

# Nitrogen Discounts

**Scheduled prices intact at present, but tendency to offer discounts for early shipment growing. Latest to join discount list—ammonium nitrate**

**N**ITROGEN PRICES should remain firm over the second half of 1955. That's the contention of manufacturers. They cite two basic facts to support their view:

Contract prices have been established for the fertilizer season which began July 1, and price reductions would not stimulate buying owing to seasonal characteristics of the industry.

Inflationary forces are already at work as the result of wage increases in the steel and automobile plants, which may be reflected in time by all commodities.

But while scheduled prices are intact at this time for anhydrous ammonia, ammonium nitrate, sodium nitrate, and ammonium sulfate, the tendency nevertheless is increasing in this industry to offer discounts for early shipment. The latest large-consumption nitrogen product to adopt the discount idea is ammonium nitrate.

Anhydrous ammonia is the key to the nitrogen market situation. It is the basic product in the manufacture of not only ammonium nitrate but also of synthetic sodium nitrate, nitrogen solutions, synthetic ammonium sulfate, and urea. Changes either way in the anhydrous price would affect in some degree these other materials. In prewar times when anhydrous ammonia was a minor factor in agricultural nitrogen, leadership in establishing prices was taken by Chilean nitrate of soda and domestic coke-oven ammonium sulfate.

Since then ammonia production has been expanded considerably, and there is no need here to omit the fact that lower prices have been more or less expected. Many new interests have entered the ammonia manufacture field, and the pressure of this enlarged capacity undoubtedly is being felt in some quarters of the ammonia industry at a time when agricultural demand is not keeping step with greater production.

The tank car quotation for anhydrous ammonia, however, is being maintained at \$85.00 per ton, f.o.b. plant, and following the more or less general practice of the chemical industry, the freight rate is

being equalized with competing shipping points.

In addition to the seasonal factor and the possible role of inflation, ammonia producers are citing upturns in costs, labor and materials principally, which have taken place within their own industry.

To meet the competition offered by an ammonia producer in the petroleum industry, chemical manufacturers are offering ammonium nitrate at discounts which scale down from \$4 per ton for September shipment to \$1 for December. American Cyanamid is quoting the product at \$70 per ton at Port Robinson, Ont., and equalizing freights up to \$8 per ton in meeting competition on this product.

Ammonium nitrate at one time sold as high as \$170 per ton. This level was reached in 1930-31. Within two or three years the price had been brought down to \$80, or less than one-half of its record high. Further declines found ammonium nitrate at \$43 when World War II ended. Its supply meanwhile had been expanded through new facilities for anhydrous and nitric acid.

Ammonium sulfate may be in better supply for the 1955-56 season as the result of a higher rate of steel operations. Current prices range from \$42 to \$45 per ton at coke oven centers, excepting at St. Louis where the price is \$47. The sulfate quotations are subject to discounts for early shipment. These amount to

### Coke-Oven Ammonium Sulfate Prices

(July 1955-June 1956 shipment, f.o.b. ovens in bulk)

	PER TON
Pittsburgh district	\$42.00
Buffalo district	42.00
Cleveland	42.00
Youngstown	42.00
Erie	42.00
Johnstown	42.00
Bethlehem	42.00
Steelton	42.00
Philadelphia	42.00
Conshohocken	42.00
Morrisville	42.00
Sparrows Point	42.00
Birmingham district	42.00
Holt, Ala.	42.00
Hamilton, Ohio	43.00
Kearney, N. J.	43.00
Alabama City, Ala.	43.00
Port of Boston	43.00
Geneva-Ironton, Utah	44.00
Detroit	44.00
Chicago district (dried)	45.00
Chicago district (undried)	42.00
Lorain	45.00
Toledo	45.00
St. Paul	45.00
Duluth	45.00
St. Louis	47.00

(Source: Nitrogen Products, Inc.)

\$3.00 per ton for shipments that were made in June and July; \$2.00 per ton for August and September; and \$1.00 per ton for October and November.

Coke-oven ammonium sulfate has to sell competitively against synthetic and imported ammonium sulfate. To meet this competition coke-oven sellers have established a price of \$44 per ton in bulk, f.o.b. cars, at Atlantic and Gulf ports, without seasonal discounts. An exception to this is the Port of Boston where the price is \$43 per ton.

Synthetic ammonium sulfate at this writing is being named at \$42 per ton by five chemical and petroleum interests. They are, Allied Chemical and Dye Corp., f.o.b. cars, Hopewell, Va.; Rohm and Haas, Bristol, Pa.; American Cyanamid Co., Avondale, La.; Lion Oil Co., El Dorado, Ark.; and Phillips Chemical Co., Houston, Tex. (The port price of Phillips Chemical is \$44 per ton).

The Matthieson & Hegeler Zinc Co., has established its price for synthetic ammonium sulfate at \$46 per ton, f.o.b. cars, La Salle, Ill. As in the instance of the coke-oven product, synthetic sulfate is subject to seasonal discounts of the same extent.

# Synthetic Amino Acids

**Enrichment with them can upgrade many proteins, but NRC sees no need for extensive U. S. program**

**U**NDoubtedly, the bulk of the amino acids needed to feed the world population must continue to come from plant and animal proteins. However, there are cases where the nutritional value of a protein is limited by a deficiency of one of the essential amino acids, and then enrichment with a synthetic amino acid will increase the protein's value by several times the cost of the added material. Proteins are not utilized in the body as such, but are broken down into their component amino acids, which are then recombined to form the body's own protein. For protein synthesis it is necessary that all the required amino acids be present simultaneously; the lack of any one essential amino acid will bring about the waste of all the others. In a human or animal diet containing proteins from several sources, amino acid deficiencies in individual proteins are often cancelled out by excesses in others, but there are situations where the variety of proteins in the diet is not great and then it may be advantageous to use synthetic amino acids.