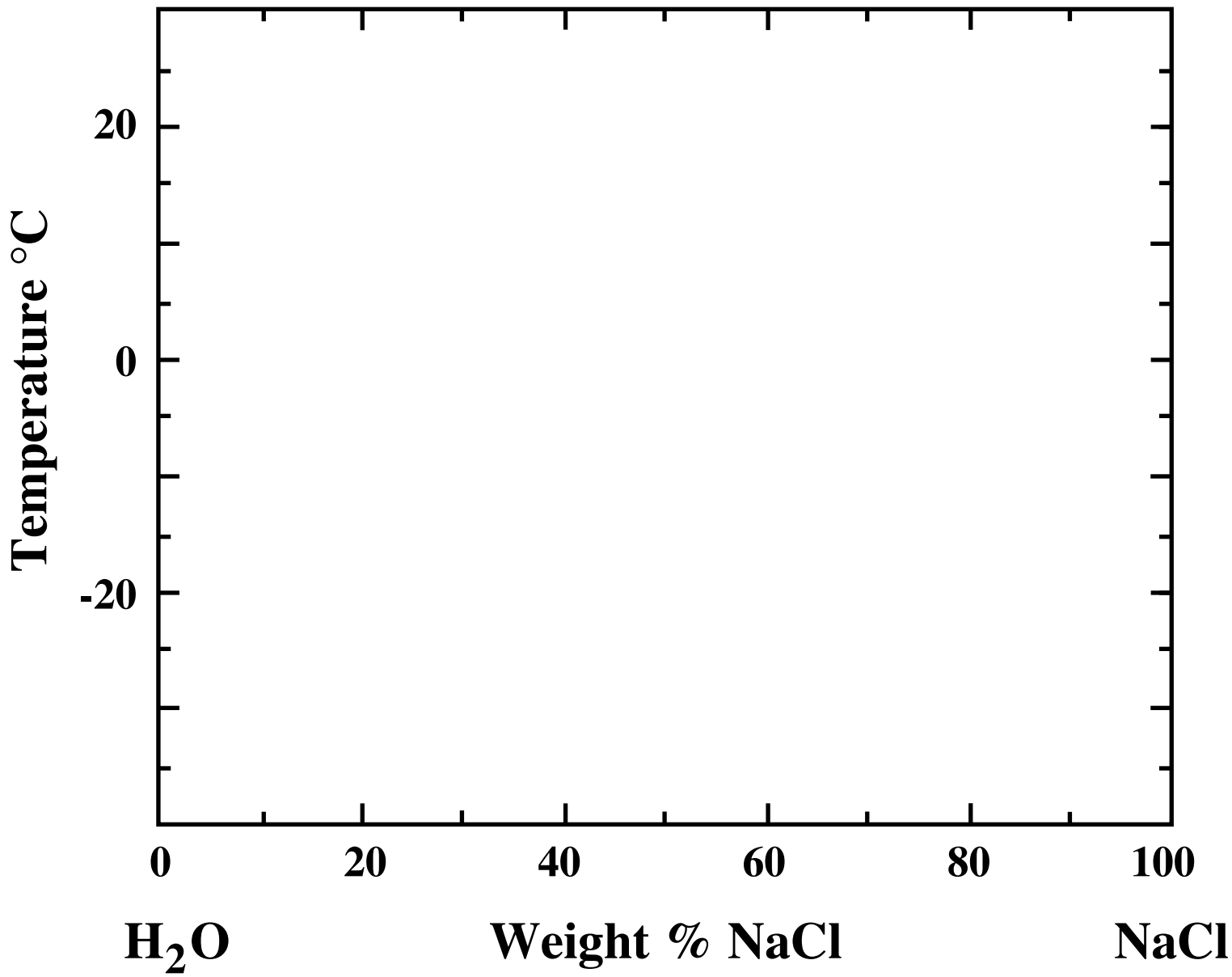
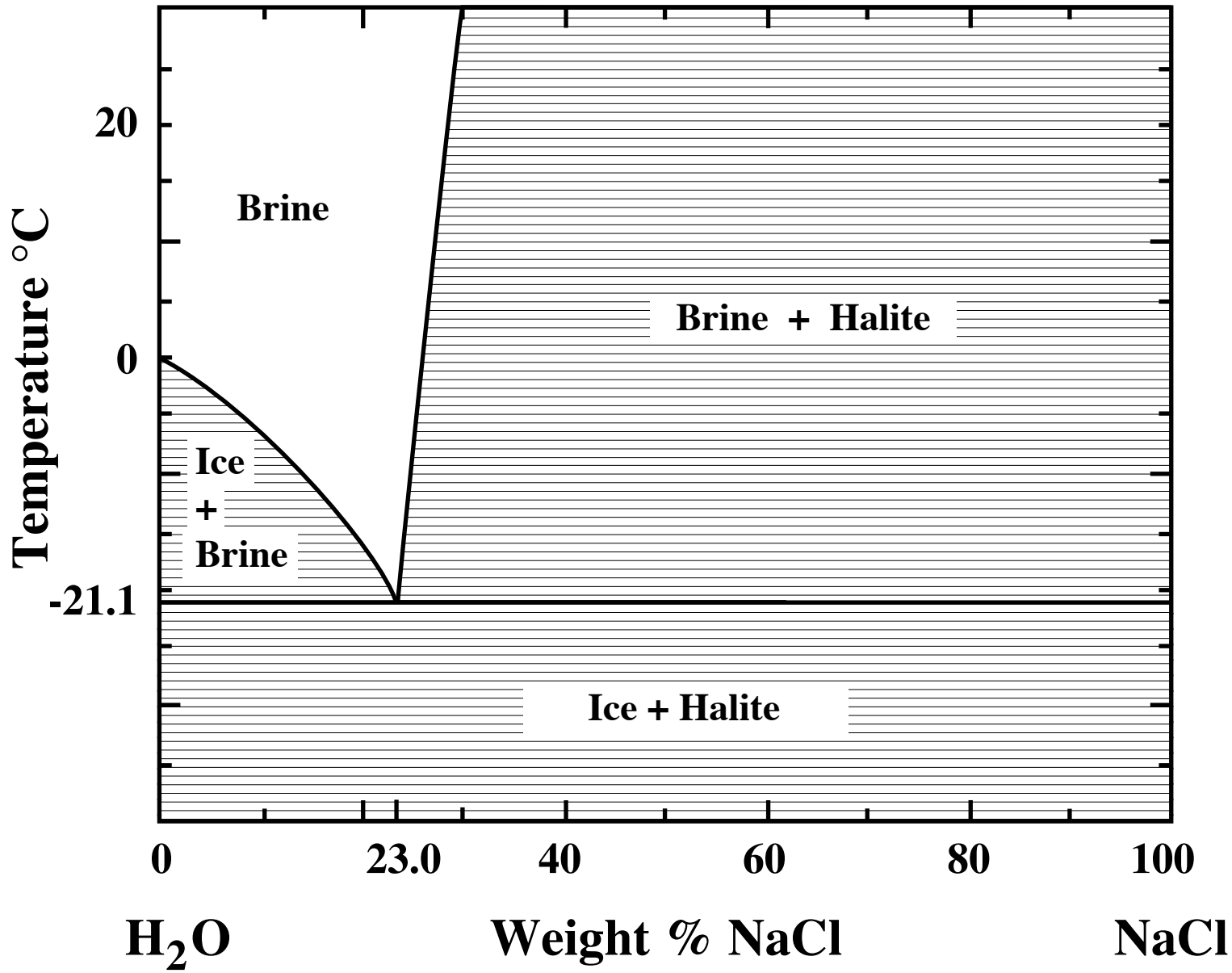
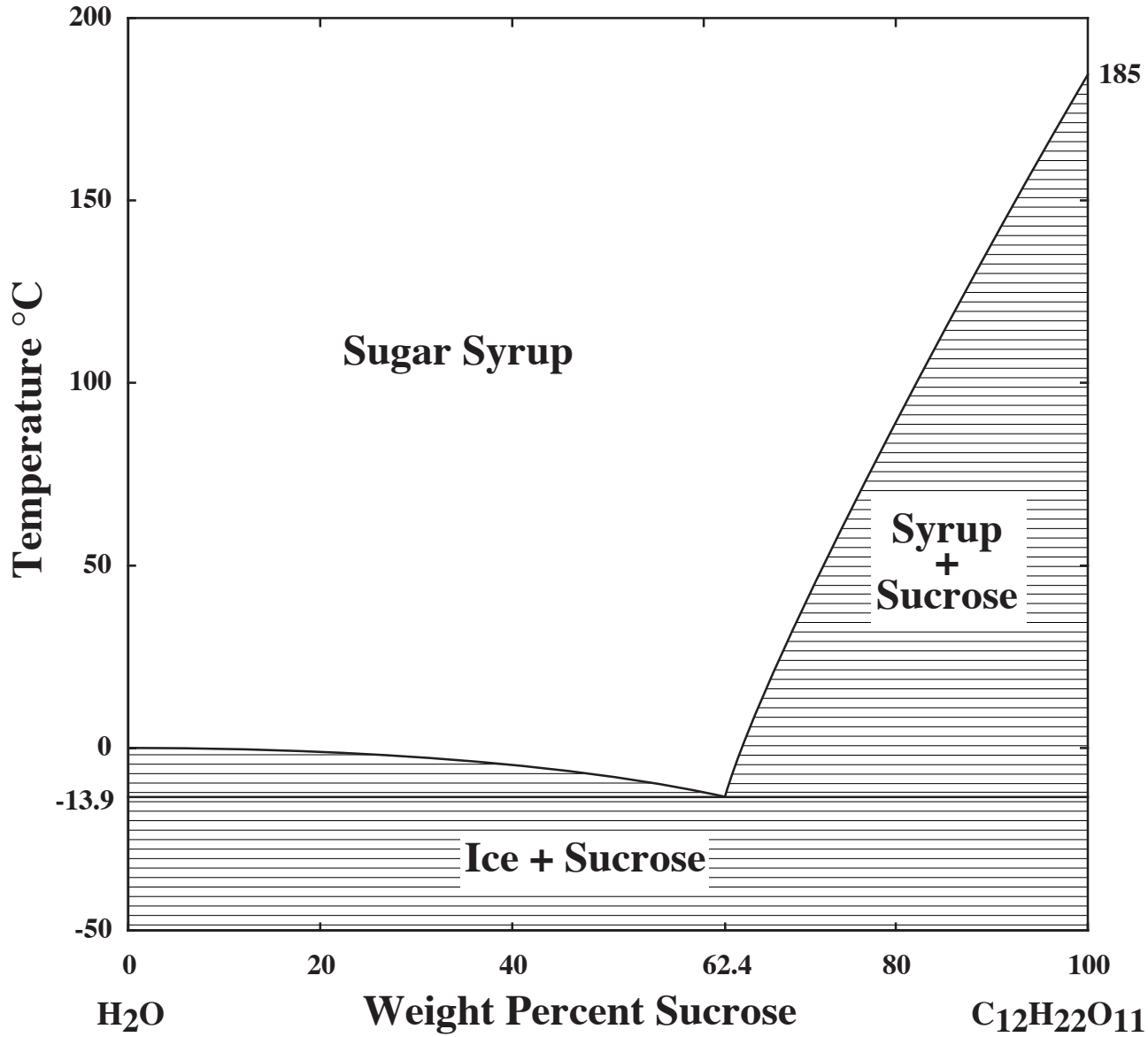
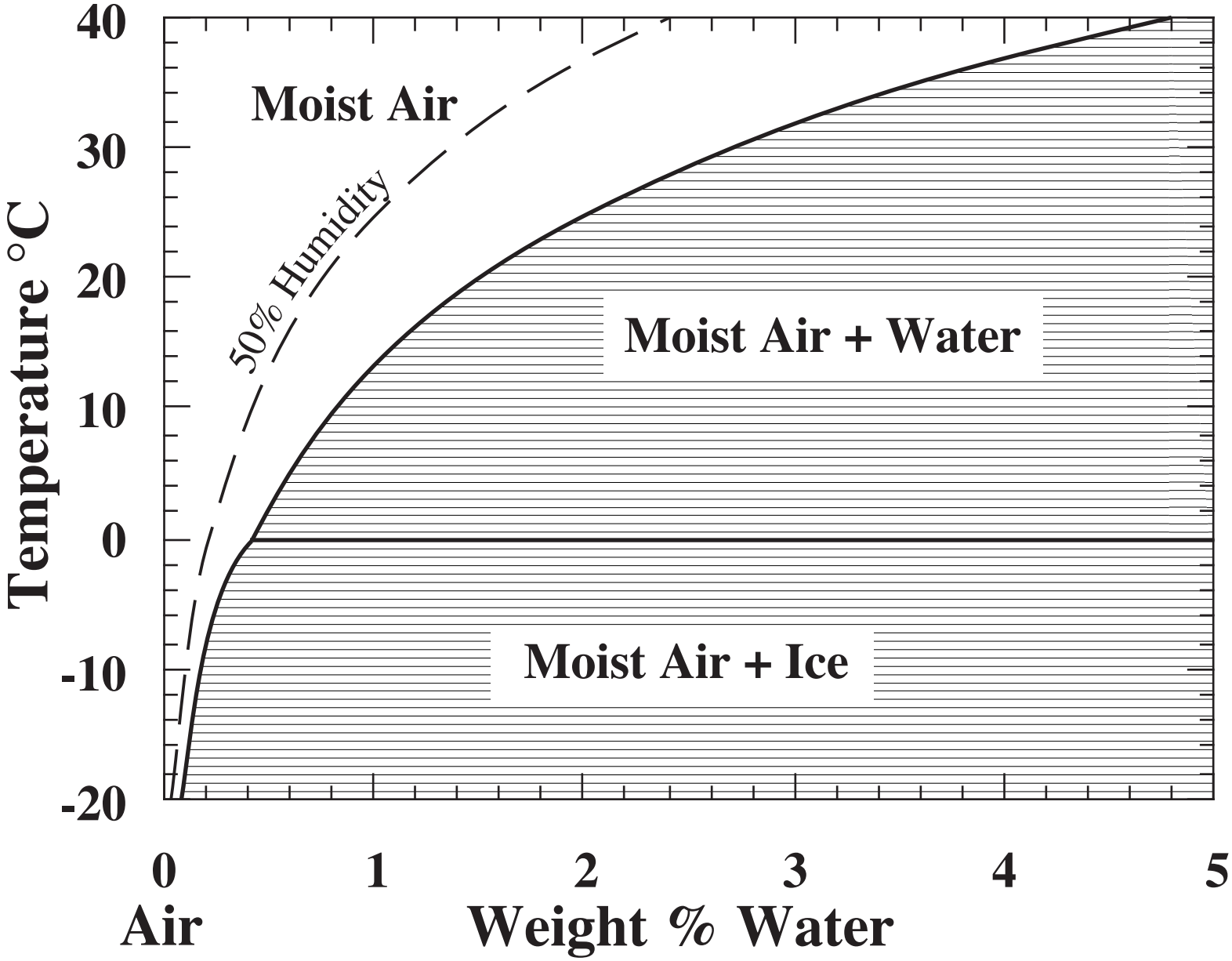
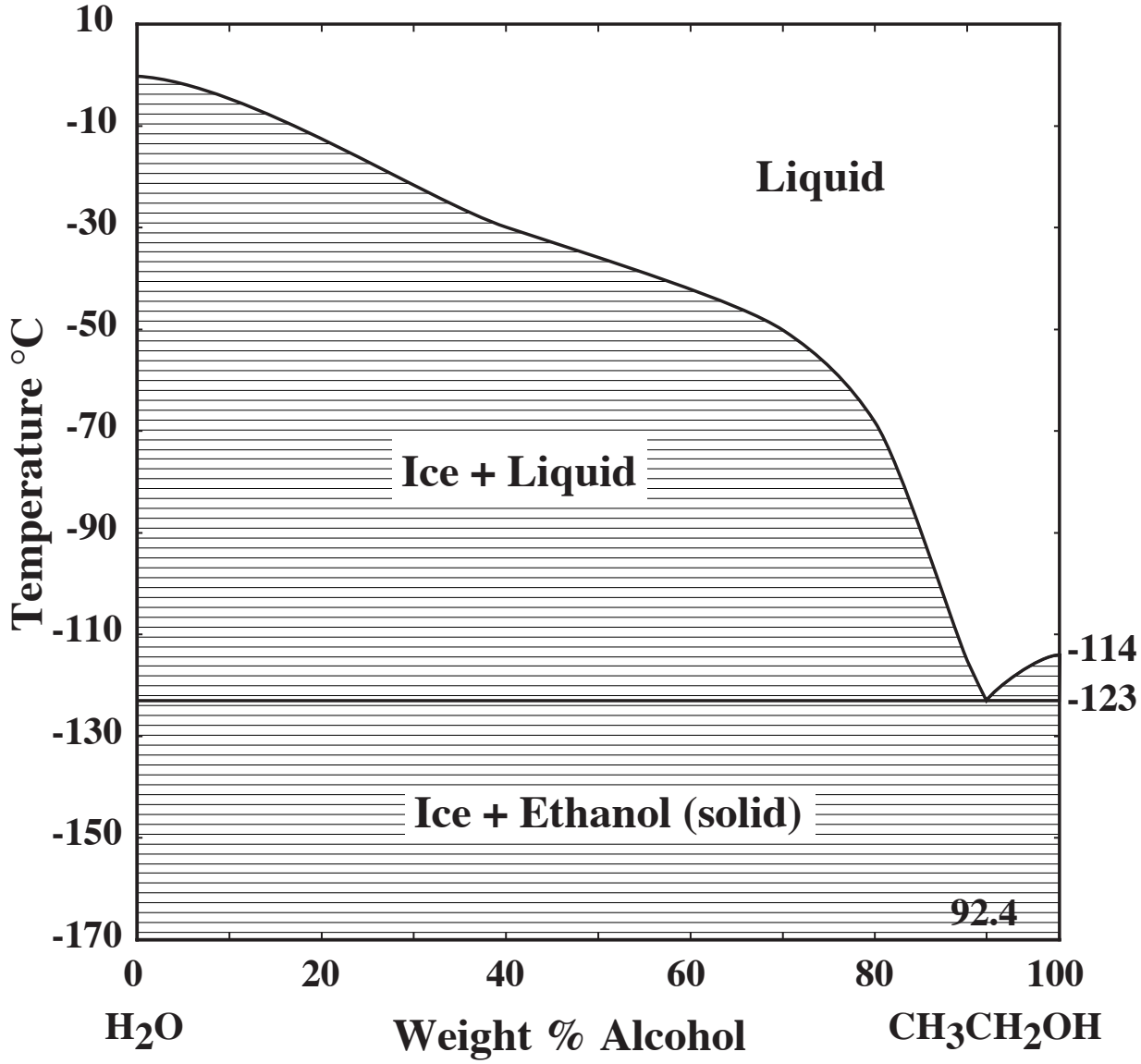
