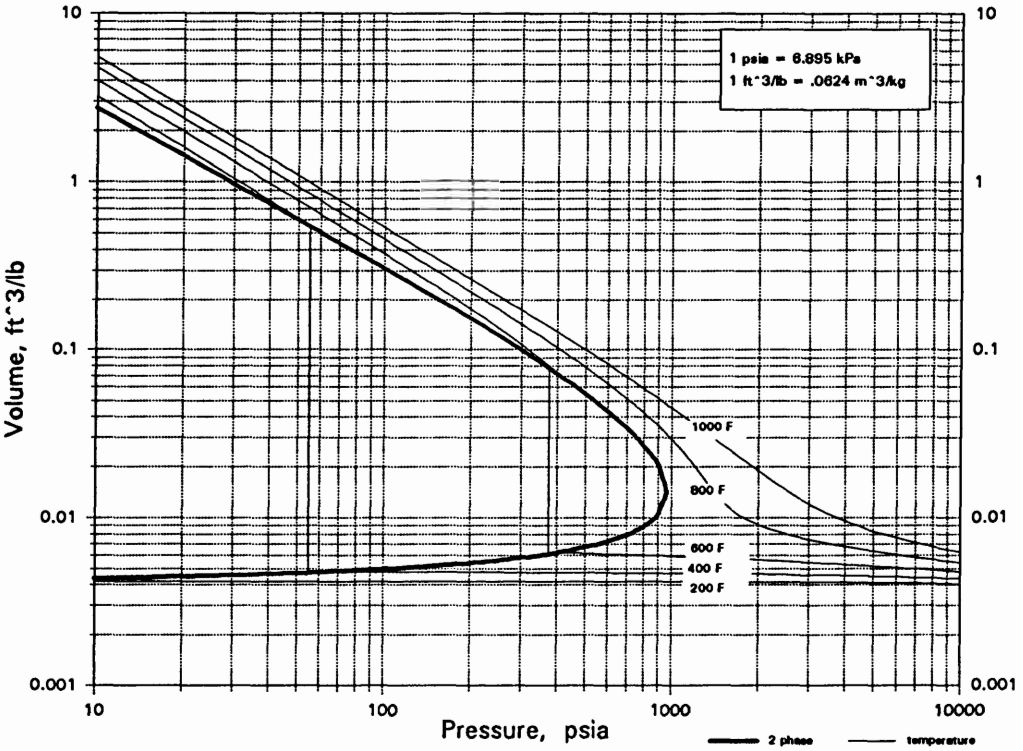


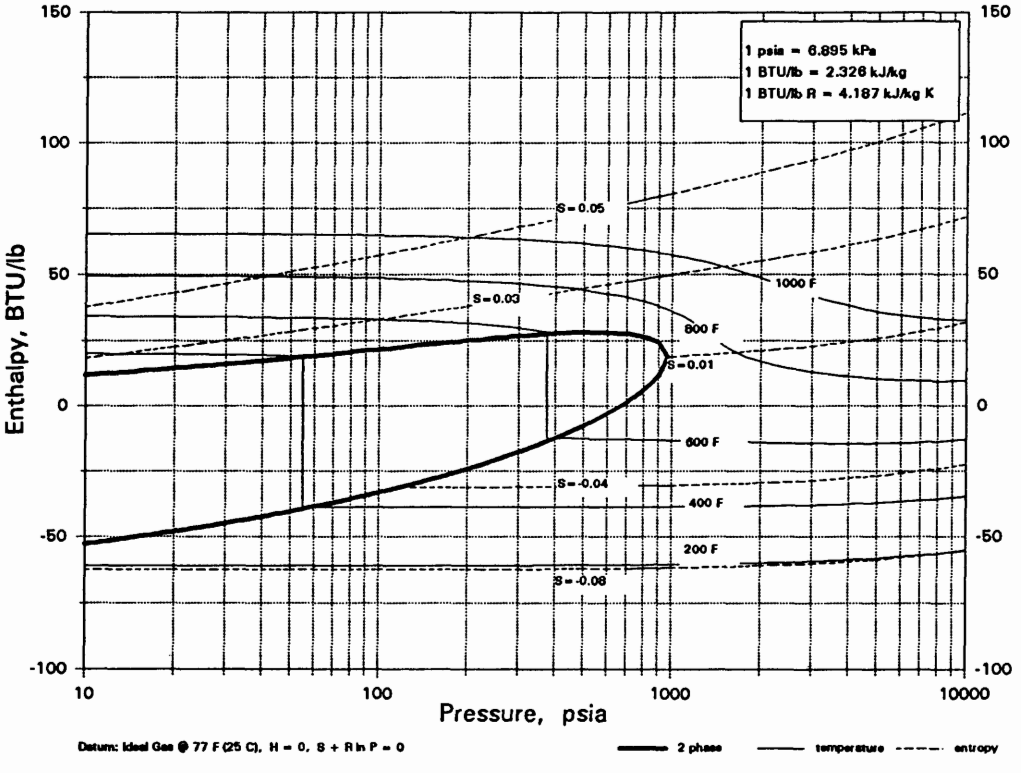
SiH2F2 DIFLUOROSILANE



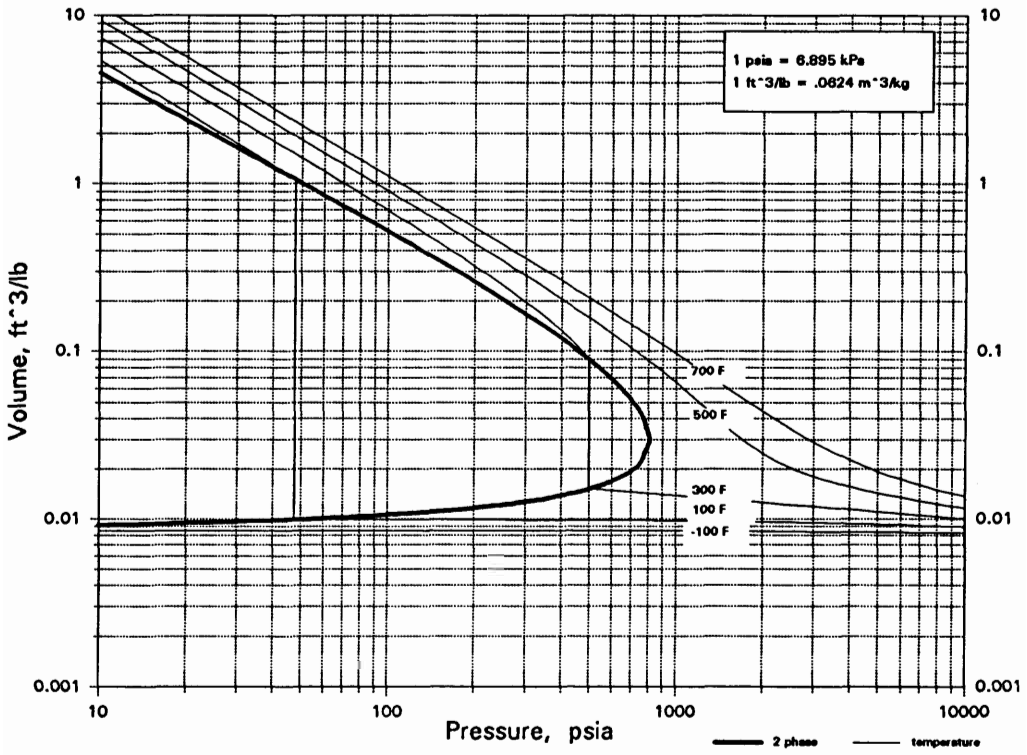


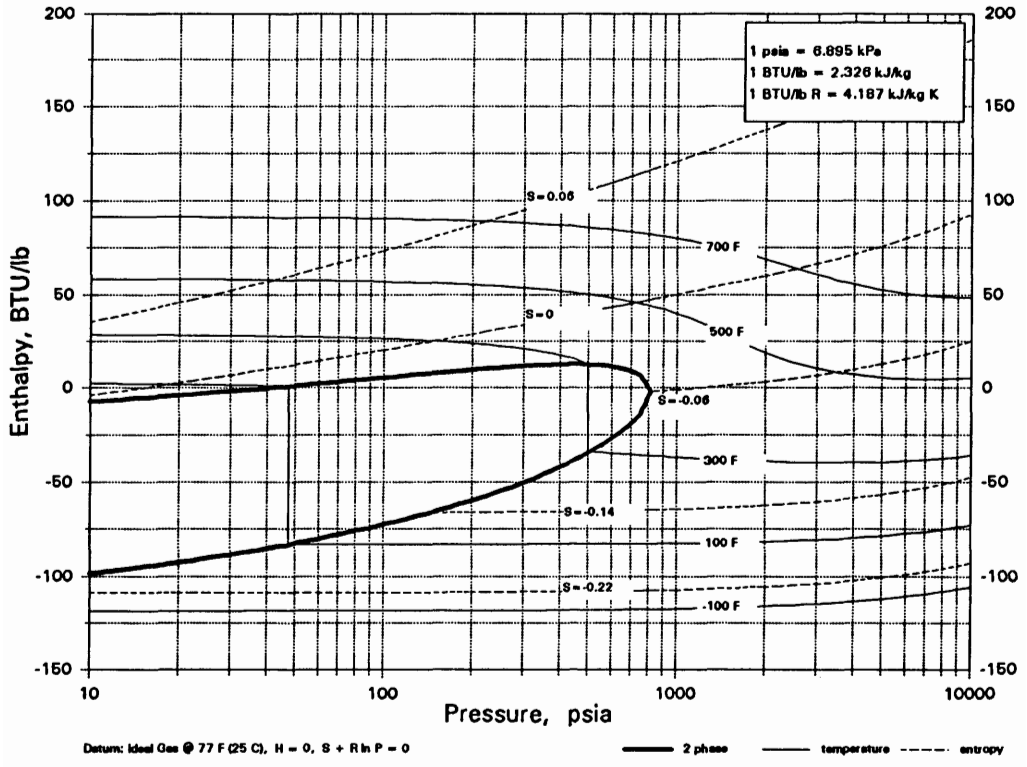
SiH2I2 DIIODOSILANE



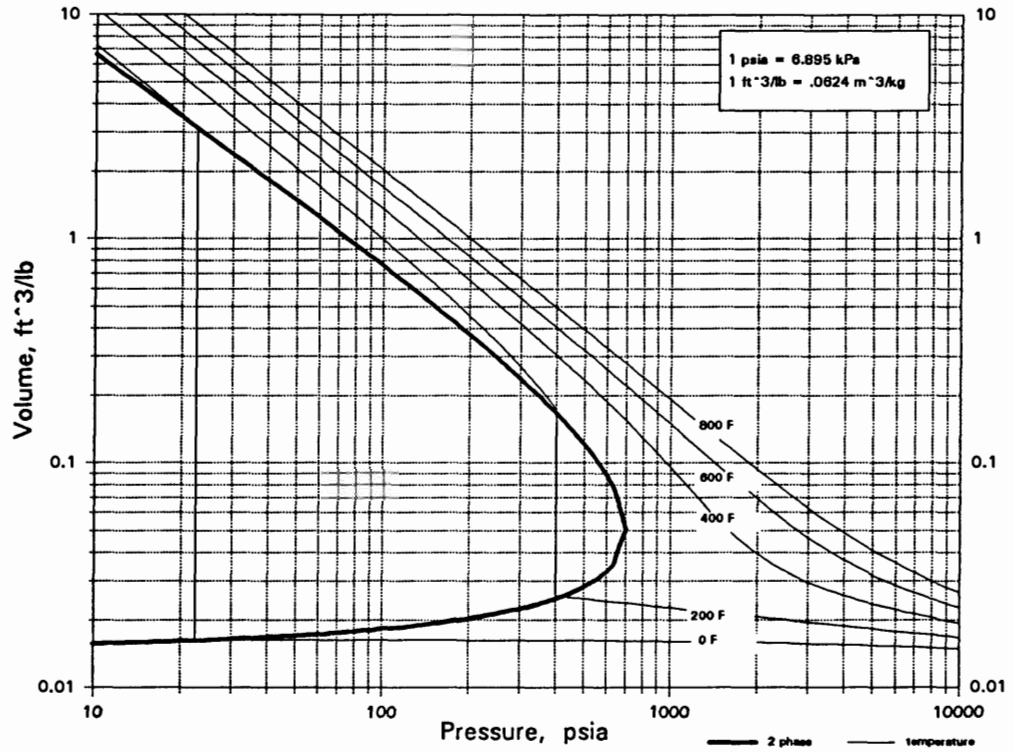


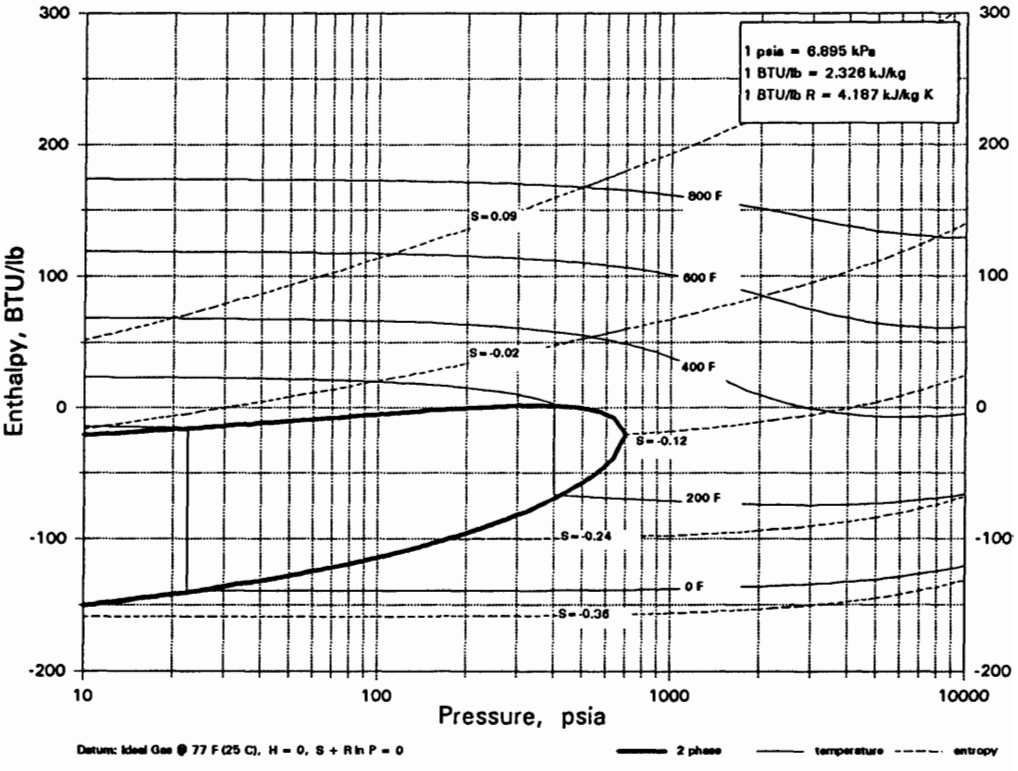
SiH3Br MONOBROMOSILANE



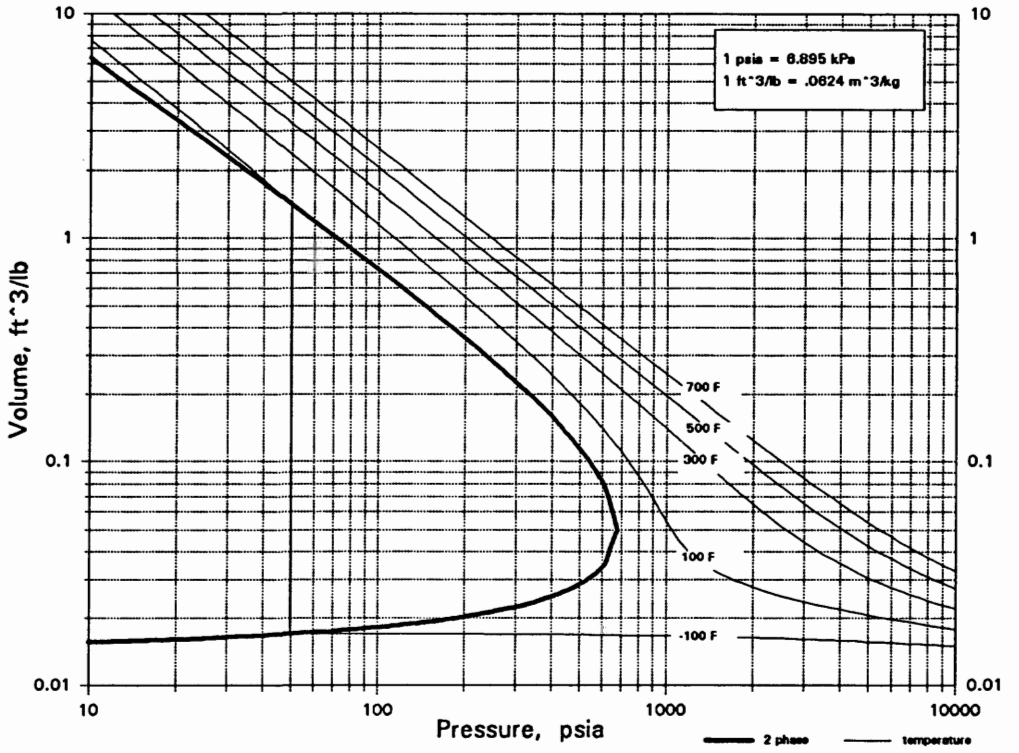


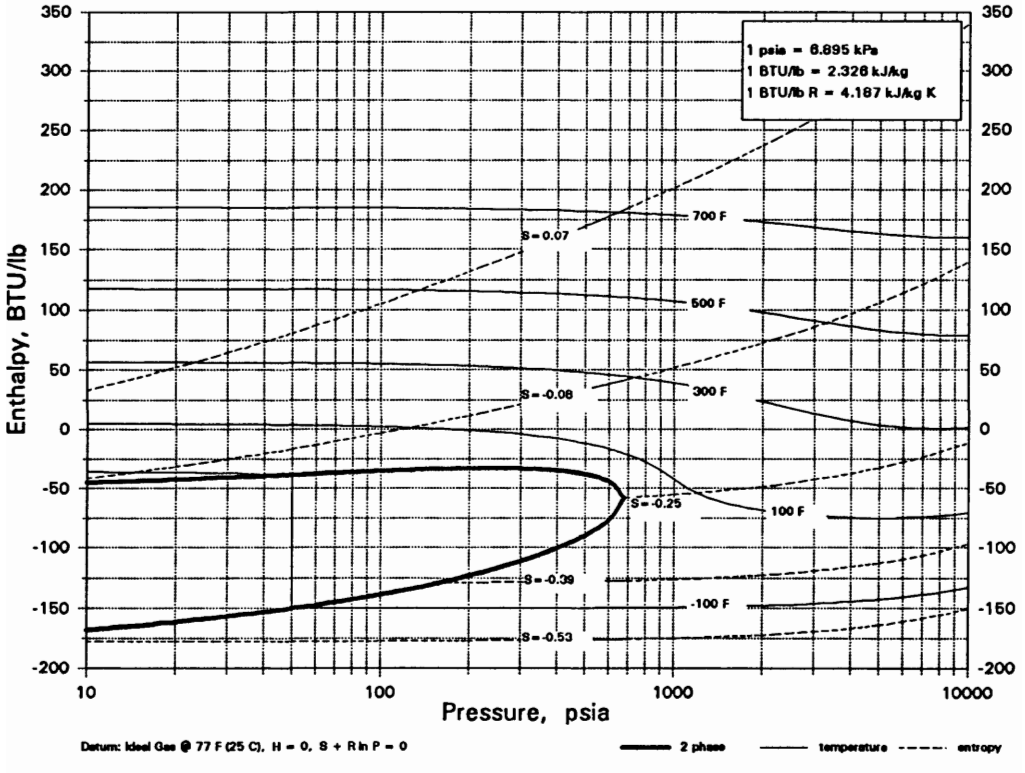
SiH3Cl MONOCHLOROSILANE



