ANIMAL FEED GRADE DL-METHIONINE FROM FRANCE


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# CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Determination</td>
<td>1</td>
</tr>
<tr>
<td>Views of the Commission</td>
<td>3</td>
</tr>
<tr>
<td>Information obtained in the investigation:</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>A-1</td>
</tr>
<tr>
<td>Other investigations concerning methionine</td>
<td>A-1</td>
</tr>
<tr>
<td>Description and uses</td>
<td>A-2</td>
</tr>
<tr>
<td>DL-methionine</td>
<td>A-2</td>
</tr>
<tr>
<td>Liquid DL-methionine</td>
<td>A-3</td>
</tr>
<tr>
<td>The hydroxy analog</td>
<td>A-3</td>
</tr>
<tr>
<td>Dry hydroxy analog</td>
<td>A-3</td>
</tr>
<tr>
<td>L-methionine</td>
<td>A-4</td>
</tr>
<tr>
<td>Uses</td>
<td>A-4</td>
</tr>
<tr>
<td>Substitute products</td>
<td>A-4</td>
</tr>
<tr>
<td>Degussa's position</td>
<td>A-4</td>
</tr>
<tr>
<td>Monsanto's position</td>
<td>A-5</td>
</tr>
<tr>
<td>Rhône-Poulenc's position</td>
<td>A-5</td>
</tr>
<tr>
<td>Production processes:</td>
<td>A-5</td>
</tr>
<tr>
<td>DL-methionine</td>
<td>A-5</td>
</tr>
<tr>
<td>The hydroxy analog</td>
<td>A-5</td>
</tr>
<tr>
<td>Liquid and dry forms</td>
<td>A-6</td>
</tr>
<tr>
<td>U.S. tariff treatment</td>
<td>A-6</td>
</tr>
<tr>
<td>Nature and extent of alleged sales at LTFV</td>
<td>A-6</td>
</tr>
<tr>
<td>U.S. market</td>
<td>A-7</td>
</tr>
<tr>
<td>U.S. producers</td>
<td>A-7</td>
</tr>
<tr>
<td>Foreign producers</td>
<td>A-8</td>
</tr>
<tr>
<td>U.S. importers</td>
<td>A-9</td>
</tr>
<tr>
<td>Consideration of material injury:</td>
<td></td>
</tr>
<tr>
<td>U.S. producers' capacity and production</td>
<td>A-9</td>
</tr>
<tr>
<td>U.S. producers' shipments</td>
<td>A-10</td>
</tr>
<tr>
<td>U.S. producers' inventories</td>
<td>A-10</td>
</tr>
<tr>
<td>Employment</td>
<td>A-11</td>
</tr>
<tr>
<td>Financial experience of U.S. producers</td>
<td>A-11</td>
</tr>
<tr>
<td>Capital expenditures</td>
<td>A-12</td>
</tr>
<tr>
<td>The question of threat of material injury:</td>
<td></td>
</tr>
<tr>
<td>Consideration factors</td>
<td>A-13</td>
</tr>
<tr>
<td>Inventories held by importers</td>
<td>A-13</td>
</tr>
<tr>
<td>The question of the causal relationship between the alleged LTFV</td>
<td></td>
</tr>
<tr>
<td>sales and the alleged injury</td>
<td>A-13</td>
</tr>
<tr>
<td>U.S. imports</td>
<td></td>
</tr>
<tr>
<td>Prices:</td>
<td>A-15</td>
</tr>
<tr>
<td>Pricing policies</td>
<td>A-15</td>
</tr>
<tr>
<td>Market structure</td>
<td>A-17</td>
</tr>
<tr>
<td>Price comparisons</td>
<td>A-17</td>
</tr>
<tr>
<td>Prices of the dry forms</td>
<td>A-18</td>
</tr>
<tr>
<td>Prices of the liquid forms</td>
<td>A-19</td>
</tr>
</tbody>
</table>
CONTENTS

Information obtained in the investigation—Continued
The question of the causal relationship between the alleged LTFV sales and the alleged injury—Continued
Freight costs ................................................. A-20
Exchange rates ............................................... A-20
Lost sales and price depression ....................... A-20

Appendix A. The Federal Register notices ................. A-25
Appendix B. Witnesses at the Commission's conference ...... A-29
Appendix C. Monsanto's letters .......................... A-31

Tables

6. Average number of production and related workers engaged in the manufacture of DL-methionine or the hydroxy analog, hours worked by such workers, wages paid, and total compensation, by firms, 1982-84, January-March 1984, and January-March 1985 ......................................... A-11
CONTENTS

Tables--Continued


Note.—Data which would disclose confidential operations of individual concerns may not be published and therefore have been deleted from this report. Deletions are indicated by asterisks.
Investigation No. 731-TA-255 (Preliminary)
ANIMAL FEED GRADE DL-METHIONINE FROM FRANCE

Determination

On the basis of the record 1/ developed in the subject investigation, the Commission determines, pursuant to section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)), that there is no reasonable indication that an industry in the United States is materially injured or threatened with material injury, or that the establishment of an industry in the United States is materially retarded, by reason of imports from France of animal feed DL-methionine, provided for in item 425.04 of the Tariff Schedules of the United States, which are alleged to be sold in the United States at less than fair value (LTFV).

Background

On April 3, 1985, a petition was filed with the Commission and the Department of Commerce by Degussa Corp., a U.S. producer of DL-methionine, alleging that an industry in the United States is materially injured and threatened with material injury by reason of LTFV imports of animal feed grade DL-methionine from France. Accordingly, effective April 3, 1985, the Commission instituted preliminary antidumping investigation No. 731-TA-255 (Preliminary).