Sample	Wt. NaCl	Wt. H2O	Wt% NaCl	Saturated?	T (C)
1	**5.0**	**50**	**9.1**		
2	**10.0**	**50**	**16.7**		
3	**15.0**	**50**	**23.1**		
4	**20.0**	**50**	**28.6**		
5	**25.0**	**50**	**33.3**		
6	**30.0**	**50**	**37.5**		

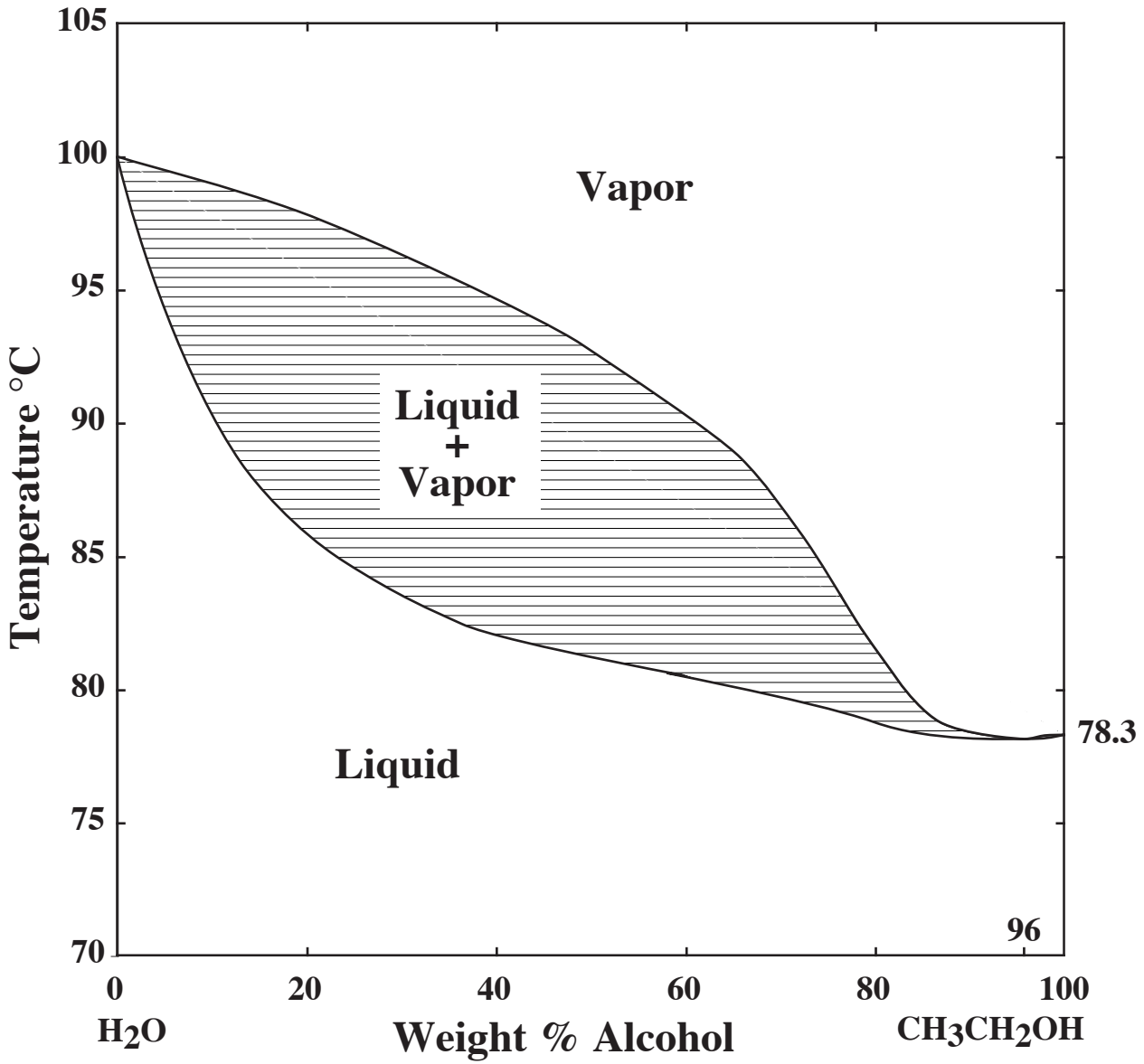

Temperature °C
20
0
-20
0
20
40
60
80
100
H_2O
Weight % NaCl
NaCl

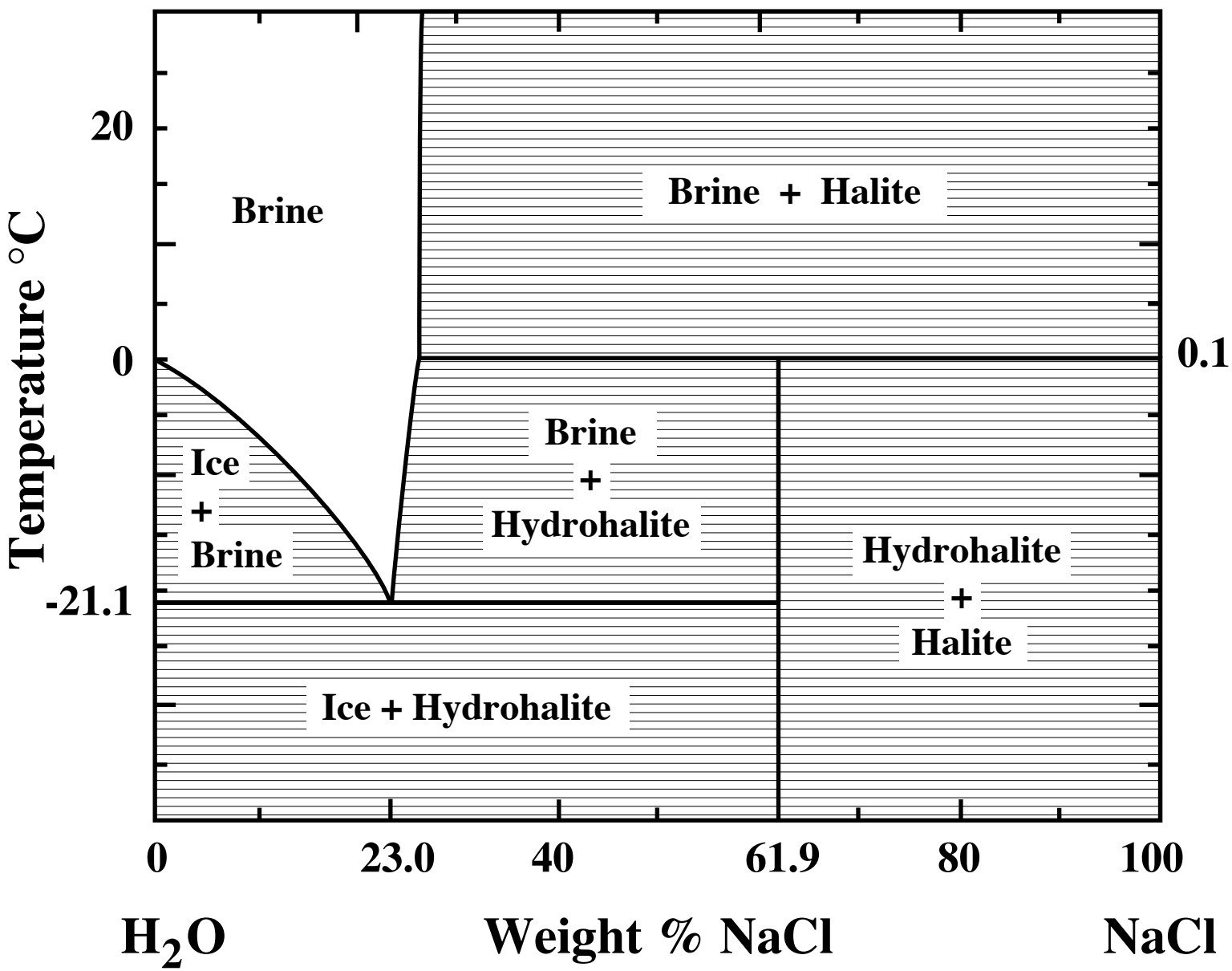

Temperature °C
20
0
-21.1
Brine