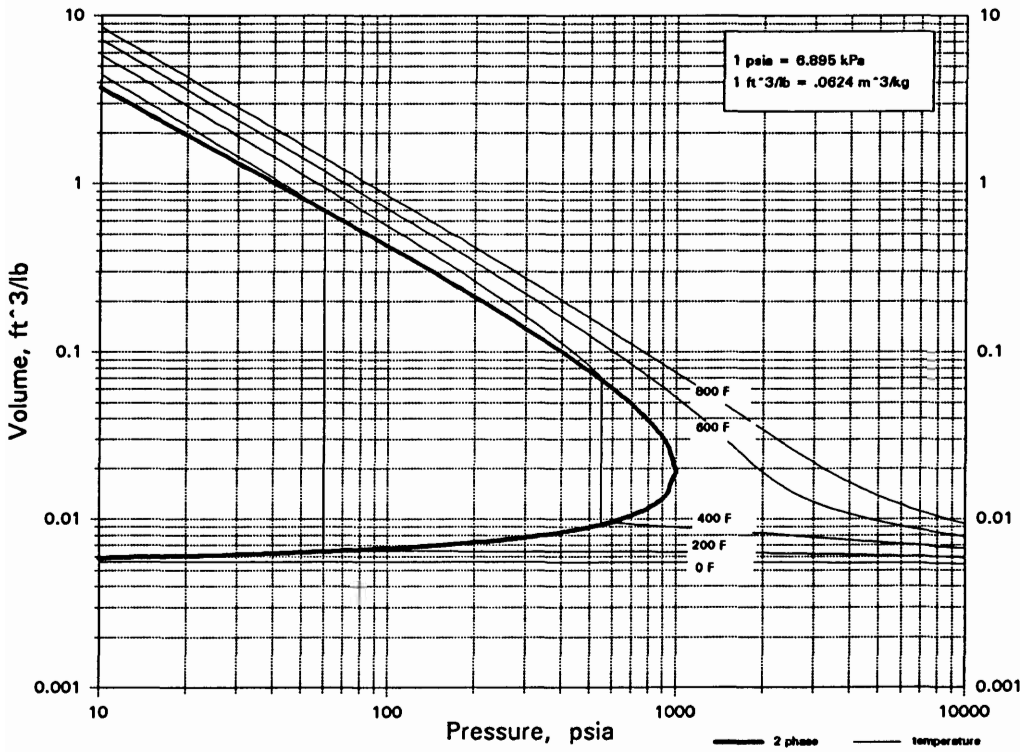


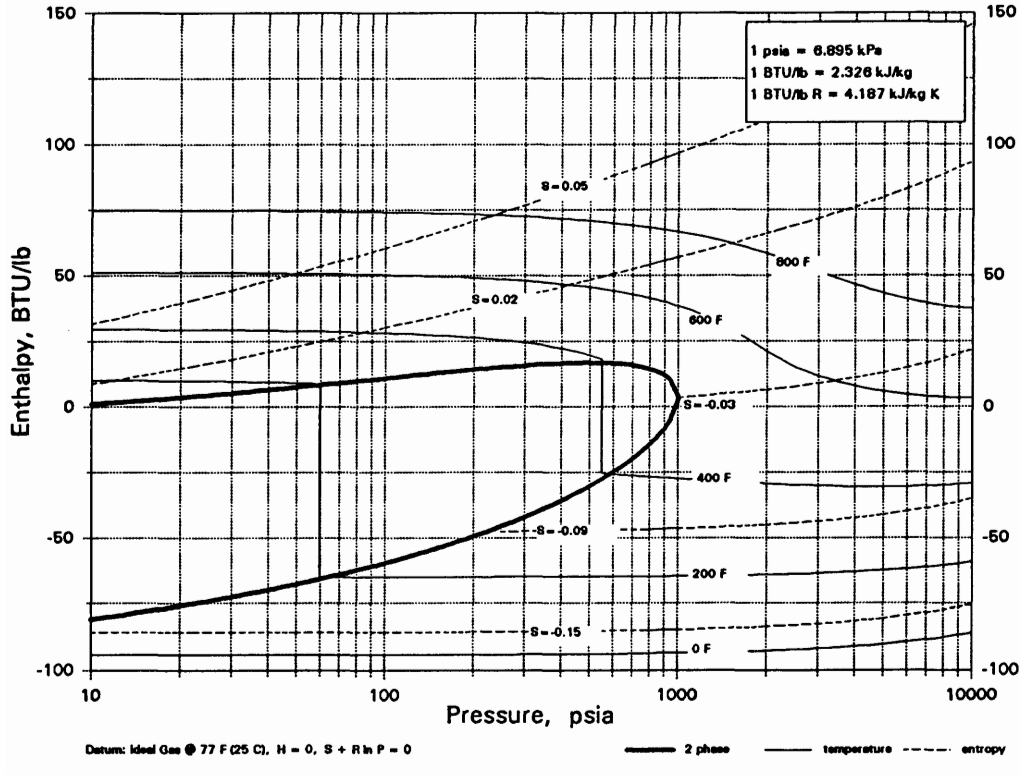
SiH3F MONOFLUOROSILANE



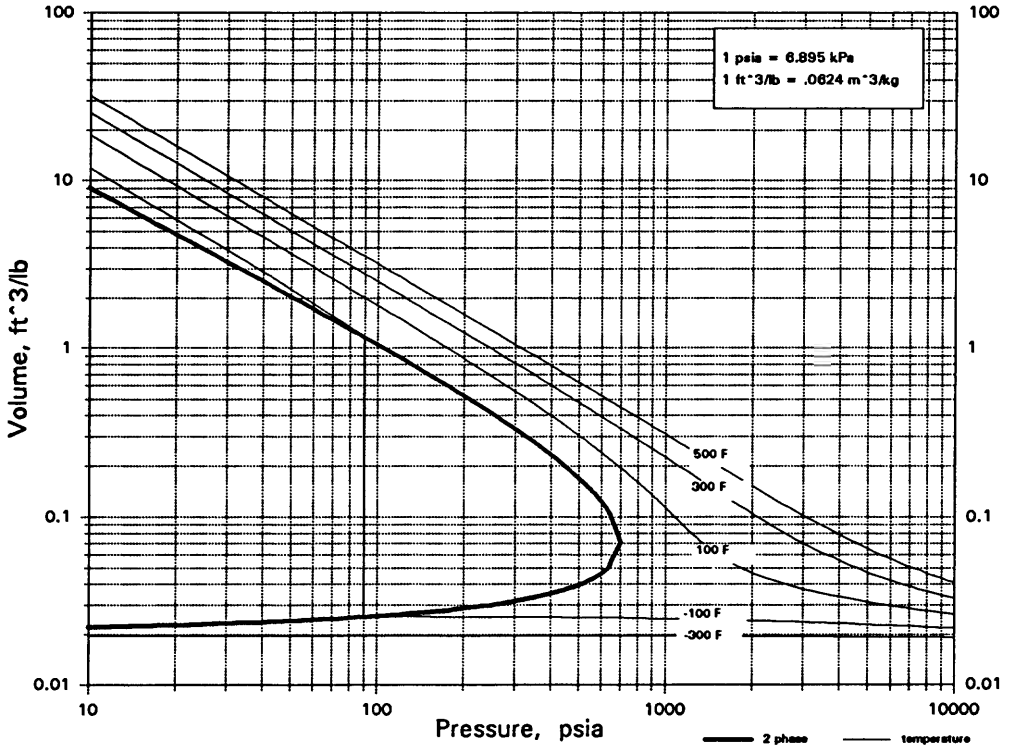


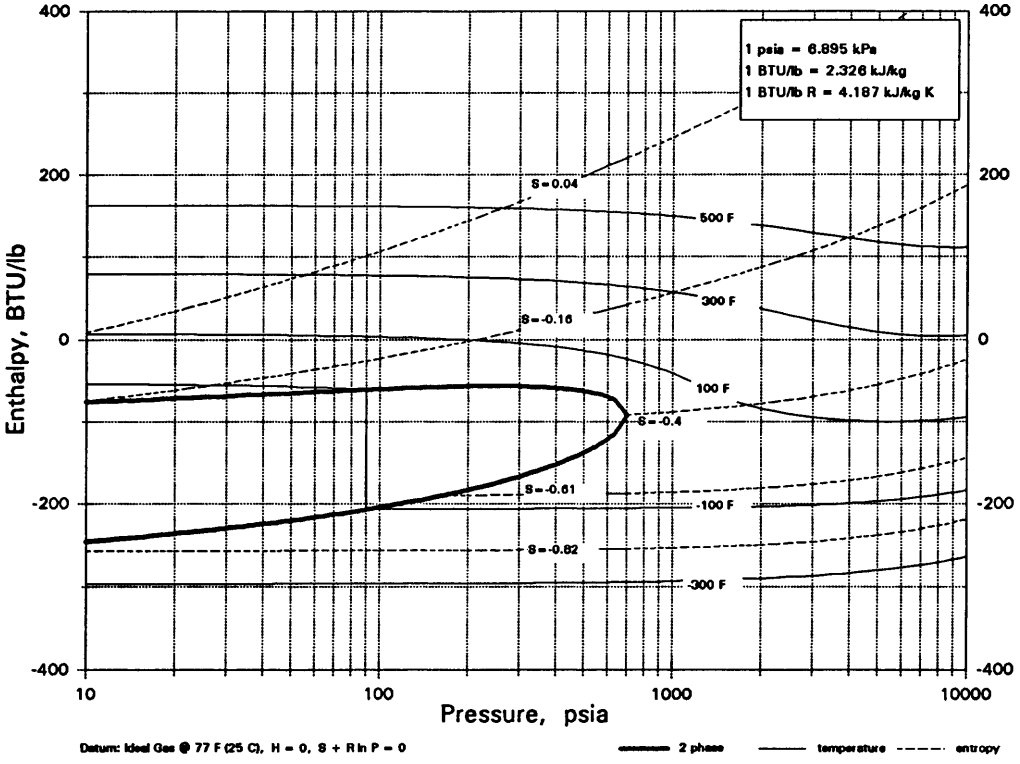
SiH3I IODOSILANE

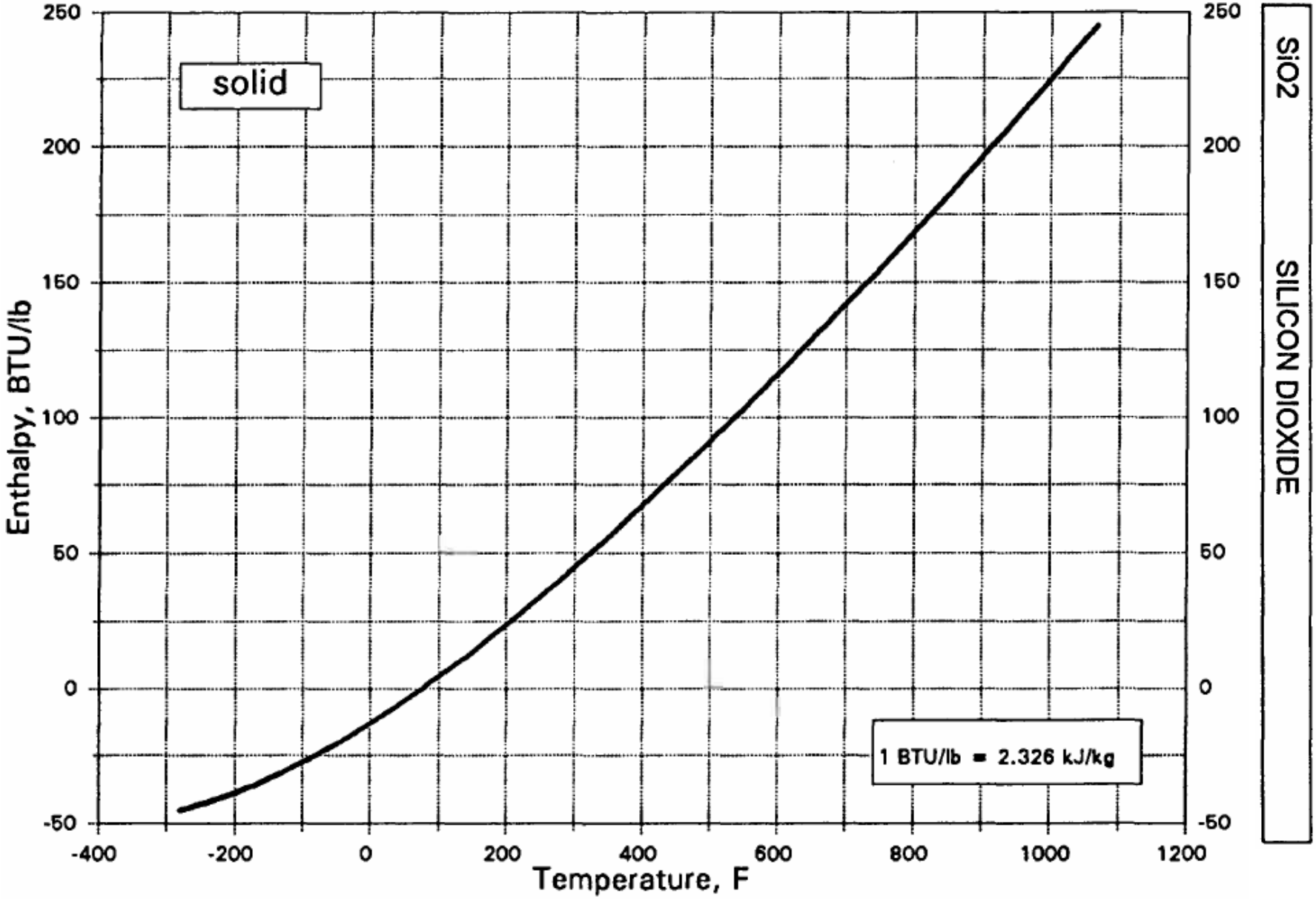




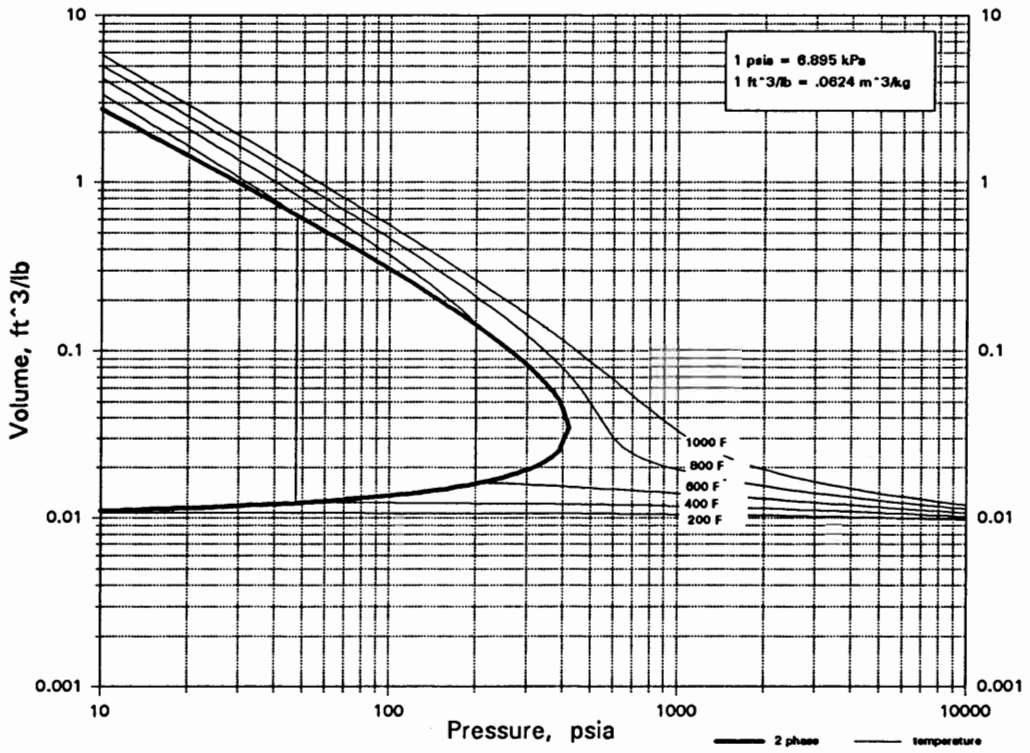
SiH4	SILANE

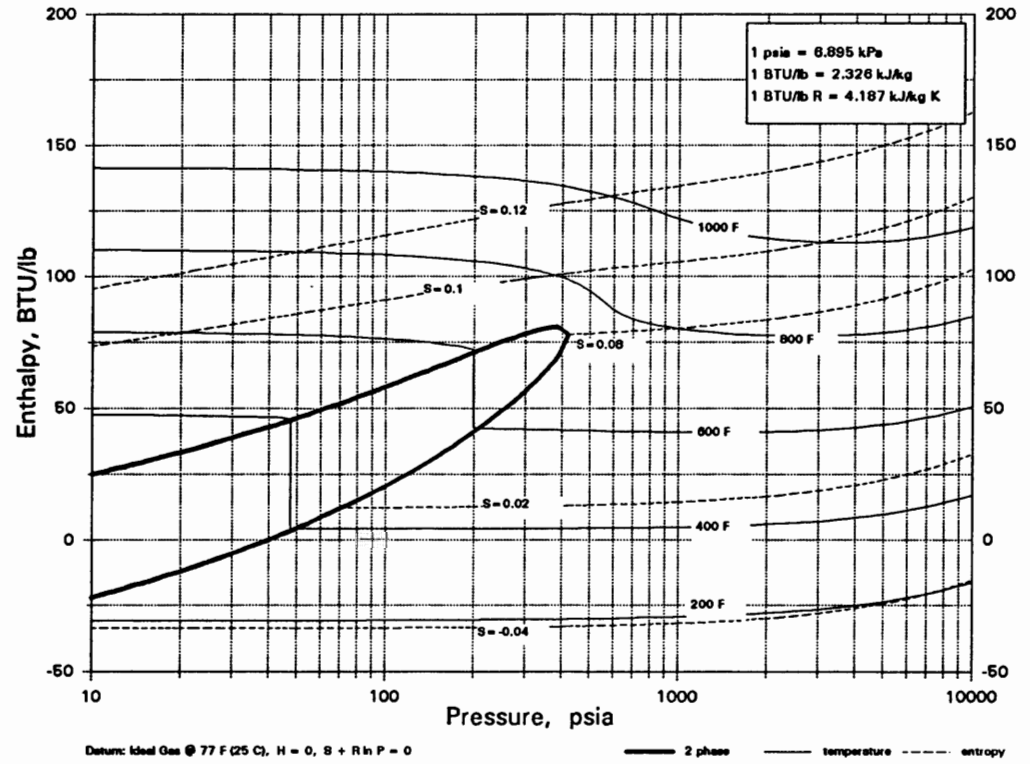

1 psia = 6.895 kPa
1 ft^3/lb = .0624 m^3/kg
Volume, ft^3/lb
Pressure, psia
500 F
300 F
100 F
-100 F
-300 F
2 phase
temperature