Notice of the institution of the Commission's investigation and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade

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1/ The record is defined in sec. 207.2(i) of the Commission's Rules of Practice and Procedure (19 CFR § 207.2(i)).
Commission, Washington, DC, and by publishing the notice in the Federal Register of April 10, 1985 (50 FR 14171). The conference was held in Washington, DC, on April 26, 1985, and all persons who requested the opportunity were permitted to appear in person or by counsel.
VIEWS OF THE COMMISSION

We determine that there is no reasonable indication that an industry in the United States is materially injured or threatened with material injury by reason of allegedly less than fair value (LTFV) imports of animal feed grade DL-methionine from France. 1/ The Commission's negative determination in this investigation is based on the lack of any reasonable indication of a causal relationship between imports from France and the condition of the domestic industry. 2/

Like product and the domestic industry

As a threshold inquiry, the Commission is required to identify the domestic industry to be examined for the purpose of making an assessment of material injury. Section 771(4)(A) of the Tariff Act of 1930 defines the term "industry" as "[t]he domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product." 3/ Section 771(10), in turn, defines "like product" as "[a] product which is like, or in the absence of like, most similar in characteristics and uses with the articles subject to an investigation . . . ." 4/

The imported product subject to this investigation is animal feed grade DL-methionine, which is a synthetic amino acid in powdered form used as a poultry feed supplement. The petitioner, Degussa Corporation, is the only domestic producer of DL-methionine. The DL-methionine produced by Degussa,

1/ Material retardation is not an issue in this case.
2/ Because there are only two domestic producers and one importer, most of the data obtained by the Commission are confidential and cannot be included in this public opinion. Therefore, much of the discussion of market trends in this opinion is necessarily general.
while different in color and appearance, has the same chemical formula as the imported product. Although the methods of production of Degussa and Rhone-Poulenc differ to a certain degree, they are substantially similar. Moreover, both imported and domestic DL-methionine are marketed through the same channels of distribution, sold to the same end users, and put to the same use. We therefore determine that domestic DL-methionine is like the imported product.

We must also decide whether the methionine hydroxy analog produced by Monsanto is "like" imported DL-methionine. The hydroxy analog differs from DL-methionine in that it is not itself an amino acid. Instead, the hydroxy analog is converted into an amino acid by the animal after it is ingested. The efficiency of the conversion process is referred to in the trade as "bioefficacy." The bioefficacy of the hydroxy analog relative to the DL-methionine has been estimated as 88 percent by Monsanto, but this is subject to considerable debate within the industry. Other estimates of the hydroxy analog's bioefficacy range from 68-88 percent. 5/

Both DL-methionine and the hydroxy analog are methionine-based animal feed additives. They are put to the identical end use and are recognized by the petitioner as commercially interchangeable. 6/ DL-methionine and the hydroxy analog are commercially synthesized from the same raw materials, although the production processes are different. They are both marketed through the same channels of distribution.

A comparison of the chemical structure of DL-methionine and the hydroxy analog reveals that the only chemical difference between the two is that DL-methionine has an amino group attached to the number 2 carbon atom, while

6/ Transcript of the conference at 32.
the hydroxy analog has a hydroxy group at that position. However, after the hydroxy analog is ingested by an animal, a chemical conversion occurs whereby, in vivo, an amino group is substituted for the hydroxy group of the analog product. The hydroxy analog then becomes chemically identical to DL-methionine. Not all of the hydroxy analog undergoes such a conversion. The bioefficacy figures are the estimates of the percentage of the hydroxy analog that is converted to an amino acid by the animal.

In light of the above factors, we determine that the domestically produced hydroxy analog is "like" the imported DL-methionine. Since both domestically produced DL-methionine and the hydroxy analog are "like" the imported DL-methionine, the domestic industry consists of the sole domestic producer of DL-methionine, Degussa Corporation, and the sole domestic producer of the hydroxy analog, Monsanto Corporation.

In making a determination as to the condition of the domestic industry, the Commission considers, among other factors, whether there are declines in production, domestic prices, market share, employment, capacity utilization, investment and profitability.

7/ This conclusion is consistent with our previous decision in Synthetic L-Methionine from Japan, Inv. No. 751-TA-4 (1981), in which we held that both DL-methionine and the hydroxy analog were "most similar in characteristics and uses" with the imported product in that investigation.

8/ We note that the like product and domestic industry determination has no effect on the outcome of this case. The fundamental trends in the domestic industry that support our conclusion remain unchanged, regardless of the scope of that industry. Therefore, our determination in this case would have been the same even if Monsanto were excluded from the domestic industry. Indeed, inclusion of Monsanto in the domestic industry makes the petitioner's material injury case stronger than if Monsanto were excluded.

During the period of investigation, the data available to the Commission show a substantial and rapid increase in production and capacity for the domestic industry. 10/ The majority of this increase is attributable to the opening of a new plant by Monsanto in 1984. Primarily because of this substantial increase in domestic capacity, capacity utilization dropped significantly in 1984. Domestic shipments have increased steadily throughout the period of investigation, but inventories, as a percentage of shipments, have also increased. Investment in the industry has been substantial, with the bulk of the expenses incurred by Monsanto for the construction of its new plant.

Available data on employment indicate that the number of workers in the domestic industry increased until the first quarter of 1985, when Monsanto's West Virginia plant was closed. The number of hours worked, amount of wages paid and total compensation followed similar trends. 11/

Aggregate sales in dollar terms for the domestic industry increased substantially between 1982 and 1983 but dropped significantly in 1984 as prices dropped. 12/ Profit data for the domestic industry followed a similar trend and dropped substantially subsequent to the opening of Monsanto's new plant in late 1983. 13/

10/ Since there are only two domestic producers and one importer in this investigation and since they have cooperated fully by providing complete and thorough responses to our questionnaires, the data available are unusually complete in this preliminary investigation. Moreover, because of the 1981 L-methionine review case, the Commission and its staff have a thorough understanding of the market forces at work in this particular domestic industry.