Brine + Halite
Ice
+
Brine
Ice + Halite
0
23.0
40
60
80
100
H2O
Weight % NaCl
NaCl


200
150
100
50
0
-13.9
-50
Temperature °C
185
Sugar Syrup
Syrup
+
Sucrose
Ice + Sucrose
0
20
40
62.4
80
100
H2O
Weight Percent Sucrose
C12H22O11


Moist Air
50% Humidity
Moist Air + Water
Moist Air + Ice
Temperature °C
40
30
20
10
0
-10
-20
0
1
2
3
4
5
Air
Weight % Water


10
-10
-30
-50
-70
-90
-110
-130
-150
-170
Temperature °C
Liquid
Ice + Liquid
Ice + Ethanol (solid)
-114
-123
92.4
0
20
40
60
80
100
H2O
Weight % Alcohol
CH3CH2OH


105
100
95
90
85
80
75
70
Temperature °C
Vapor
Liquid
+
Vapor
Liquid
78.3
96
0
20
40
60
80
100
H2O
Weight % Alcohol
CH3CH2OH


Temperature °C
20
0
-21.1
0.1
Brine
Brine + Halite
Ice
+
Brine
Brine
+
Hydrohalite
Hydrohalite
+
Halite
Ice + Hydrohalite
0
23.0
40
61.9
80
100
H2O
Weight % NaCl
NaCl