1 psia = 6.895 kPa
1 BTU/lb = 2.326 kJ/kg
1 BTU/lb R = 4.187 kJ/kg K
Enthalpy, BTU/lb
Pressure, psia
S = 0.04
S = -0.16
S = -0.4
S = -0.61
S = -0.82
500 F
300 F
100 F
-100 F
-300 F
Datum: Ideal Gas @ 77 F (25 C), H = 0, S + R ln P = 0
2 phase
temperature
entropy

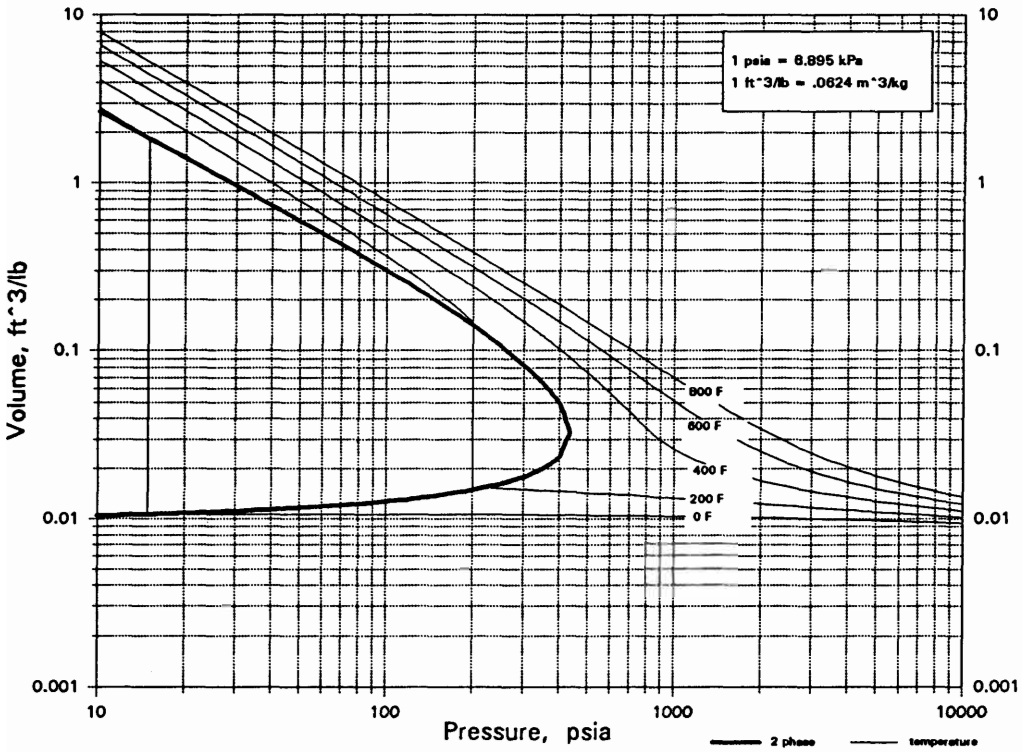

SiO2
SILICON DIOXIDE
solid
Enthalpy, BTU/lb
Temperature, F
250
200
150
100
50
0
-50
-400
-200
0
200
400
600
800
1000
1200
1 BTU/lb = 2.326 kJ/kg