11/ It should be noted that the level of employment is generally fixed for at least one of the domestic producers. That is, it takes the same number of employees to operate a plant at full capacity as it does to operate at lower capacity. Report at A-11.

12/ Id. at A-11-12.

13/ Id. Profit data and trends for the industry are confidential and cannot be discussed in detail.
Based upon our evaluation of the available data, especially declining prices and profits, we determine that there is a reasonable indication that the domestic industry is suffering material injury. 14/

**No reasonable indication of material injury by reason of allegedly LTFV imports**

In making our determination whether there is a reasonable indication that material injury to the domestic industry is "by reason of" allegedly LTFV imports, 15/ we have considered, among other factors, the volume of imports, the effect of imports on prices in the United States for the like product, and the impact of such imports on the relevant domestic industry. 16/

Throughout the period of investigation, the volume of imports of DL-methionine from France has declined significantly, while total consumption in the United States has increased steadily. 17/ The result has been an even more significant decline in the market penetration by imports.

In contrast, the production capacity, volume of shipments, and market share of the domestic producers have steadily increased. Nonetheless, the domestic industry has experienced declines in capacity utilization, prices, and profitability. We have determined that those declines, however, are not

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14/ Chairwoman Stern does not believe it necessary or desirable to make a determination on the question of material injury separate from the consideration of causality. She joins her colleagues by concluding that the domestic industry is experiencing economic problems.

15/ 19 U.S.C. § 1673(b).


17/ The volume of imports must be put into proper perspective. Rhone-Poulenc has been marketing DL-methionine in the United States for approximately 30 years, while Degussa only began domestic production in 1977. Therefore, it is not surprising that Rhone-Poulenc has a sizeable volume of sales to the United States and a corresponding market share. This alone, however, is not indicative of a causal relationship between the imports and the condition of the domestic industry in this investigation. Because of Rhone-Poulenc's historical presence in the market, we consider changes in volume and market share as more probative on the issue of causation than their absolute levels.
causally related to the imports from France. Instead, they are directly related to the rapid expansion of domestic capacity and the sharp downward pressure on prices created by excess supply and aggressive price cutting by the domestic producers.

The undisputed information of record discloses that methionine production is capital intensive and requires significant capital expenditures. Moreover, labor input is relatively low as a percentage of total cost and, for at least one producer, it is fixed regardless of production levels. These factors create substantial pressure to operate at a high level of capacity utilization in order to lower unit cost and raise profitability. Because DL-methionine and the hydroxy analog compete primarily on the basis of price, the only way to increase sales and capacity utilization sufficiently is to cut prices. Price cutting is exactly what the domestic industry, in particular Monsanto, has done in order to increase sales volume and utilize excess capacity.

The evidence available to the Commission indicates that the price decline, which contributed to declines in profitability for the domestic industry, was coincident with the enormous increase in domestic capacity. The evidence also indicates that the domestic producers, in particular Monsanto, have been aggressive in cutting prices and have claimed credit for the declining prices. 18/ Because "meet or release" contracts predominate in the industry and price cuts are rapidly disseminated throughout the industry, the decline in prices has spiraled rapidly downward. 19/ Rhone-Poulenc has followed the downward price spiral. Purchasers contacted by the staff in response to lost sales and revenue allegations, as well as information

18/ Report at A-18 and App. C.
19/ Petitioner has admitted that the market is extremely price sensitive and that news of price cutting becomes widespread very quickly. Id. at A-17.
submitted by respondents, indicated that domestic producers have been the price leaders in the market. The fact that Rhone-Poulenc has lost market share in a price-sensitive market confirms this conclusion.

While there have been some instances of underselling by imports and lost sales to imports, an evaluation of the market as a whole reveals that such instances are insignificant. Declines in volume and market share of imports are indicative of a significant number of sales lost by imports to domestic producers. This trend is corroborative of other evidence of record demonstrating that the domestic producers are the price leaders in the market and are directly responsible for the current condition of the domestic industry. The lack of a causal connection between the imports and the condition of the domestic industry is also supported by the pricing data, which indicate that the domestic product frequently undersold imports. In addition, a comparison of import prices with the price of the hydroxy analog shows a similar but more dramatic trend of price cutting by Monsanto. 20/

On the basis of the data obtained in this investigation, we conclude that there is no reasonable indication that LTFV imports from France are a cause of material injury to the domestic industry.

No reasonable indication of a threat of material injury by reason of allegedly LTFV imports

In our examination of the question of whether there is a reasonable indication of the threat of material injury to an industry in the United States, we have taken into consideration such factors as changes in the volume of the alleged LTFV imports, changes in the U.S. market penetration by

20/ Id. at A-19, Tables 12-13. Price comparisons between DL-methionine and the hydroxy analog were computed on an equimolar basis.
such imports, quantities of such imports held in inventory in the United States, and the capacity of the foreign producers to generate exports (including the availability of export markets other than the United States). 21/

We have already noted that both the volume and the market share of imports from France decreased steadily throughout the period of this investigation. The ratio of inventories of imports to shipments has fluctuated within a narrow range throughout this period. The capacity of Rhone-Poulenc has not changed throughout this period, while capacity utilization has declined somewhat. However, export sales to countries other than the United States have consistently and substantially exceeded export sales to the United States. No evidence was presented to indicate that imports from France directed to the United States would increase in the immediate future. Moreover, Rhone-Poulenc anticipates demand in its other markets to grow at a substantially higher rate than demand in the United States. We therefore determine that there is no reasonable indication of a threat of material injury to the domestic industry by reason of allegedly LTFV imports from France.

