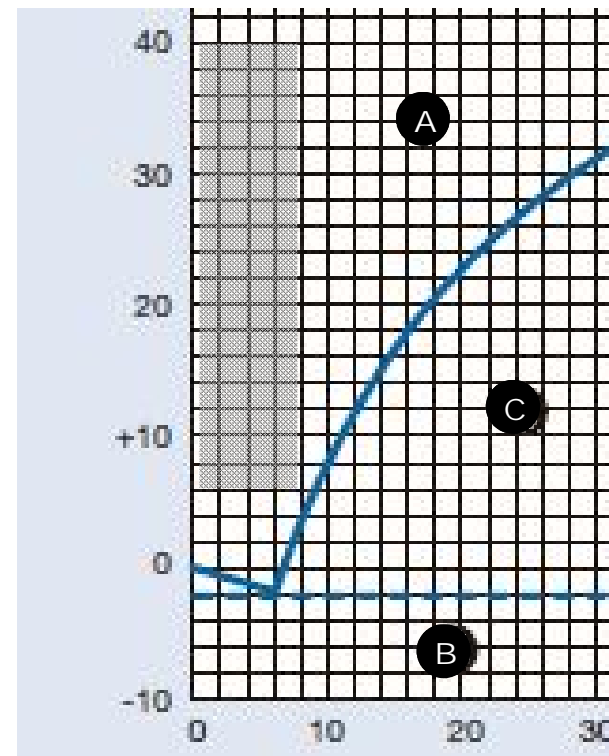
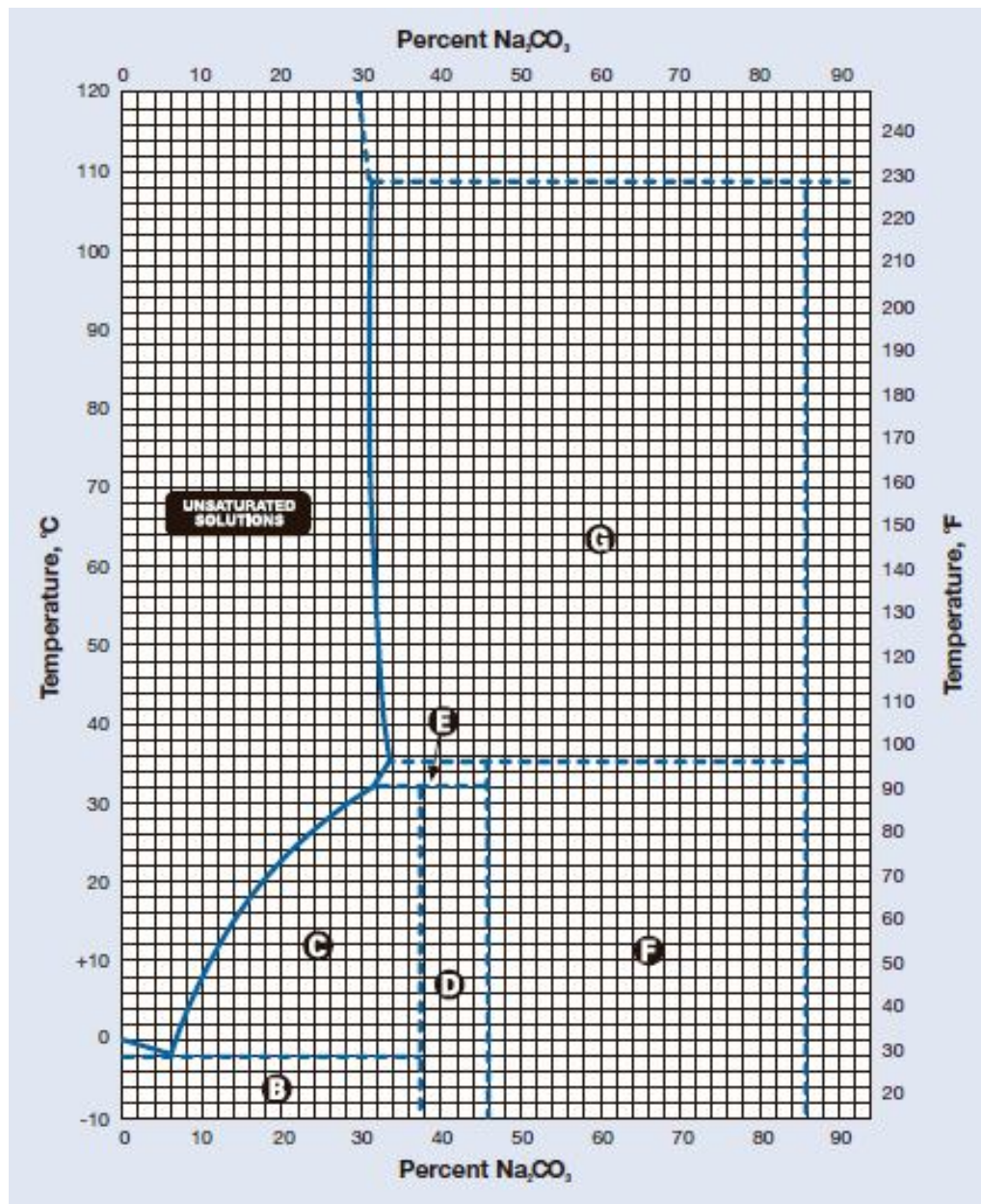


Phase diagram for sodium carbonate solutions in water

Soda Ash Handbook, General Chemical Industrial Products



2 Tbsp per gal	0.8 percent
4 Tbsp per gal	1.6 percent
6 Tbsp per gal	2.4 percent
8 Tbsp per gal	3.2 percent
10 Tbsp per gal	4.0 percent
20 Tbsp per gal	8.0 percent

Zone A liquid, unsaturated solution (100 percent dissolved)

Zone B ice plus undissolved $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$

Zone C saturated solution in equilibrium with undissolved $\text{Na}_2\text{CO}_3 \cdot 10\text{H}_2\text{O}$

The area that is shaded in grey represents solutions of 2 to 20 tablespoons per gallon at solution temperatures of 43 to 104 Fahrenheit. The density of sodium carbonate was taken from General Chemical's literature and is 1000 kg/m^3 , or 15 grams per tablespoon.