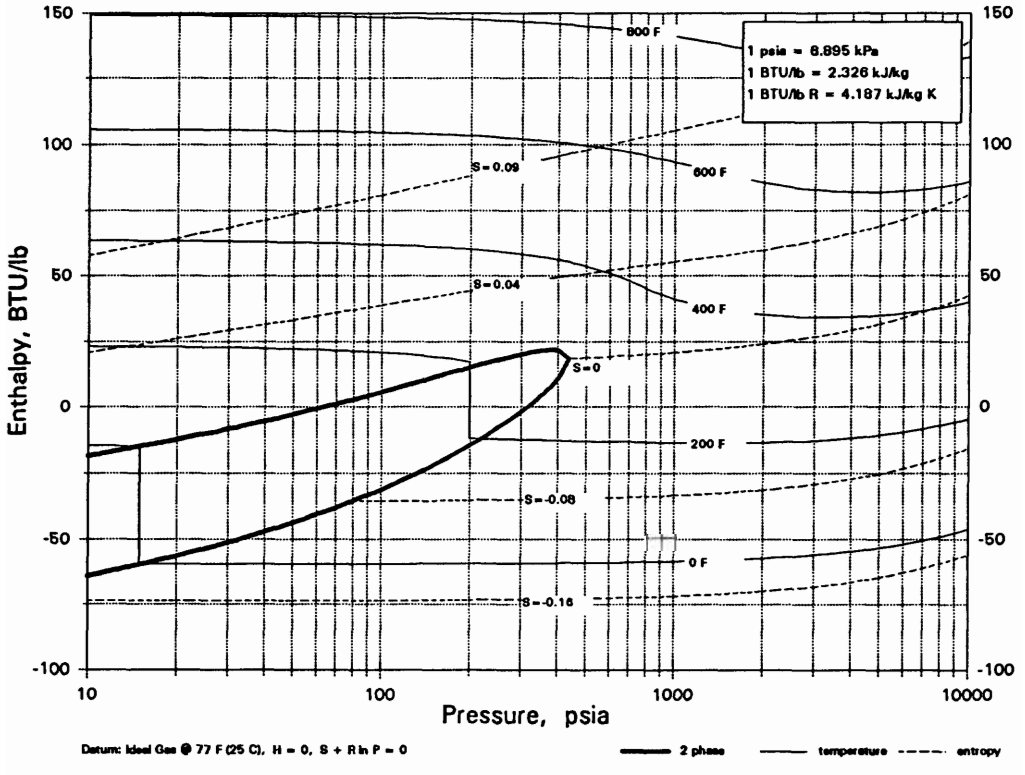
Si2Cl6 HEXACHLORODISILANE



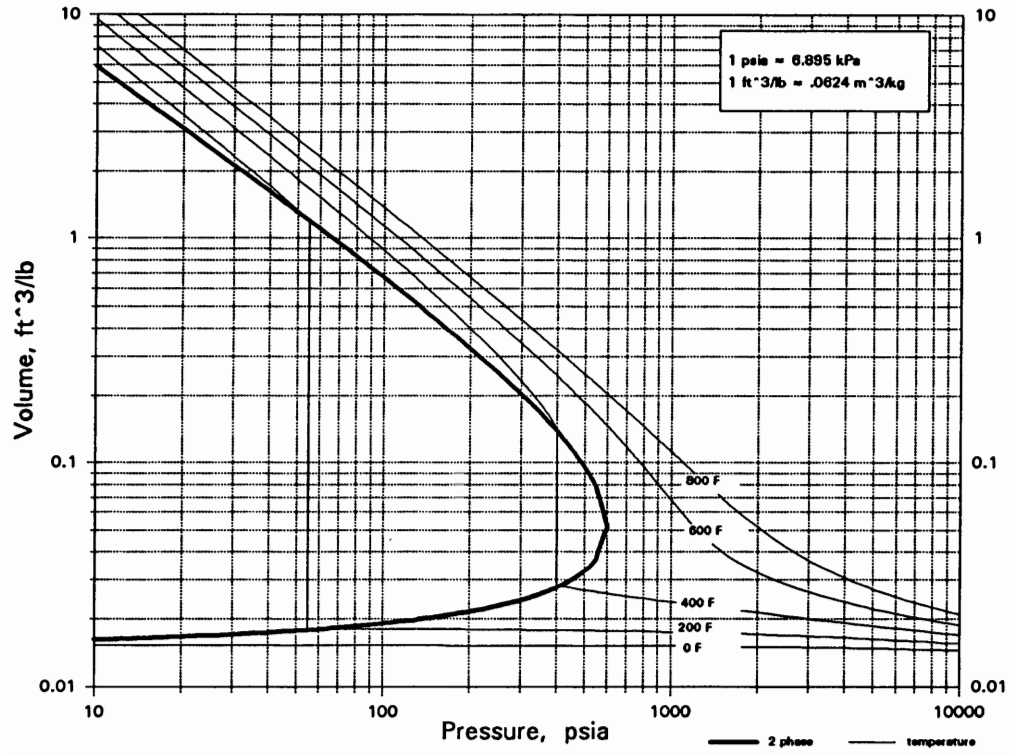


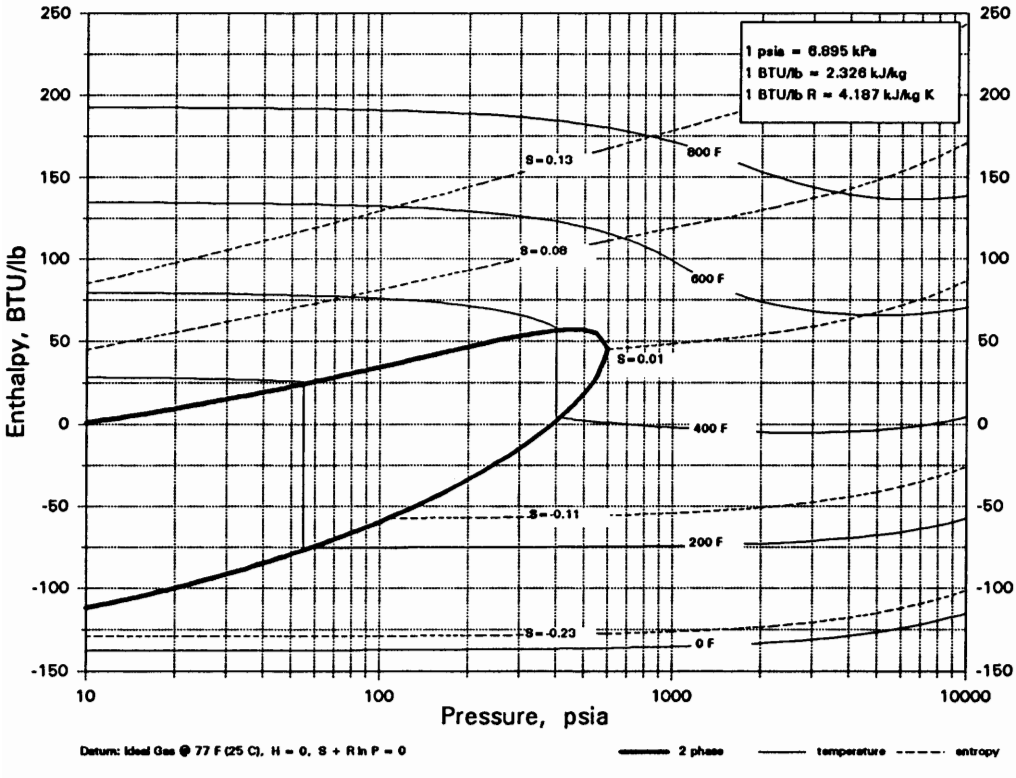
Si2F6 HEXAFLUORODISILANE



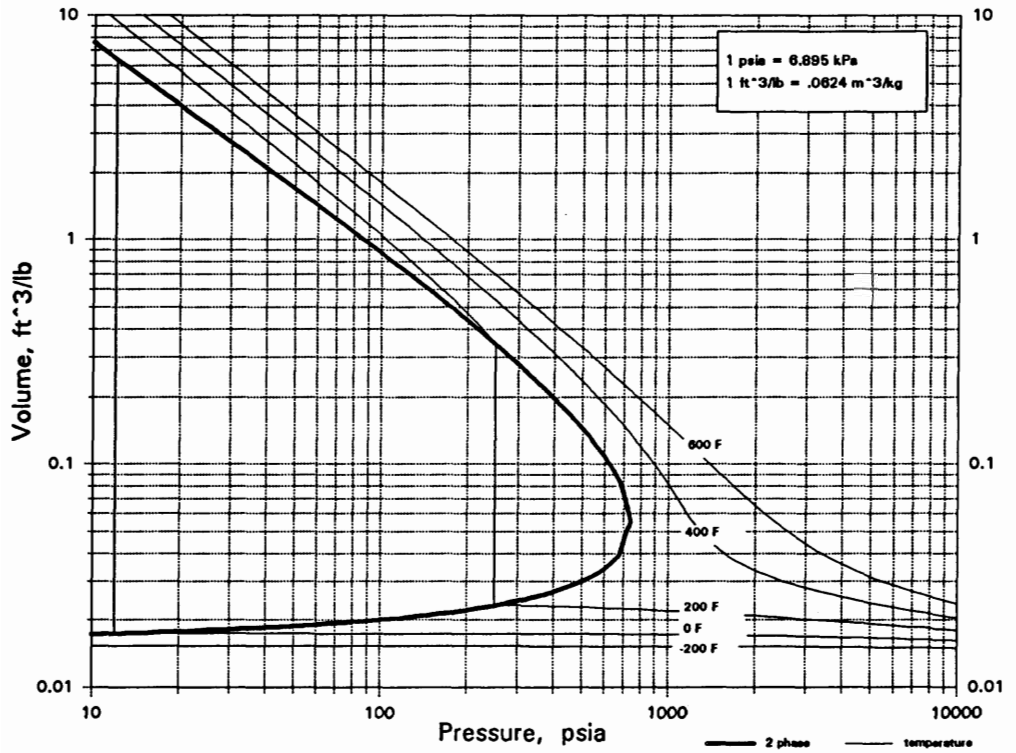


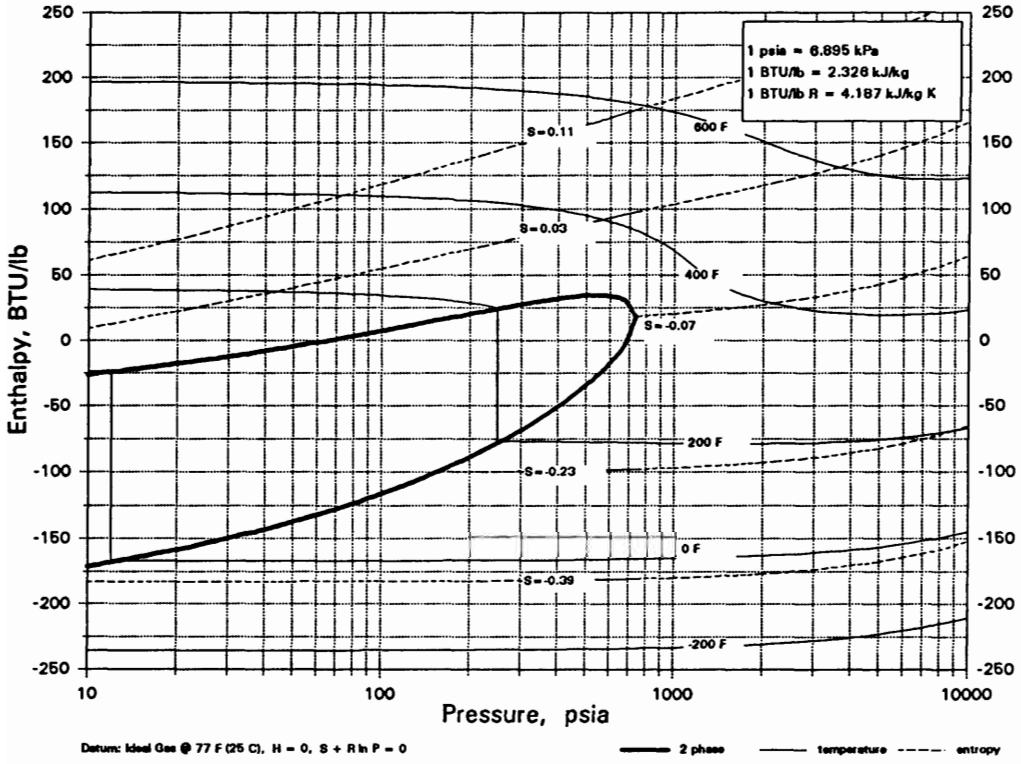
Si2H5Cl DISILANYL CHLORIDE



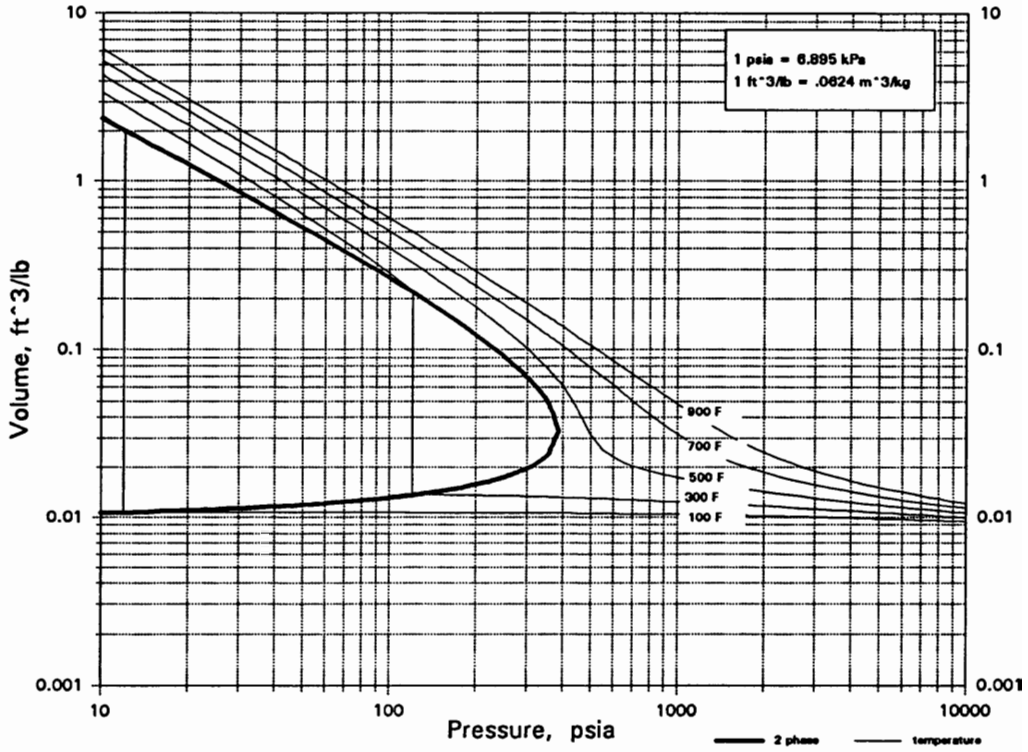


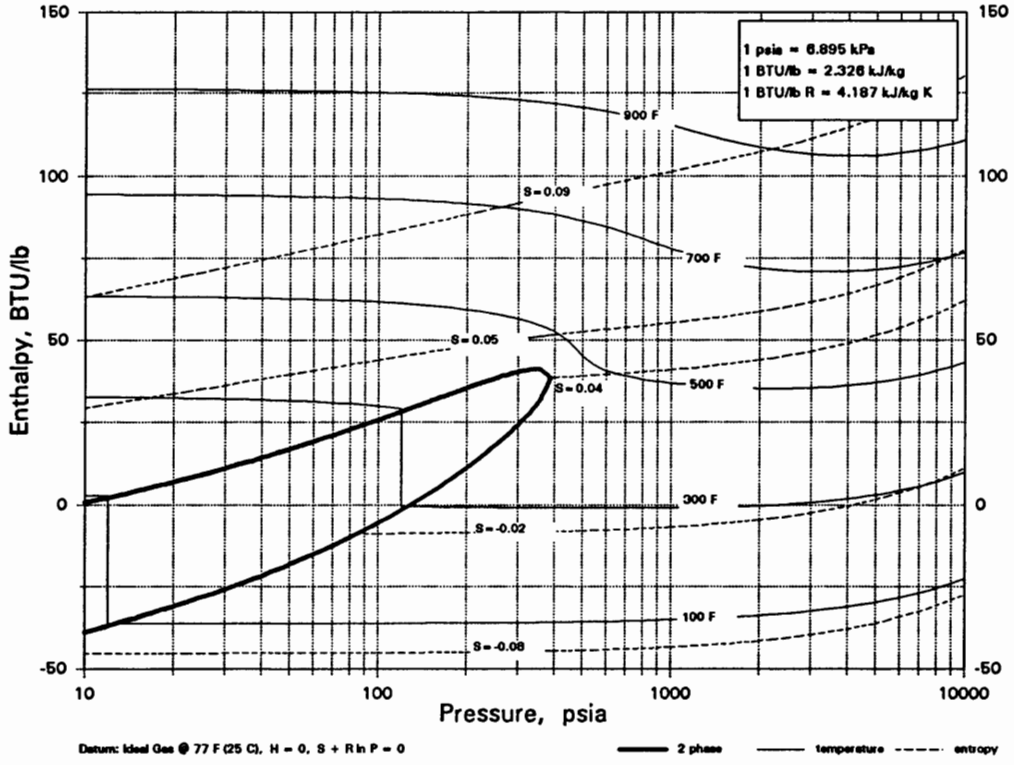
Si2H6 DISILANE



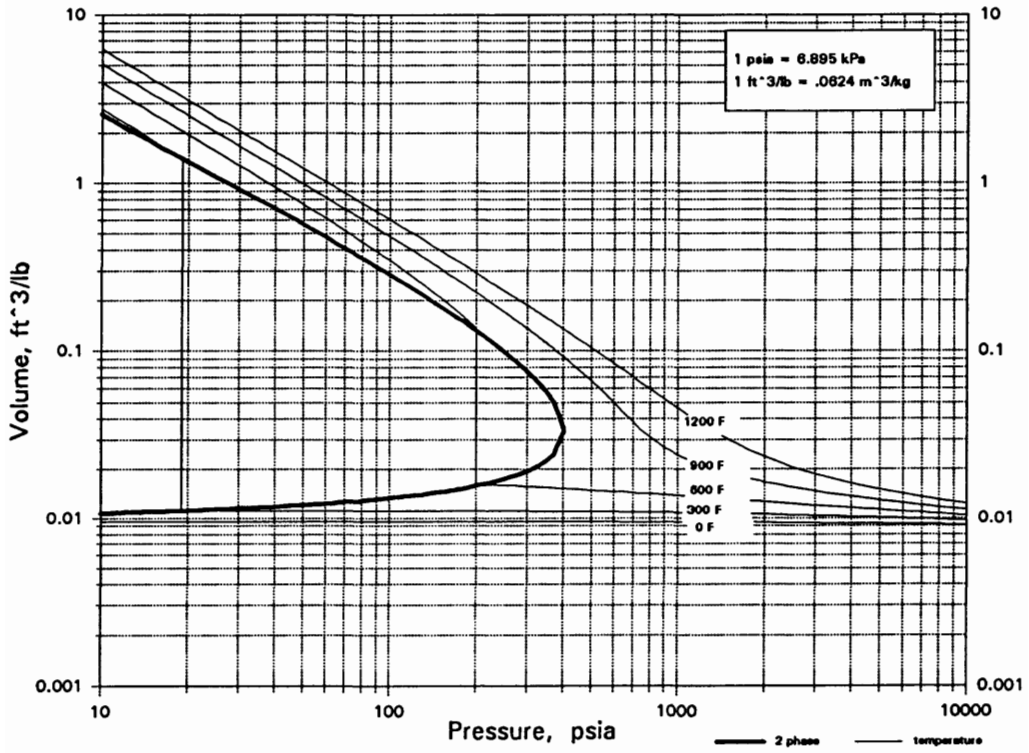