Conclusion

On the basis of the foregoing discussion, we determine that there is no reasonable indication that the domestic industry is materially injured or threatened with material injury by reason of allegedly less than fair value imports from France.

21/ We note that an affirmative determination with respect to threat of material injury must be based upon information showing that the threat is real and the injury imminent, not a mere supposition or conjecture. S. Rep. No. 249, 96th Cong., 1st Sess. 88 (1979).
INFORMATION OBTAINED IN THE INVESTIGATION

Introduction

On April 3, 1985, counsel for Degussa Corp. filed an antidumping petition with the U.S. International Trade Commission and the U.S. Department of Commerce. The petition alleges that an industry in the United States is materially injured and is threatened with material injury by reason of imports from France of animal feed grade DL-methionine, provided for in item 425.04 of the Tariff Schedules of the United States (TSUS), which are allegedly sold at less than fair value (LTFV). Accordingly, the Commission instituted a preliminary investigation under the provisions of the Tariff Act of 1930 to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports of such merchandise into the United States. The statute directs that the Commission make its determination within 45 days after its receipt of a petition, or in this case, by May 20, 1985.

Notice of the institution of the Commission's investigation and of a conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of April 10, 1985 (50 FR 14171). 1/ The conference was held in Washington, DC, on April 26, 1985. 2/ The briefing and vote was held on May 15, 1985.

Other Investigations Concerning Methionine

On May 14, 1973, the Commission determined that an industry in the United States was injured within the meaning of the Antidumping Act, 1921, by reason of LTFV imports of methionine from Japan. On July 3, 1973, the U.S. Department of the Treasury issued a finding of dumping.

In 1981, the Commission conducted a review investigation and determined that an industry in the United States would not be materially injured or threatened with material injury, and the establishment of an industry in the United States would not be materially retarded, if the antidumping order were modified or revoked with respect to L-methionine. Accordingly, the dumping order was modified to exclude L-methionine. This specialty methionine is discussed in the description and uses section of this report.

The dumping order concerning other grades of methionine, including animal feed grade DL-methionine, is still in effect. In the latest annual review of this order, published in December 1983, Commerce determined that dumping margins ranged from 0 to 48 percent. In 1984, imports of all grades of methionine from Japan accounted for less than 1 percent of total imports from all sources.

1/ Copies of the Commission's and Commerce's notices are presented in app. A.
2/ A list of witnesses appearing at the conference is presented in app. B.
Description and Uses

Methionine is an amino acid with the chemical name of 2-amino-4-(methylmercapto)-butyric acid. Methionine is one of the essential sulfur-containing amino acids that must be supplied in the diets of humans and animals. It is used in the synthesis of protein. Humans usually obtain the required amino acids from proteins contained in eggs, fish, poultry, milk, and beef in their diet.

Methionine exists in different optical isomeric forms. It can occur as one of two optically active isomers or as a mixture of both. The designation "optical isomer" refers to the rotation of a plane of polarized light passed through a medium containing one type of isomer. If the isomer rotates the polarized light to the right, it is known as dextrorotatory (D) and if the polarized light is rotated to the left, the isomer is called levorotatory (L). If the D and L isomers are mixed in equal portions, then the mixture is not optically active, it is designated (DL) and is called racemic.

All amino acids that occur naturally in food protein are present in the optically active L-isomeric form. However, any synthetic process which produces amino acids yields a racemic DL mixture that is one-half dextrorotatory (D) and one-half levorotatory (L). Synthetic animal feed grade DL-methionine is the imported product under consideration in this investigation.

DL-methionine

The chemical name for DL-methionine is (DL) 2-amino-4-(methylmercapto)-butyric acid. Synthetic DL-methionine is a white crystalline powder with a faint characteristic odor and sweet, slightly bitter taste. DL-methionine is marketed in two grades, animal feed grade and United States Pharmacopoeia (U.S.P.) or National Formulary (N.F.) grade. The standards for the U.S.P. and N.F. grades are identical and conform to the Food Chemicals Codex specification for purity. The U.S.P. grade of DL-methionine differs from animal feed grade only in purity, and it can be produced from feed grade DL-methionine through further chemical purification. The purification processes increase the cost of U.S.P. grade and, as a consequence, the U.S.P. grade DL-methionine sells for about double the price of animal feed grade DL-methionine. The U.S.P. grade accounts for less than 2 percent of all DL-methionine consumed in the United States and is used in pharmaceutical preparations and in the production of certain antibiotics.

1/ Optical isomers differ from one another in the way atoms or groups of atoms are arranged in space. The molecular formulas and molecular weights of optical isomers are identical but they may have different properties.
**Liquid DL-methionine**

DL-methionine can be easily converted to a liquid form. The pale yellow aqueous solution of the sodium salt of DL-methionine differs from dry DL-methionine in that a hydrogen atom in the terminal acid group has been replaced by a sodium atom. This is accomplished by neutralization of the dry DL-methionine with an aqueous sodium hydroxide solution to form the sodium salt. The amino group at the 2 or alpha carbon position is not affected by this reaction. Although this compound is not an amino acid, per se, it does have essentially the same chemical structure. On an equimolar basis 1/ liquid DL-methionine is accepted as having the same metabolic activity as the dry amino acid.

