



As Pure & Natural As Nature Itself

NATURAL SODA



FEED GRADE SODIUM BICARBONATE



Natural Soda's pure & natural feed grade sodium bicarbonate, primarily used as a dairy cow feed supplement, offers outstanding buffering qualities which help stabilize rumen pH by reducing acid conditions. Dairy cows with diets high in grain concentration will benefit from supplemental buffering. Sodium Bicarbonate improves rumen performance and dairy cow productivity. Pure Sodium Bicarbonate is preferred by many dairymen and nutritionist over alternative buffers due to its excellent buffering capabilities and superior palatability.

Sodium Bicarbonate is also fed as a partial replacement for salt in poultry rations. Broiler operations find that sodium bicarbonate provides an alternative source of sodium that assists with litter control by providing dryer litter and a healthier living environment.

PRODUCT SPECIFICATIONS

Sodium Bicarbonate, as listed by the Association of American Feed Control Officials (code 57.106 AAFCO, IFN 6-04-272), is a mineral feed ingredient that contains not less than 99.0 percent sodium bicarbonate.

CHEMICAL PROPERTIES

Sodium Bicarbonate, as NaHCO_3
Sodium, as NA

TYPICAL

99.0 - 100.5%
 $\geq 27.1\%$

PHYSICAL PROPERTIES

Appearance
Bulk Density
Molecular Weight
pH (1% solution)

White Crystalline Powder
65 - 75 lbs/cu. Ft.
84.01
8.3

PARTICLE SIZE DISTRIBUTION

U.S. Std. Sieve No.
+100
+200
+325

CUMULATIVE % RETAINED

<u>Minimum</u>	<u>Maximum</u>
0	80
20	100
50	100

PACKAGING

Available in 50 lb/25kg multi-wall paper bags, 1 ton/metric ton Super-Sacks, and bulk truck and railcar.

STORAGE

Store in a cool, dry place.

INFORMATION

FEEDING RECOMMENDATIONS

DAIRY

Based on production of milk, the recommended feed rate should be approximately 0.8 ounces per 10 pounds of milk produced (8 ounces per cow per day for a cow producing 100 pounds of milk). This can be achieved by adding 15 pounds per ton to the total mixed ration (TMR). When added to the non-forage (grain) portion of the diet, nutritionists recommend approximately 30 pounds per ton.

POULTRY

Can be fed to poultry as a source of sodium carbonate and sodium bicarbonate. Feed at levels of 6 to 8 pounds per ton depending on nutritional needs.

BEEF

When used in starting cattle, feed at a rate of 1.0% to 1.5% of the total dietary dry matter for the first 30 days. The ration can be reduced to a rate of 0.5% to 0.75% of dietary dry matter once the animal is well acclimated. In diets of high moisture or high fermentation, wheat can be fed in the finishing stages along with 1.0% sodium bicarbonate in the total diet dry matter.

GOATS/SHEEP

Feed at a rate of 0.75% of the total mixed ration (15 pounds per ton).

AVAILABLE STUDIES

(Reprints available at our website: www.naturalsoda.com)

Tucker, W. B et al. 1992. Sodium Bicarbonate or Multielement Buffer via Diet or Rumen: Effects on Performance and Acid-Base Status of Lactating Cows. *J. Dairy Sci.* 75: 2409-2420.

Kohn, R. A. and Dunlap, T. F. 1998. Calculation of the Buffering Capacity of Bicarbonate in the Rumen and In Vitro. *J. Anim. Sci.* 76:1702-1709.

Khorasani, R. Factsheet: Dietary buffering requirements of the lactating dairy cow. Dairy Research and Technology Centre. University of Alberta.

Erdman, R. A. 1988. Dietary buffering requirements of the lactating dairy cow. *J. Dairy Sci.* 71:3246.

Zinn, R. A. 1991. Comparative feeding value of steam-flaked corn and sorghum in finishing diets supplemented with or without sodium bicarbonate. *J. Anim. Sci.* 1991. 69:905-916

Balnave, D. and Muheereza, S. K. 1997. Intermittent lighting and dietary sodium bicarbonate supplementation for laying hens at high temperatures. *Australian Journal of Agricultural Research.* 49(2) 279 – 284.

Yörük, M. A. et al. 2004. Laying Performance and Egg Quality of Hens Supplemented with Sodium al Bicarbonate During the Late Laying Period. *International Journal of Poultry Science* 3 (4): 272-278, 2004



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For additional product information,
contact our preferred independent
distributor or visit our website
www.naturalsoda.com



Certified to ANSI/NSF 60

Maximum use for potable water = 100mg/L

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INFORMATION