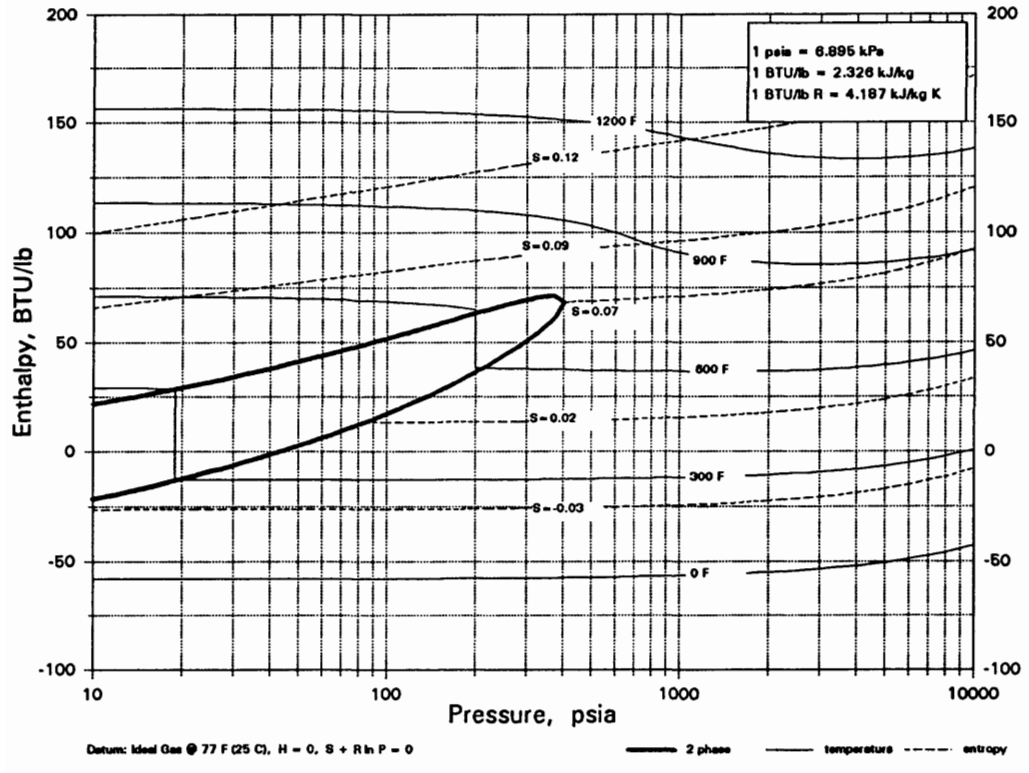
Si2OCl3F3 TRICHLOROTRIFLUORODISILOXANE



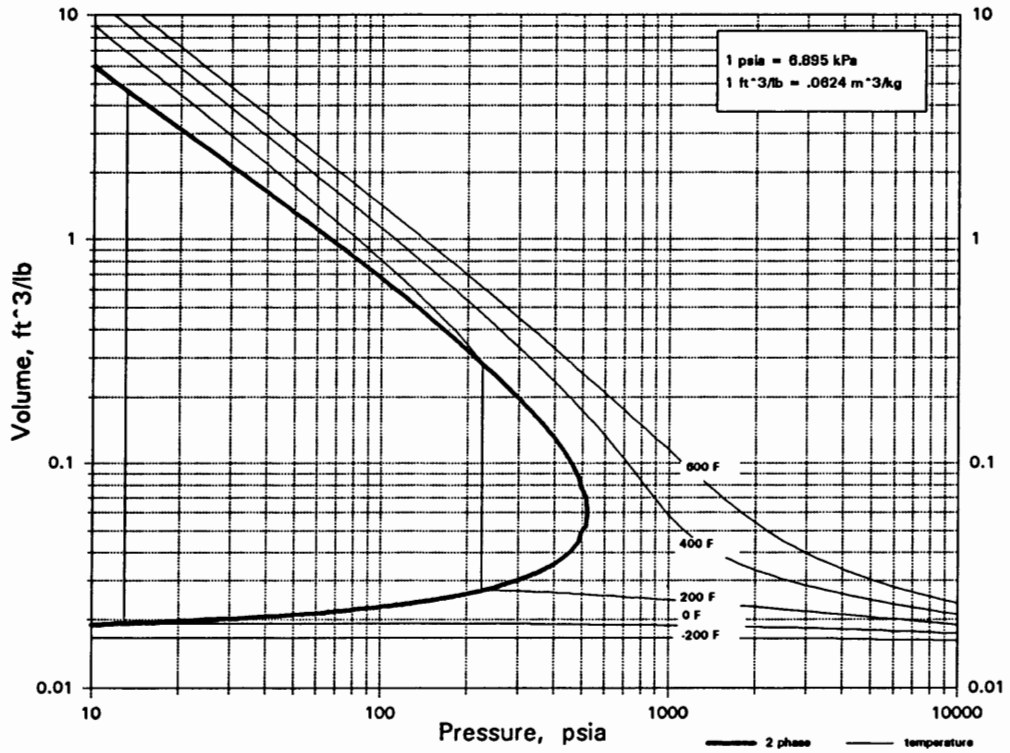


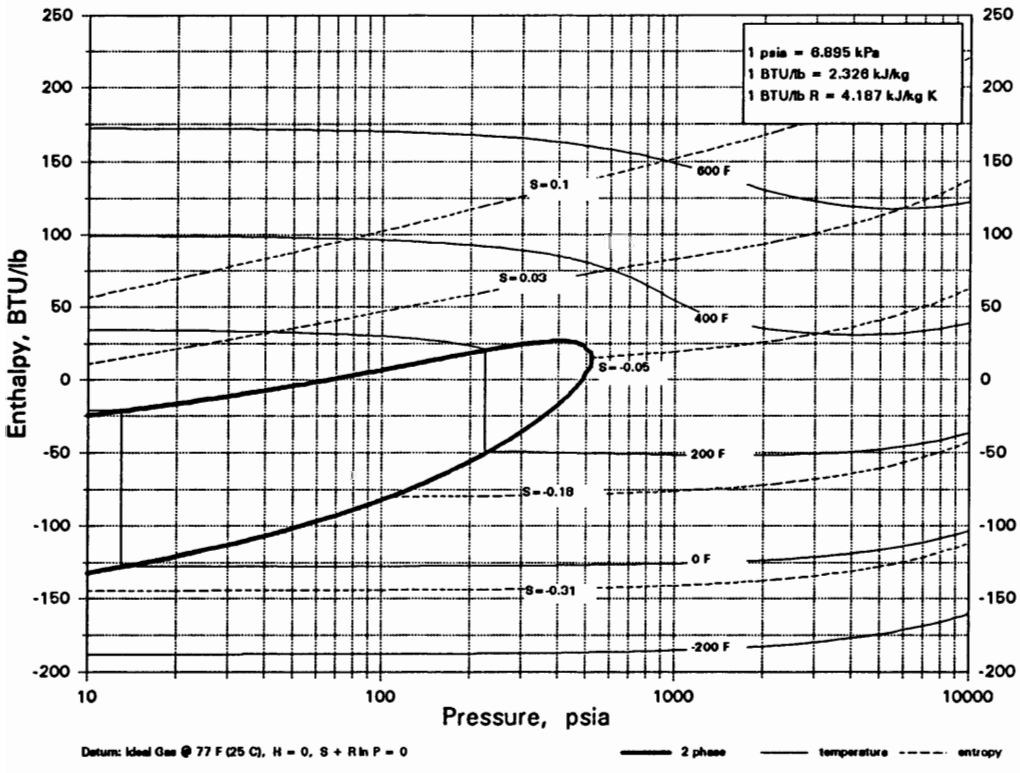
Si2OCl6 HEXACHLORODISILOXANE



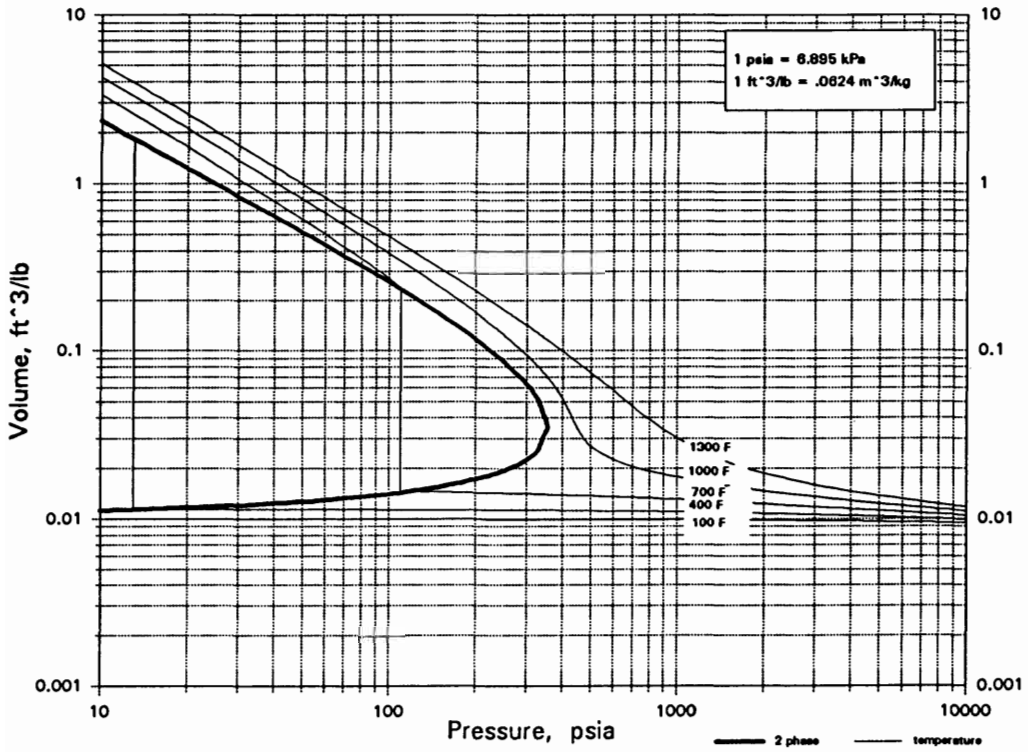


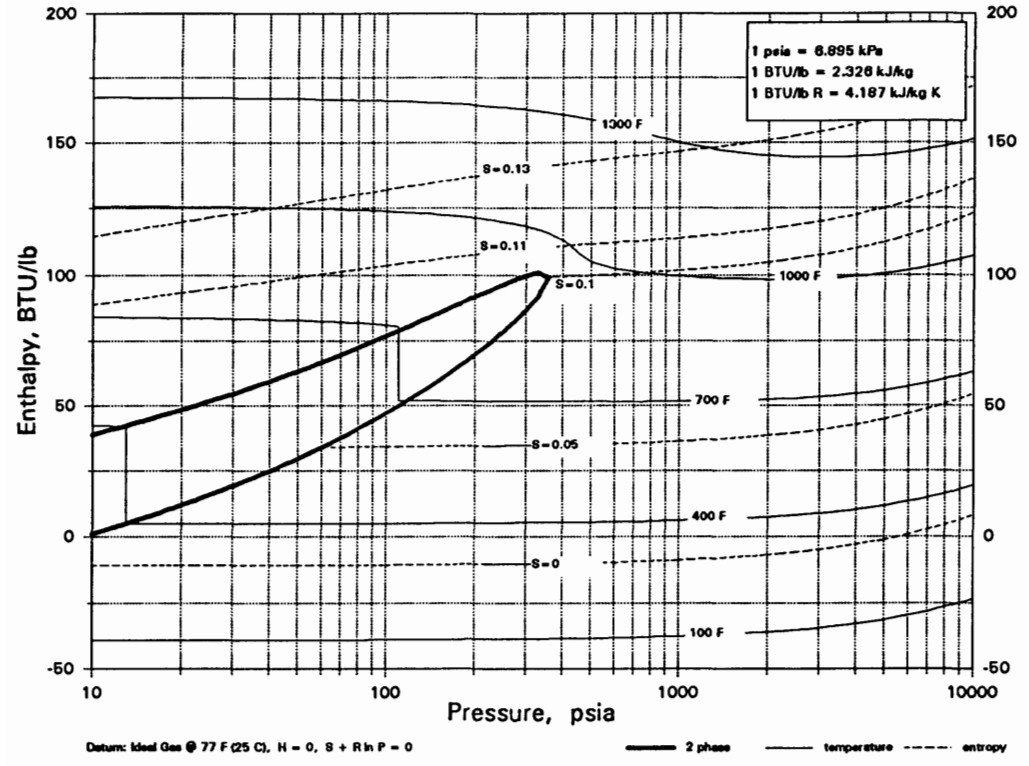
Si2OH6 DISILOXANE



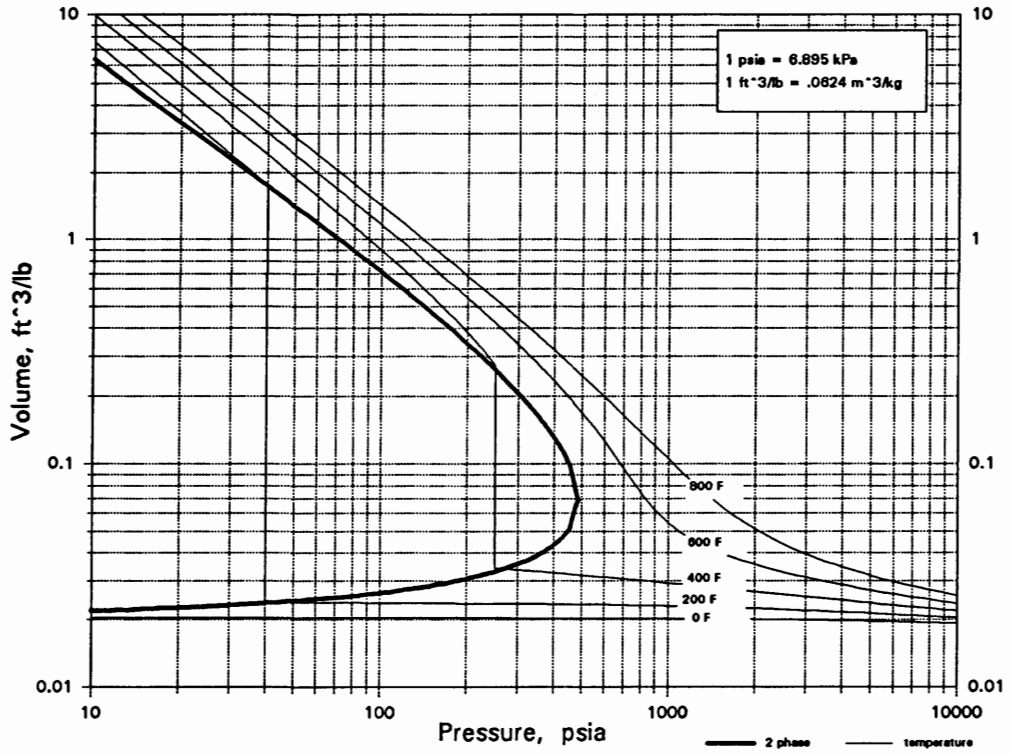


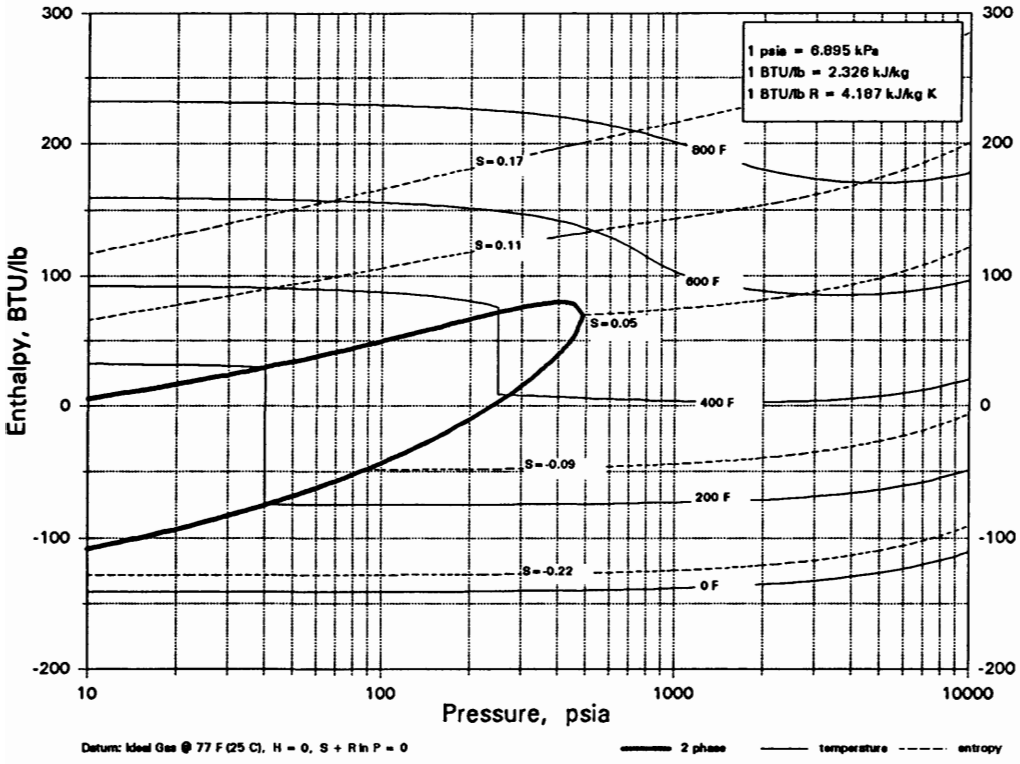
Si3Cl8 OCTACHLOROTRISILANE



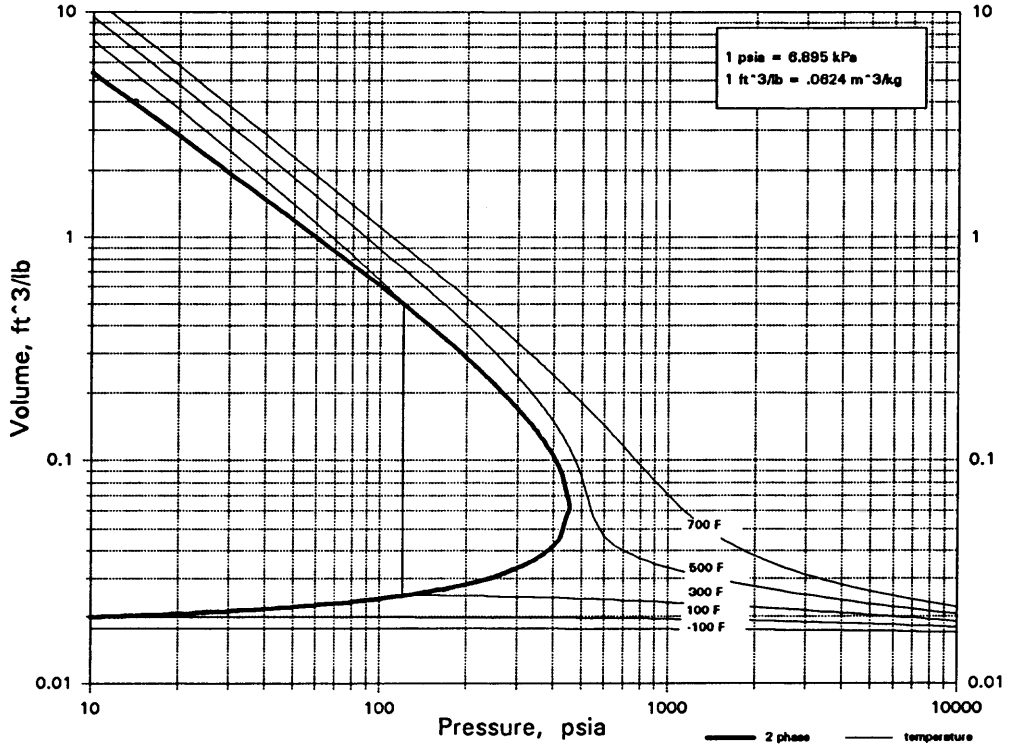