**The hydroxy analog**

There is an alpha (or 2 carbon position) hydroxy acid related to methionine that is only produced in the United States. It is a clear amber liquid with the chemical name (DL) 2-hydroxy-4-(methylmercapto)butyric acid. The chemical differs from DL-methionine in that the amino group of the molecule has been substituted with a hydroxy group. The hydroxy analog is therefore not an amino acid.

**Dry hydroxy analog**

The hydroxy analog can be precipitated as a calcium salt through neutralization with calcium hydroxide. The resultant compound is a free-flowing light tan powder with the chemical name 2-hydroxy-4-(methylmercapto)butyric acid, calcium salt.

The bioefficacy of the hydroxy analog in further amino acid animal protein metabolism is a subject of longstanding and controversial debate. There is no clear industry consensus as to the relative bioefficacy of the analog products compared with methionine products. U.S. poultry nutritionists have reported that the equivalency ratings range from a low of 68 percent for the dry hydroxy analog to a high of 88 percent for the liquid hydroxy analog. In spite of this bioefficacy debate, hydroxy analog products and methionine products are directly competitive in the animal feed market. This report will follow industry practice and present data concerning DL-methionine and the hydroxy analog on an equimolar basis, using a bioefficacy of 86 to 88 percent.

Unless otherwise specified, this report will only discuss the animal feed grade products. Both the dry and liquid animal feed grade methionine products will be collectively referred to as DL-methionine. Similarly, the liquid and dry hydroxy analog products will be collectively referred to as hydroxy analog.

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1/ A molar solution contains 1 gram molecular weight (the molecular weight of a substance in grams) of the solute per liter of solvent.
L-methionine

Synthetic L-methionine is not produced in the United States or France. It is used primarily in certain soy protein base formulas for infants who are allergic to protein from cows milk. In 1981, the Commission determined that neither DL-methionine nor the hydroxy analog "qualifies as a product "like" synthetic L-methionine." The Commission further determined that L-methionine imported from Japan does not compete with U.S.-produced DL-methionine or the hydroxy analog. 1/

Uses

Methionine is naturally supplied in scientifically formulated poultry rations from corn products, enriched soy meal, and fish meal. No generally acceptable natural feed mixture can meet optimal methionine requirements for poultry, however.

Animal feed grade DL-methionine is principally used as a poultry feed supplement. This use accounts for 95 percent of all animal feed grade DL-methionine consumed in the United States. The balance is used in swine feed, pet foods, fermentation feed stock for broad based antibiotics, single cell protein, and research.

Substitute products

Both the dry and liquid forms of the hydroxy analog are also used as sources of methionine in poultry feed supplementation. These products are directly competitive with animal feed grade DL-methionine in the poultry feed supplement market. 2/

Degussa's position.--The petitioner asserts that the product like the imported product is DL-methionine. The firm further asserts that the hydroxy analog is not a like product and that U.S. hydroxy analog operations should not be considered part of the U.S. industry.

2/ In the investigation concerning methionine from Japan, the Commission determined that DL-methionine and the hydroxy analog "are completely interchangeable in poultry feed." Synthetic Methionine From Japan: Determination of Injury in Investigation No. AA1921-115 . . . . ., TC Publication 578, May 1973.

In their opinion in the review investigation concerning L-methionine, the Commission stated—
The slight difference in the chemical formulas of DL-methionine and MHA [the hydroxy analog] is not a determining factor in the marketplace. They are commercially fungible as forms of synthetic methionine used in feed additives.
At the public conference held in connection with this investigation, Degussa acknowledged that DL-methionine and the hydroxy analog are "substitute products." In addition, Degussa further stated that of the total market for DL-methionine and the hydroxy analog combined, only 5 percent or less could only be satisfied by DL-methionine. 1/

Monsanto's position.—Monsanto Co. is the sole U.S. producer of the hydroxy analog. It was the petitioner in the original investigation concerning methionine from Japan. In the current investigation, Monsanto did not take a position either in support or in opposition to the petition. However, the company filled out the questionnaire and has cooperated in all aspects of the investigation. Monsanto takes the position that ** *

Rhone-Poulenc's position.—Rhone-Poulenc, the sole French producer and exporter of DL-methionine, ** * supports the position that U.S.-produced DL-methionine and the hydroxy analog are like the DL-methionine that it exports to the United States.

Production processes

DL-methionine.—Most processes to synthesize DL-methionine commercially use acrolein and methyl mercaptan as starting materials. Acrolein is obtained by the oxidation of propylene, and methyl mercaptan is produced by reacting methyl alcohol with hydrogen sulfide. The addition of methyl mercaptan to the double bond of acrolein yields 3-methylmercapto-propionaldehyde (MMP), which is a necessary intermediate in methionine synthesis. Further chemical reactions that utilize chemicals such as hydrogen cyanide, ammonia, and carbon dioxide produce a hydantoin compound. This compound is then subjected to hydrolysis at elevated temperature and pressure in an aqueous alkali solution and neutralized with acid to yield dry DL-methionine. All of the chemicals used to synthesize methionine are readily available industrial organic and inorganic chemicals. In addition to the process steps that involve chemical reactions, there are a number of separation, recovery, and purification steps. Liquid DL-methionine is produced by neutralization of the dry DL-methionine with an aqueous sodium hydroxide solution.

The differences between the U.S. and French DL-methionine synthesis processes are both mechanical and chemical in nature, although both follow the same reaction sequences outlined above. Both Degussa and Rhone-Poulenc regard the details of their production processes technology and know-how as proprietary trade secrets.

