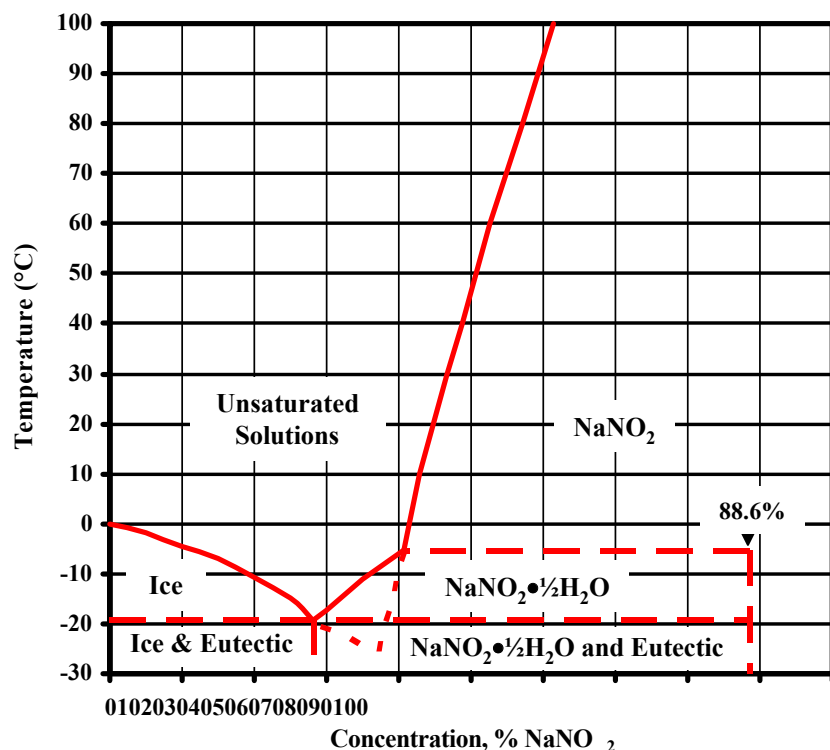


## Sodium Nitrite TECHNICAL DATA SHEET

### Solubility and Freezing Graph of Sodium Nitrite-Water



### Solubility of Sodium Nitrite in Water

Temperature °C	Temperature °F	Solubility g/100 g H <sub>2</sub> O	Concentration Percent
0	32	71.2	41.6
10	50	75.1	42.9
20	68	80.8	44.7
30	86	87.6	46.7
40	104	94.9	48.7
60	140	111	52.6
80	176	133	57.1
100	212	160	61.5

Sodium nitrite is hygroscopic and very soluble in water. It has a negative heat of solution of 14.9 kJ/mole at 20°C and 15.3 kJ/mole at 14°C; dissolving the solid material will produce a cooling effect. Therefore, the water used should be preheated.

References: "Natrium" in *Gmelins Handbuch der anorganischen Chemie, System 21, Vol. 3, Verlag Chemie, Weinheim, 1966; 960-982*; J. W. Mellor, "A Comprehensive Treatise on Inorganic and Theoretical Chemistry" Vol. 8, Longmans, Green & Co., 1928; 473-478; "Lange's Handbook of Chemistry, Twelfth Edition", McGraw-Hill Book Co., New York, 1979; page 10-18; Seidell, *Solubilities of Inorganic and Metal Organic Compounds, Fourth edition, Volume 2, American Chemical Society, Washington, D.C., 1965; page 1006.*

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