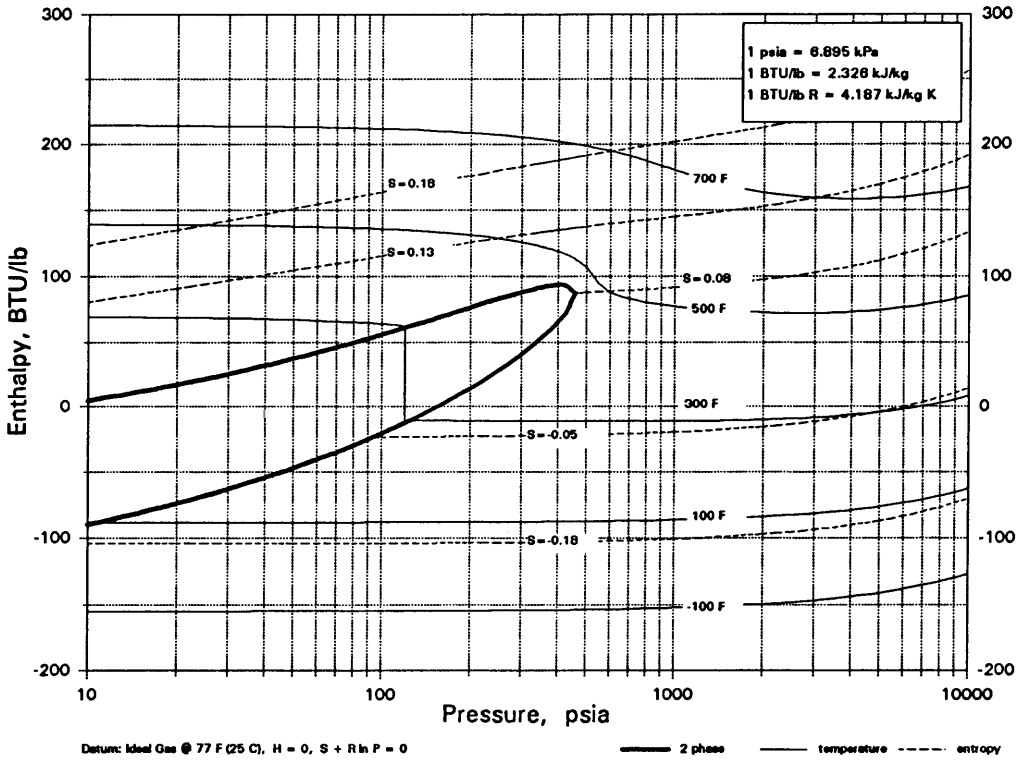
Si3H8 TRISILANE



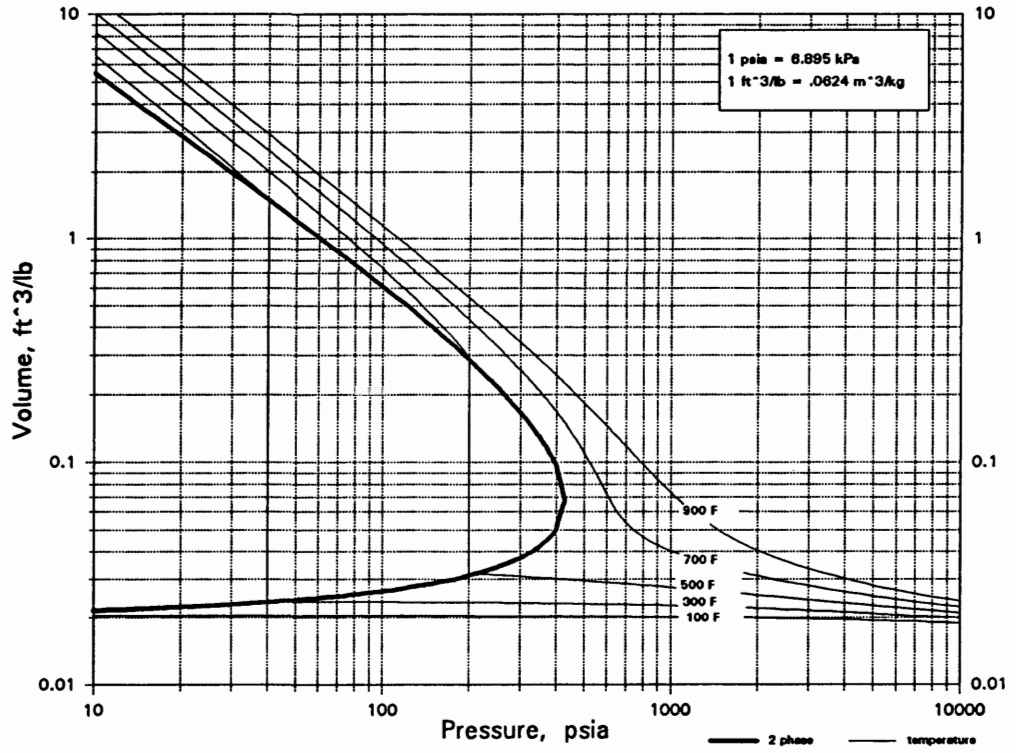


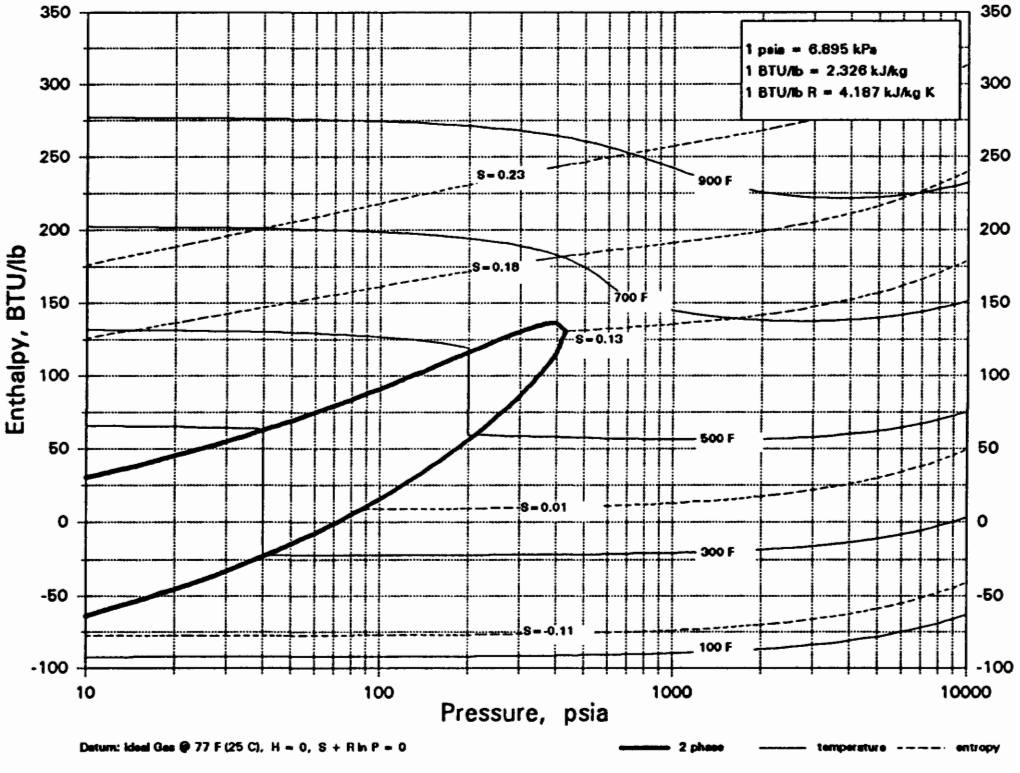
Si3H9N TRISILAZANE

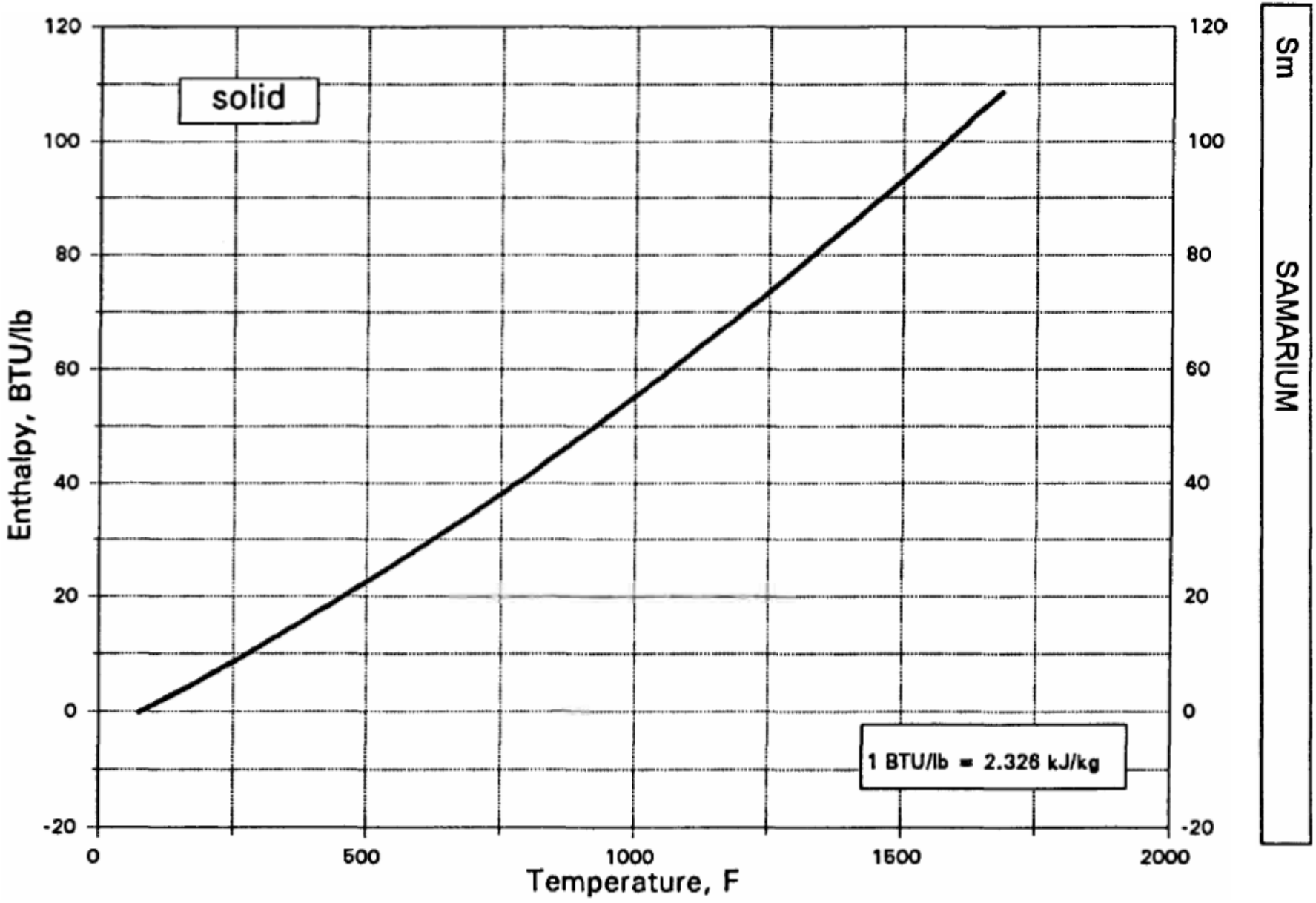


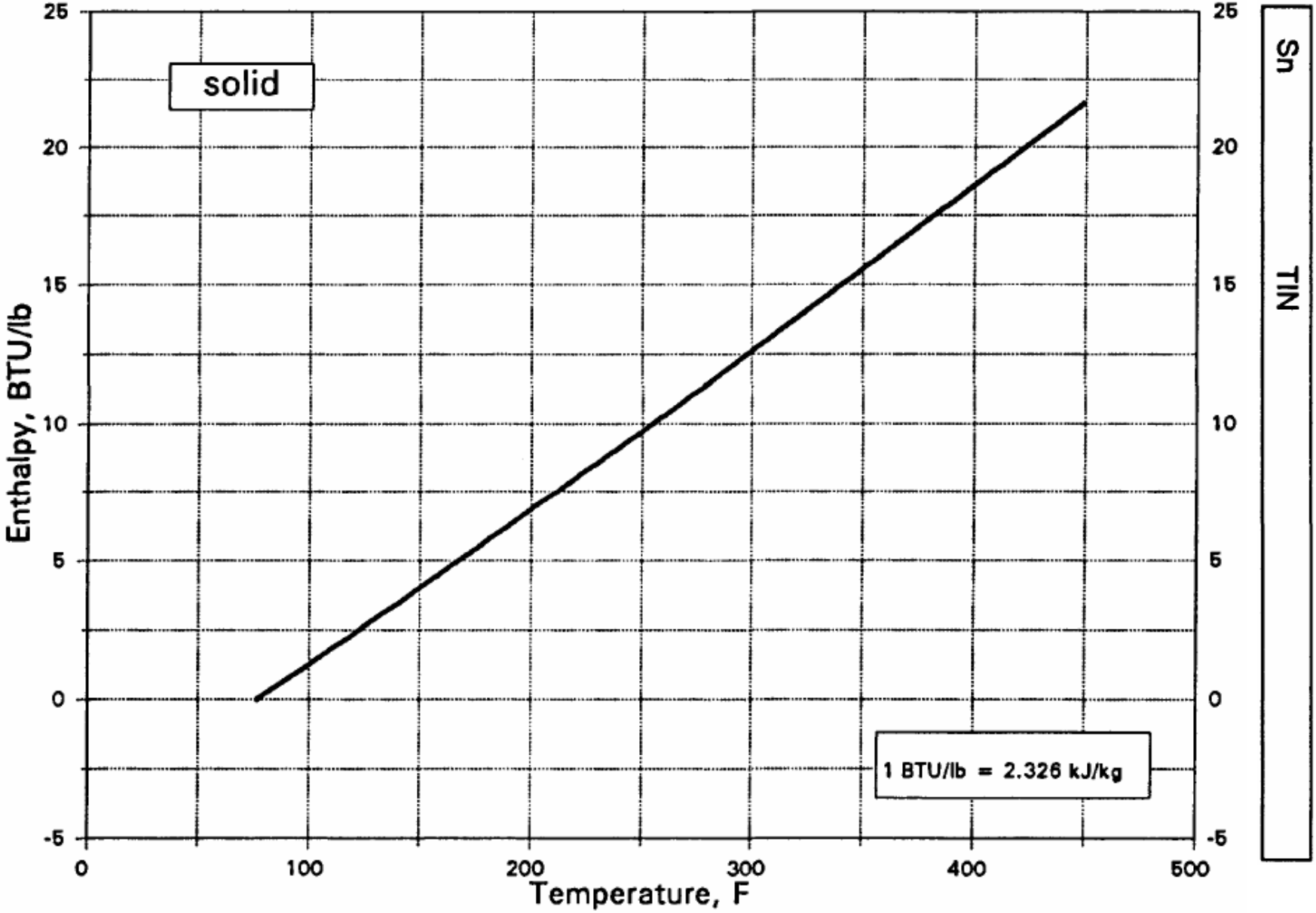


Si4H10 TETRASILANE

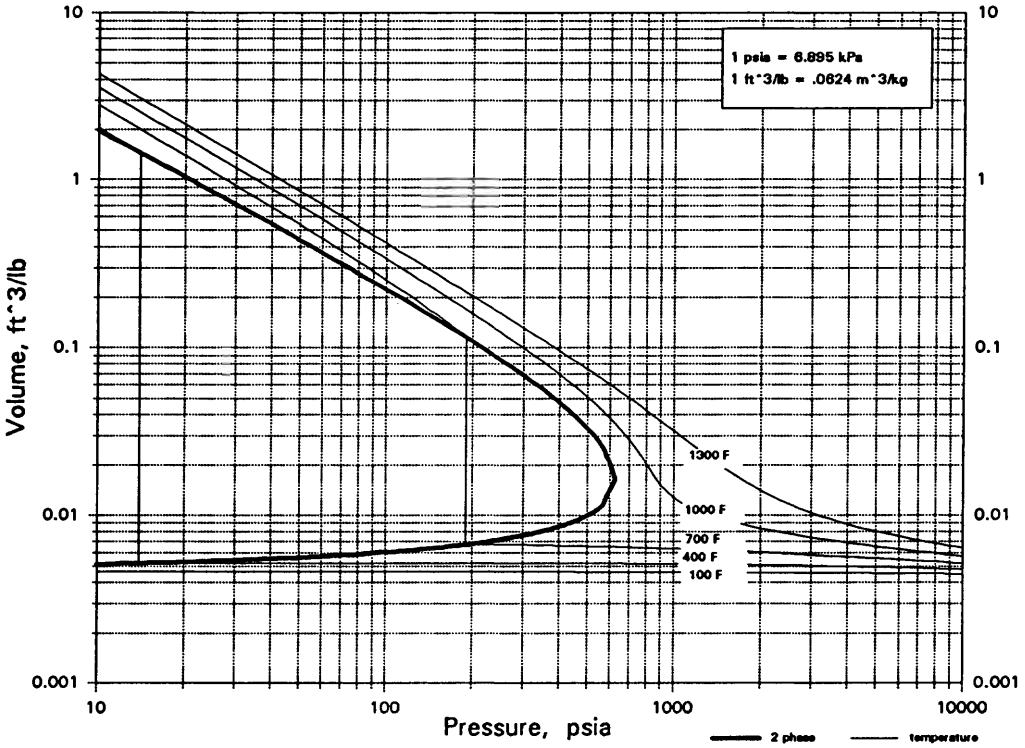


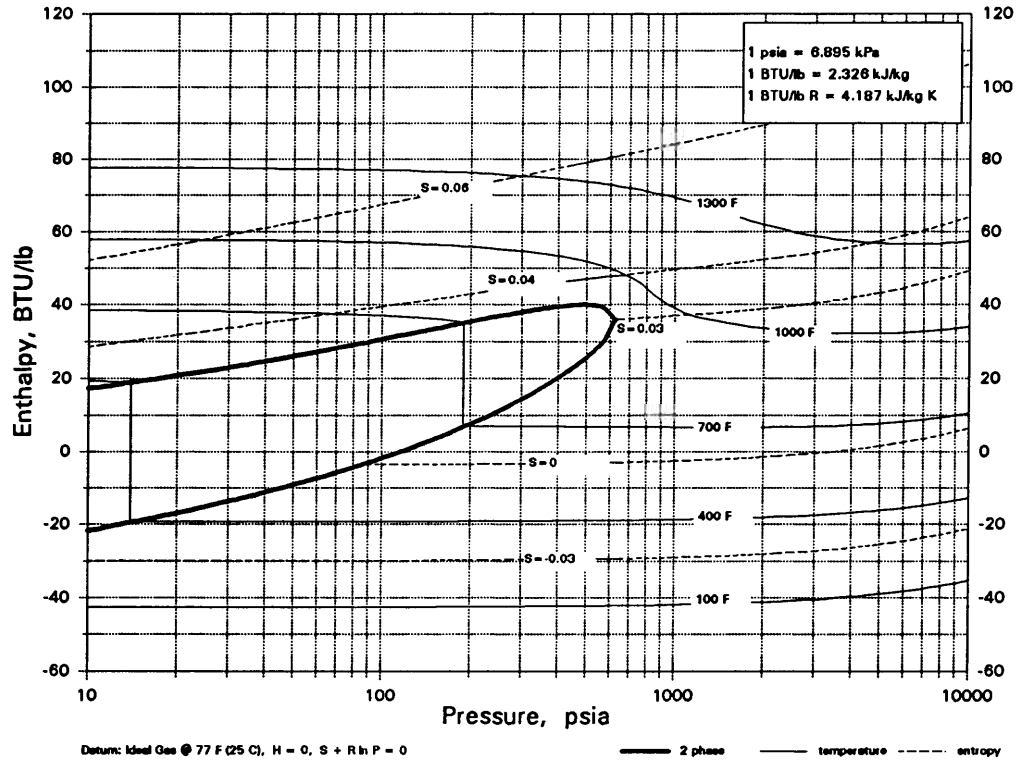


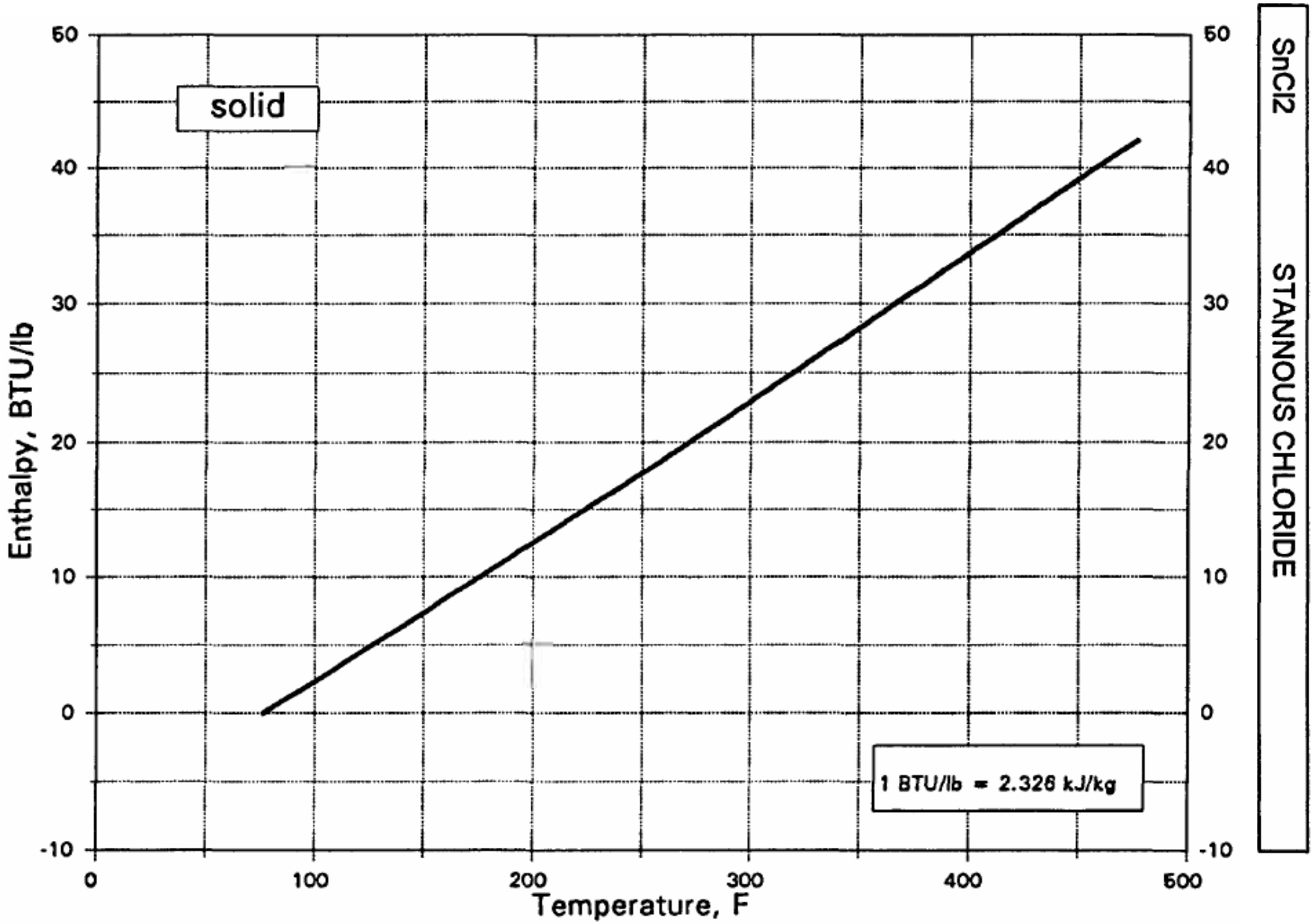

solid
Enthalpy, BTU/lb
Temperature, F
120
100
80
60
40
20