The hydroxy analog.—The hydroxy analog is commercially synthesized from the same starting materials as DL-methionine. The intermediate 3-methylmercapto-propionaldehyde is converted with hydrogen cyanide via the cyanohydrin synthesis to the corresponding hydroxynitrile. The nitrile is hydrolyzed with mineral acid to produce a hydrolyzate containing the 2-hydroxy-4-(methylmercapto)butyric acid. Further solvent extraction yields an aqueous 2-hydroxy-4-(methylmercapto)butyric acid solution. The dry hydroxy analog is precipitated from the liquid acid solution with calcium hydroxide and dried to yield calcium salt.

1/ Transcript of the conference, p. 33.
Monsanto is the sole producer worldwide of the dry and liquid hydroxy analog. Details of the process are highly secret proprietary information which Monsanto declines to discuss and has not licensed to any other company.

Liquid and dry forms

Both the liquid and dry forms of DL-methionine are used as a supplement in animal feed. They are sold through the same channels of distribution and are purchased by the same end users. Similarly, the liquid and dry forms of the hydroxy analog are also used as feed supplements and are sold to the same end users. All parties agree that the liquid and dry forms of DL-methionine are one like product.

All of the French product is imported dry. In 1984, Rhone-Poulenc converted *** pounds of dry DL-methionine, or about *** percent of total shipments of the French product, into the liquid product at a facility in Columbia, SC. About *** percent of Degussa’s product and *** percent of Monsanto’s product is sold in the liquid form.

On November 1, 1982, Commerce issued a letter ruling that liquid DL-methionine was included within the scope of the antidumping order concerning methionine from Japan. The letter stated that—

Although these two products have different forms, one being liquid and one being dry, they are chemically similar and biochemically identical. However concerning..., the use of the product, which is to complete animal feeds as a source of essential amino acid activity, there is no doubt but that the liquid and solid forms are similar. Finally..., we believe that the channels of trade are essentially the same for both types.

U.S. Tariff Treatment

Imports of methionine enter under item 425.04 of the TSUS. Imports of such merchandise from France are assessed the column 1 (most-favored-nation) rate of duty. As a result of agreements made during the Tokyo round of trade negotiations, this rate has been reduced in stages from 5.3 percent ad valorem effective January 1, 1982, to 4.7 percent ad valorem on January 1, 1985. This rate is scheduled to be reduced further, in stages, to 4.2 percent ad valorem by January 1, 1987.

Nature and Extent of Alleged Sales at LTFV

According to the petition, in February 1984, DL-methionine from France was sold in the United States at LTFV margins of 43 to 63 percent. The petitioner calculated these margins by comparing home-market prices of DL-methionine in France with the prices at which the French product is sold in the United States.
U.S. Market

The United States accounts for about one-third of total consumption of DL-methionine and the hydroxy analog worldwide. According to the Chemical Economics Handbook, the vast bulk of these products is used in animal feed, as shown in the following tabulation (in percent):

* * * * * * *

About 2 to 4 pounds of DL-methionine or the hydroxy analog are added to 1 ton of poultry feed, accounting for about 0.1 to 0.2 percent of the ration, by weight. DL-methionine or the hydroxy analog account for less than 0.5 percent of the total cost of the feed.

According to the petition, there are about 200 customers nationwide for DL-methionine. About *** percent of the DL-methionine produced by Degussa is sold directly to poultry producers, such as ***. These producers then mix their own feed. About *** percent of Degussa's sales are to general feed-line companies, such as ***. The general feed-line companies mix feed for resale to small poultry and other livestock producers. *** percent of Degussa's sales are to blender/distributors. The blender/distributor either resells the methionine to poultry producers or mixes the methionine with other feed ingredients, such as vitamins, before selling it to the poultry producer.

Data concerning U.S. consumption of DL-methionine and the hydroxy analog are presented in table 1. U.S. consumption of DL-methionine *** from *** pounds in 1982 to *** in 1983, or by *** percent. Consumption then *** by *** percent to *** pounds in 1984. The level of consumption in January-March 1985 was *** percent *** than the level in the corresponding period of 1984.

Table 1.—DL-methionine and the hydroxy analog: U.S. consumption, 1982-84, January-March 1984, and January-March 1985

* * * * * * *

Combined U.S. consumption of DL-methionine and the hydroxy analog *** during the period, *** by *** percent from 1982 to 1984, and by *** percent during the January-March periods. With the increase in demand for poultry in the United States, the market for DL-methionine and the hydroxy analog is expected to grow at a rate of 4 to 5 percent a year.

U.S. Producers

The petitioner, Degussa, is a wholly owned U.S. subsidiary of Degussa AG, a German firm. Degussa's U.S. headquarters are located in Teterboro, NJ, and its methionine plant is in Theodore, AL. This plant began to produce DL-methionine in late 1977.

Monsanto produces hydroxy analog at its facility in Chocolate Bayou, TX, which opened in January 1984. The company now **.

Du Pont produced hydroxy analog in Beaumont, TX, from the early 1960's to March 1982. Du Pont officials reported that it ceased producing the hydroxy analog because **. 1/

Foreign Producers

Worldwide capacity to produce DL-methionine and the hydroxy analog in 1984, according to the Chemical Economics Handbook published by the Stanford Research Institute, is concentrated in North America, Western Europe, and Japan, as shown in the following tabulation (in percent):

```
* * * * * * * *
```

Degussa, Monsanto, and Rhone-Poulenc dominate the world market for these products, controlling ** percent, *** percent, and ** percent, respectively, of worldwide capacity. Degussa has plants in Belgium, West Germany, and the United States; Rhone-Poulenc has plants in France and a **-percent ownership of a plant in Brazil. In addition, Rhone-Poulenc has licensed its technology to producers in Mexico, Spain, and the U.S.S.R. Monsanto, the sole producer of the hydroxy analog, has its production facilities in Texas.

Information concerning French production, capacity, and shipments of DL-methionine is presented in table 2. The United States, as shown in the table, accounted for ** to *** percent of total French shipments during 1982-84.


```
* * * * * * * *
```

Rhone-Poulenc advises that demand for DL-methionine worldwide is expected to increase at a rate of 9 percent per year, whereas the U.S. market is projected to grow at an annual rate of 5 percent. Rhone-Poulenc states that it already has significant export sales to countries other than the United States. It expects to **.

1/ Telephone conversations between Cynthia Trainor of the Commission's staff and officials at Du Pont.
U.S. Importers

Beginning in *, Rhone-Poulenc, Inc., a U.S. subsidiary of the French producer, *, the largest importers, in addition to Rhone-Poulenc, were Nutrius Inc., and Mitsui & Co. (U.S.A.), Inc., as shown in the following tabulation (in percent):

* * * * * * * * * *

Nutrius and Mitsui * * *. Mitsui, a large Japanese trading company, is a distributor of DL-methionine in the United States. Nutrius, a wholly owned subsidiary of Mitsui, is a blender/distributor of animal feed ingredients. The firm sells about * * percent of its DL-methionine directly to poultry producers; the remaining * * percent it mixes with other feed ingredients, such as vitamins, and sells to poultry producers. Although Mitsui and Nutrius * * *,

Consideration of Material Injury

U.S. producers' capacity and production

The Degussa plant in Theodore, AL, has a nameplate capacity of * * pounds a year. The plant's practical annual capacity is * * pounds (table 3). During shorter periods, Degussa can run its plant at * * pounds a year, or * * pounds a quarter. The plant's capacity has * * *

Table 3.—DL-methionine and the hydroxy analog: U.S. production, capacity, and capacity utilization, by firms, 1982-84, January-March 1984, and January-March 1985

* * * * * * * * * *

Degussa's production of DL-methionine * * from * * pounds in 1982 to * * pounds in 1983, or by * * percent. The company's production then * * to * * pounds in 1984, or * * percent the level of production in 1982. Production * * in 1985 * * by * * percent in January-March 1985 compared with the level in the corresponding period of 1984. Degussa utilized * * percent of its practical capacity in 1982, * * percent in 1983, and * * percent in 1984. Utilization of capacity * * percentage points in January-March 1985, compared with the level of utilization during the corresponding period of 1984.

With the opening of its new hydroxy analog plant in Chocolate Bayou, TX, in 1984, Monsanto's capacity to produce the hydroxy analog increased from * * pounds in 1982 to * * pounds in 1984. Monsanto's production * * during the period, from * * pounds in 1982 to * * pounds in 1984. In January-March 1985, its production * * percent compared with the level of production during the corresponding period of 1984. Monsanto utilized * * *
percent and *** percent of its productive capacity in 1982 and 1983, respectively. With the opening of its new plant, utilization *** percent in 1984.


From 1982 to 1984, total U.S. capacity to produce DL-methionine and the hydroxy analog *** by *** percent and total production of these two products *** by *** percent. Total production *** percent during the January-March periods.

**U.S. producers' shipments**

Degussa's domestic shipments of DL-methionine *** percent from 1982 to 1984 and by *** percent during the January-March periods (table 4). Degussa's exports of DL-methionine accounted for *** percent of its total shipments during 1982-84 and went primarily to ***. In 1984, ***.

Table 4.—DL-methionine and the hydroxy analog: U.S. producers' domestic shipments and exports, by firms, 1982-84, January-March 1984, and January-March 1985

| * | * | * | * | * | * | * | * | * |

Domestic shipments of the hydroxy analog produced by Monsanto *** during 1982-84. During the January-March periods, such shipments *** by *** percent.

Total U.S. producers' shipments of DL-methionine and the hydroxy analog combined *** by *** percent from 1982 to 1983, ***; then *** and by *** percent from 1983 to 1984. Total shipments *** by *** percent during the January-March periods.

**U.S. producers' inventories**

Degussa holds inventory of DL-methionine in *** warehouses throughout the United States. Its yearend inventory *** from *** percent of shipments in 1982 to *** percent in 1984 and then *** to *** percent of annualized shipments during January-March 1985 (table 5).

Table 5.—DL-methionine and the hydroxy analog: U.S. producers' inventories and shipments, by firms, 1982-84, January-March 1984, and January-March 1985

| * | * | * | * | * | * | * | * | * |

Total inventories of DL-methionine and the hydroxy analog combined *** from *** percent of shipments in 1982 to *** percent in 1984 and to *** percent of annualized shipments in January-March 1985.
Employment

Degussa employs the same number of workers at its DL-methionine plant whether it operates at full capacity or at lower levels of capacity. ***. Degussa employed an average of ** workers in its methionine operations in 1982 and ** in 1984. (table 6). During the January-March periods, it employed ** workers. Total compensation for the Degussa workers, who are not unionized, ** from $** per hour in 1982 to $** per hour in January-March 1985, or by ** percent. **.

Table 6.—Average number of production and related workers engaged in the manufacture of DL-methionine or the hydroxy analog, hours worked by such workers, wages paid, and total compensation, by firms, 1982-84, January-March 1984, and January-March 1985

In 1982, Monsanto employed an average of ** workers at its West Virginia hydroxy analog plant. In January 1984, it opened its Texas plant, **. **. During January-March 1985, Monsanto employed ** workers **. The productivity of Monsanto's workers, as measured by tons produced per hour, ** from ** tons per hour in 1982 to ** tons per hour in January-March 1985.