0
-20
0
500
1000
1500
2000
1 BTU/lb = 2.326 kJ/kg
Sm
SAMARIUM


solid
Enthalpy, BTU/lb
Temperature, F
25
20
15
10
5
0
-5
0
100
200
300
400
500
1 BTU/lb = 2.326 kJ/kg
Sn
TIN

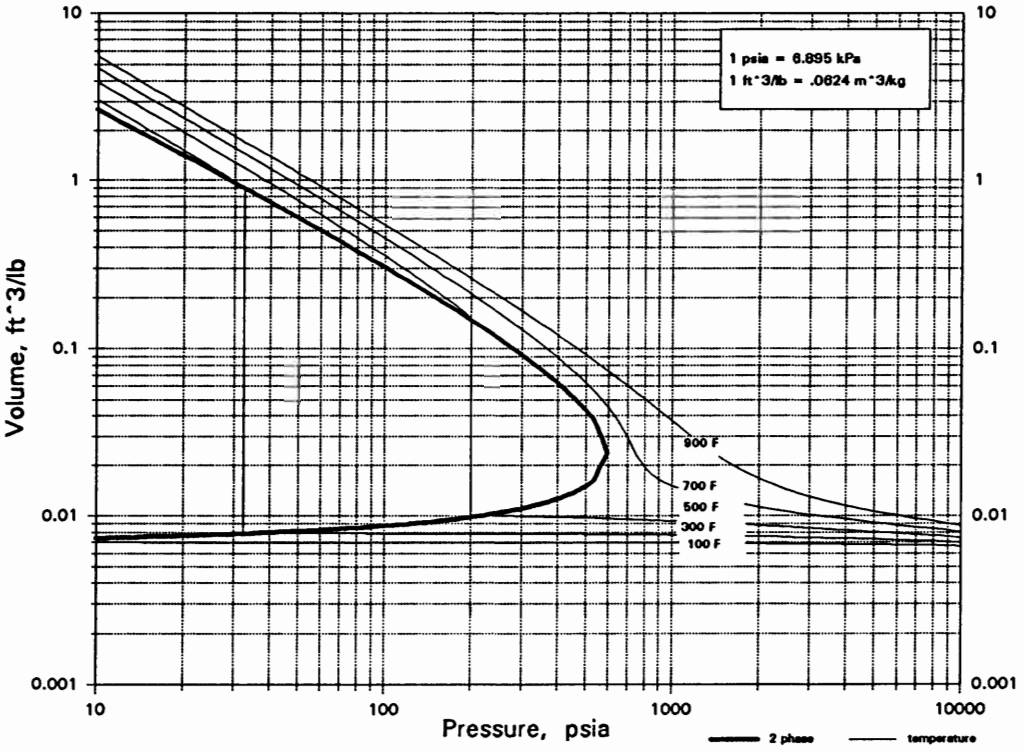
SnBr4	STANNIC BROMIDE

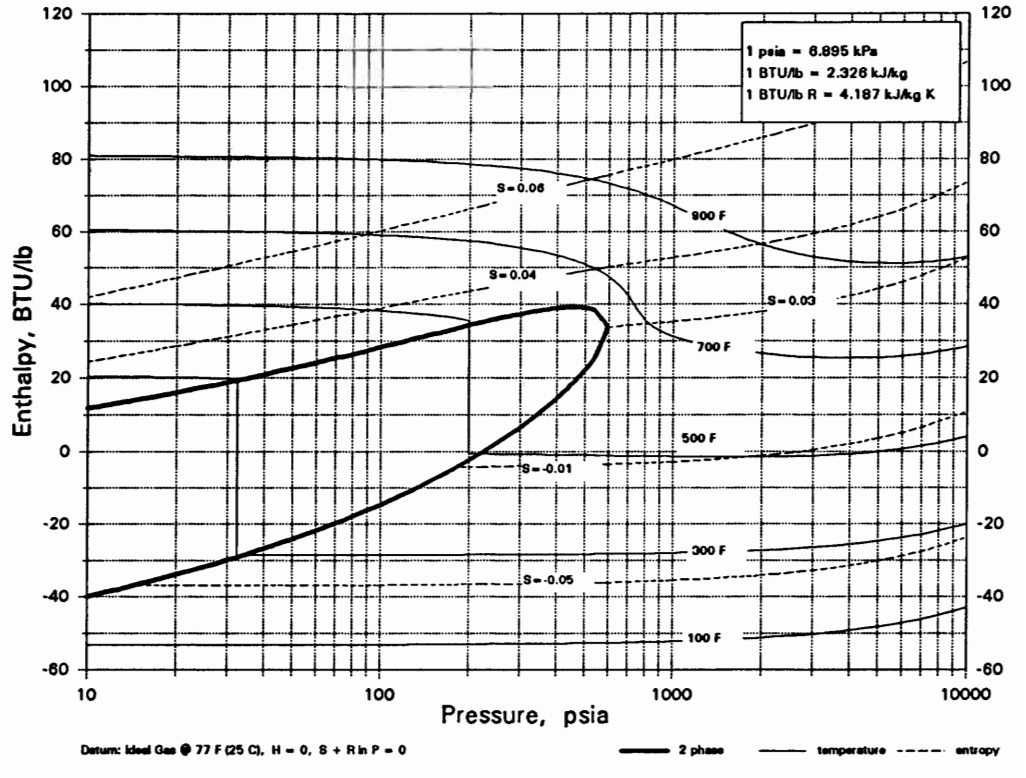




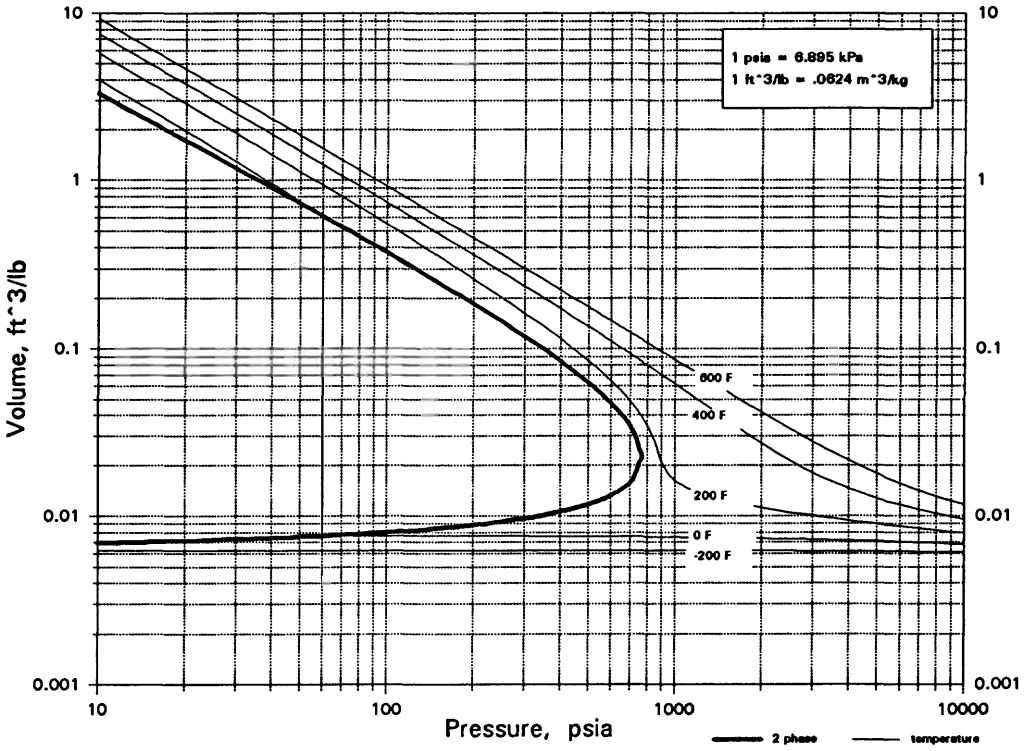

SnCl2
STANNOUS CHLORIDE
solid
Enthalpy, BTU/lb
Temperature, F
50
40
30
20
10
0
-10
0
100
200
300
400
500
1 BTU/lb = 2.326 kJ/kg

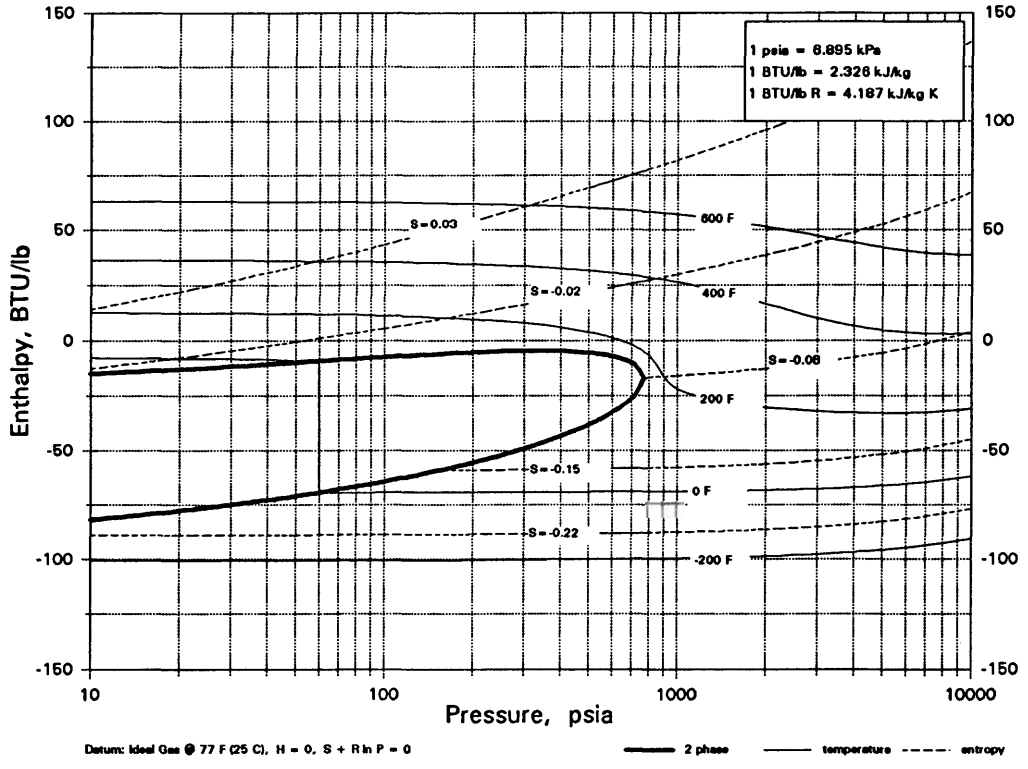
SnCl4 STANNIC CHLORIDE

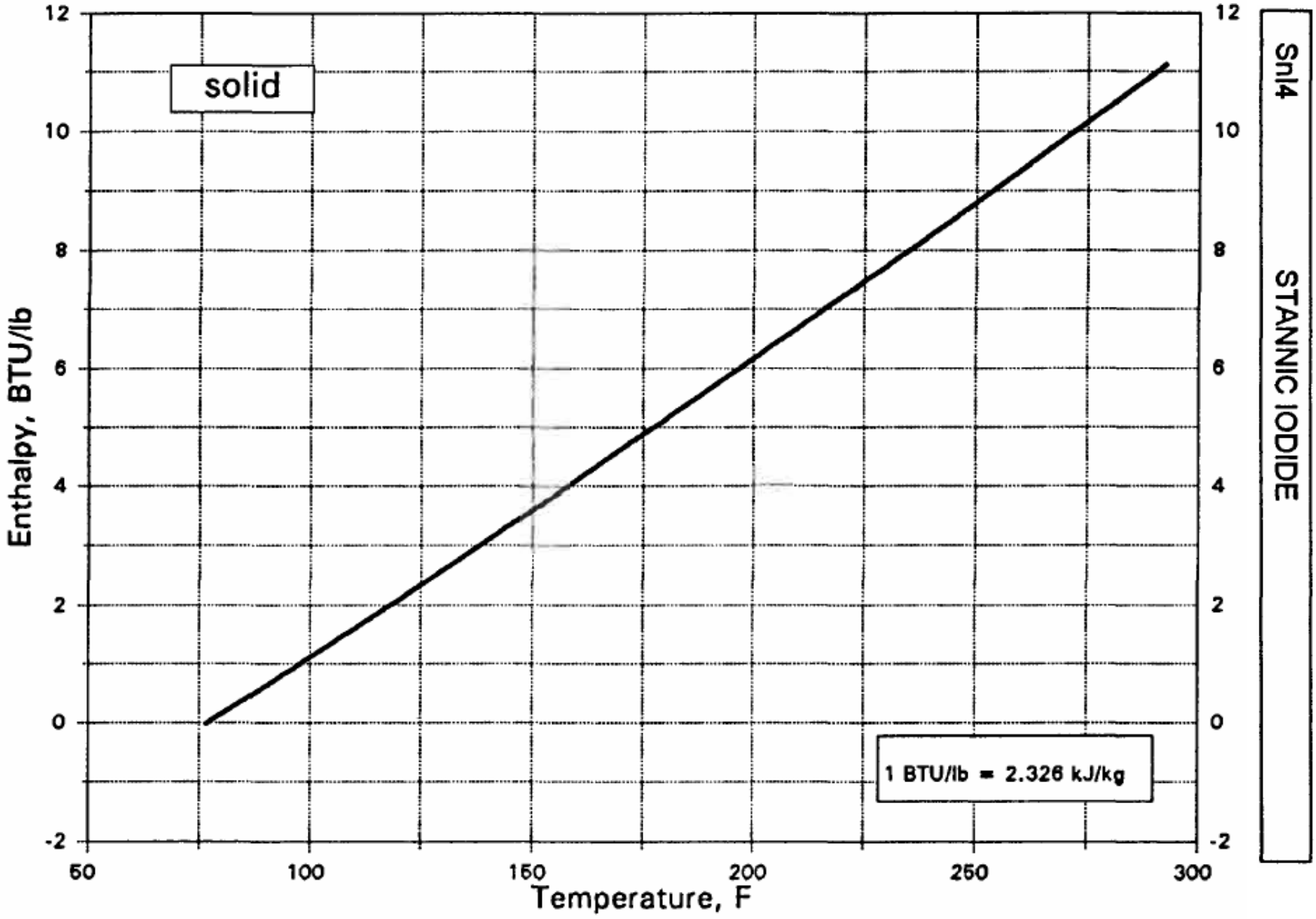


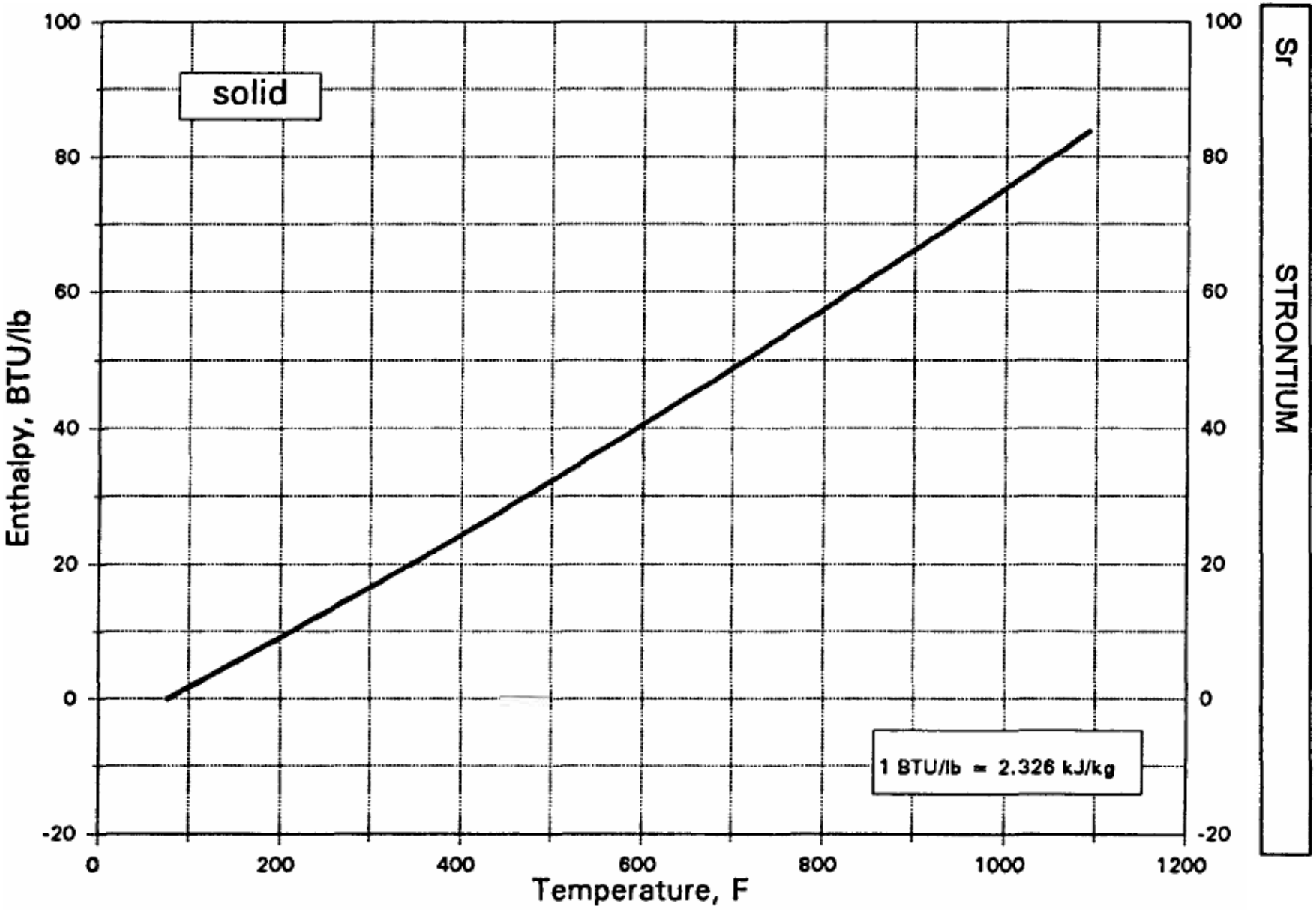


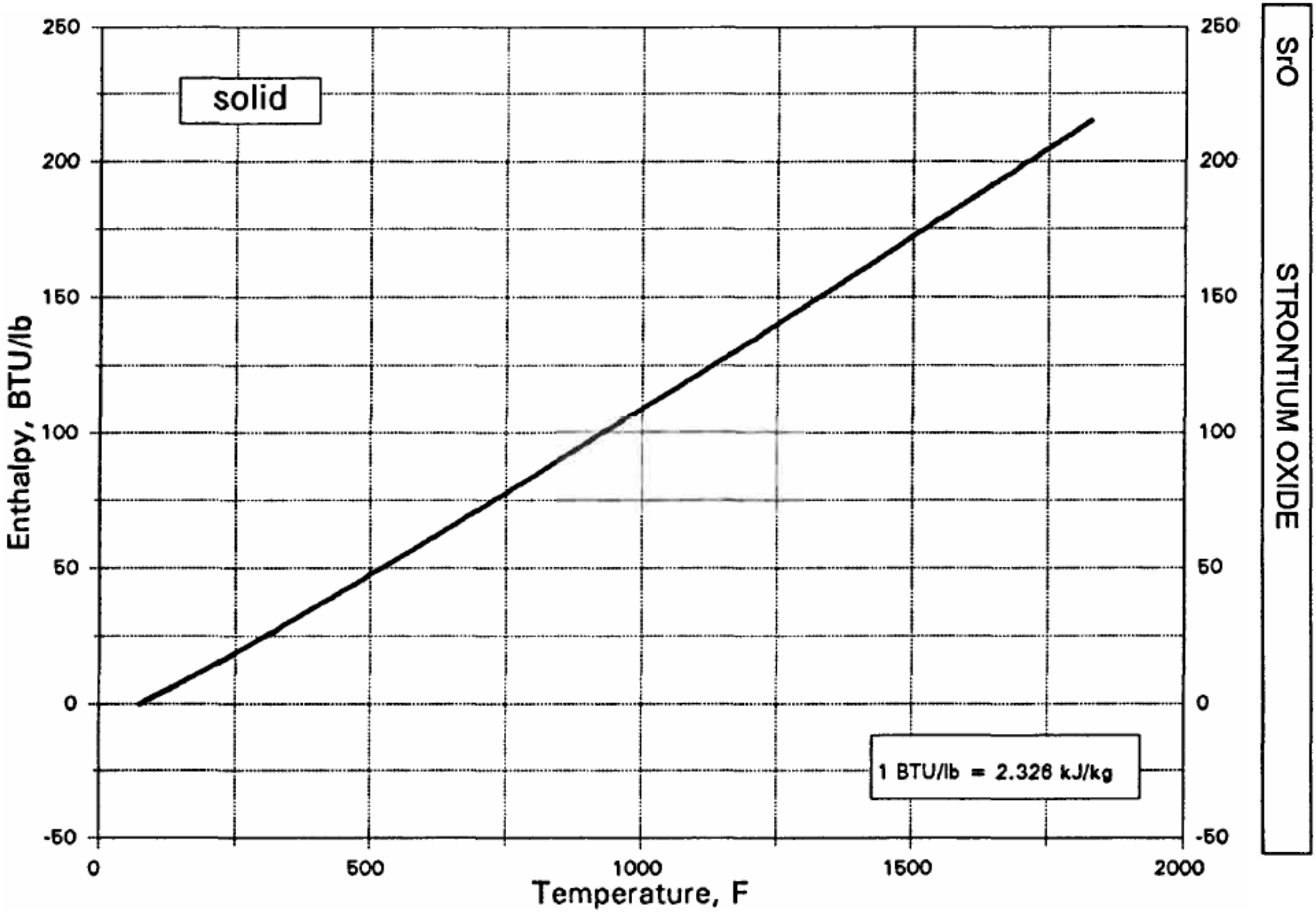
SnH4	STANNIC HYDRIDE






solid
Enthalpy, BTU/lb
Temperature, F
12
10
8
6
4
2
0
-2
50
100
150
200
250
300
1 BTU/lb = 2.326 kJ/kg
SnI4
STANNIC IODIDE


Sr
STRONTIUM
solid
Enthalpy, BTU/lb
Temperature, F
100
80
60
40
20
0
-20
0
200
400
600
800
1000
1200
1 BTU/lb = 2.326 kJ/kg


SrO
STRONTIUM OXIDE
solid
Enthalpy, BTU/lb
Temperature, F
250
200
150
100
50
0
-50
0
500
1000
1500
2000
1 BTU/lb = 2.326 kJ/kg