Financial experience of U.S. producers

Both U.S. producers furnished useable income-and-loss data on their DL-methionine (Degussa) or hydroxy analog (Monsanto) operations. Their financial experience on these products is presented both separately and in aggregate in this section.

The two firms' aggregate sales ** from $** in 1982 to $** in 1983 (representing a ** of ** percent), then ** by ** percent to $** in 1984 (table 7). During the interim periods ended March 31, aggregate sales were ** from $** in 1984 to $** in 1985, or by ** percent. **. The average unit values of each producer's sales are shown as follows (per pound, equimolar basis):

Degussa's average unit value of sales ** by ** percent from 1983 to interim 1985, and Monsanto's ** by ** percent.
Table 7.—Income-and-loss experience of U.S. producers on their operations on DL-methionine or the hydroxy analog, by firms, accounting years 1982–84 and interim periods ending Mar. 31, 1984, and Mar. 31, 1985

Aggregate gross income margins for the two firms ** from *** percent in 1982 to *** percent in 1983, then *** to *** percent in 1984. During the interim periods ended March 31, their aggregate gross income margins *** from *** percent in 1984 to *** percent in 1985. However, there is ***, as shown in table 7.

The difference in gross income margins between the two firms is accounted for, in part, by ***, as shown in the following tabulation (per pound, equimolar basis):

Degussa recently **.

The pattern of operating income or (loss) margins is similar to that of the gross margins. Aggregate operating margins ** from *** percent in 1982 to *** percent in 1983, but *** percent in 1984 and *** percent in interim 1985. Monsanto reported *** in all 3 years during 1982–84 and in both interim periods. Degussa reported **. The differences in operating margins between the two producers ***, as shown in table 7, and are the result of Monsanto's **. Such expenses ***, are shown in the following tabulation (per pound, equimolar basis):

Monsanto reported material nonrecurring expenses in *** in connection with the closing of its liquid hydroxy analog operations in West Virginia and the startup of its new facility in Texas. The effects of these nonrecurring costs on Monsanto's operating loss margins were as follows:

Capital expenditures

During January 1982–March 1985, Degussa and Monsanto spent $*** in capital expenditures on DL-methionine and the hydroxy analog (table 8). The bulk of these expenses were ***.
The Question of Threat of Material Injury

Consideration factors

In its examination of the question of a reasonable indication of the threat of material injury to an industry in the United States, the Commission may take into consideration such factors as the rate of increase of the alleged LTFV imports, the rate of increase of U.S. market penetration by such imports, quantities of such imports held in inventory in the United States, and the capacity of the foreign producers to generate exports (including the availability of export markets other than the United States).

Trends in imports and U.S. market penetration are discussed in the section of this report that addresses the causal relationship between the alleged injury and the imports which are allegedly sold at LTFV. Available information regarding the capacity of the foreign producers to generate exports is presented in the section on the foreign industry.

Inventories held by importers

Three firms * * * U.S. imports of animal feed grade DL-methionine from France in 1984 provided the Commission with information concerning their inventories of this product. This information is presented in table 9.


The Question of the Causal Relationship Between the Alleged
LTFV Sales and the Alleged Injury

U.S. imports

Imports of animal feed grade DL-methionine enter under item 425.0420 of the Tariff Schedules of the United States Annotated (TSUSA). Imports under this item also include L-methionine and U.S.P. and N.F. grade DL-methionine. According to counsel for the French producer, all of the merchandise entered under this item from France is animal feed grade DL-methionine. The bulk of the imports under this item from West Germany and Japan is L-methionine. There are no known imports of the hydroxy analog.

Total imports of methionine increased from 24.8 million pounds in 1982 to 26.1 million pounds in 1983 before decreasing to 23.6 million pounds in 1984,
representing a decrease of 5 percent compared with the level of imports in 1982 (table 10).

Table 10.—Methionine: U.S. imports, by principal sources, 1982-84, January-March 1984, and January-March 1985

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<tbody>
<tr>
<td></td>
<td>Value (1,000 dollars)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>27,789</td>
<td>29,560</td>
<td>23,403</td>
<td>7,033</td>
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<tr>
<td>West Germany</td>
<td>1,084</td>
<td>2,202</td>
<td>635</td>
<td>149</td>
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<tr>
<td>Japan</td>
<td>785</td>
<td>1,266</td>
<td>1,435</td>
<td>399</td>
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<tr>
<td>All other</td>
<td>137</td>
<td>629</td>
<td>203</td>
<td>41</td>
</tr>
<tr>
<td>Total</td>
<td>29,795</td>
<td>33,812</td>
<td>25,694</td>
<td>8,584</td>
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<tbody>
<tr>
<td></td>
<td>Value (1,000 pounds)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>France</td>
<td>24,209</td>
<td>24,127</td>
<td>22,913</td>
<td>7,033</td>
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<tr>
<td>West Germany</td>
<td>371</td>
<td>1,167</td>
<td>323</td>
<td>149</td>
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<tr>
<td>Japan</td>
<td>125</td>
<td>149</td>
<td>165</td>
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<tr>
<td>All other</td>
<td>105</td>
<td>629</td>
<td>203</td>
<td>41</td>
</tr>
<tr>
<td>Total</td>
<td>24,810</td>
<td>26,072</td>
<td>23,603</td>
<td>7,262</td>
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<tbody>
<tr>
<td></td>
<td>Percent of total quantity</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>France</td>
<td>98</td>
<td>93</td>
<td>97</td>
<td>97</td>
</tr>
<tr>
<td>West Germany</td>
<td>1</td>
<td>4</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Japan</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>All other</td>
<td>17</td>
<td>2</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

1/ Less than 0.5 percent.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.—Because of rounding, figures may not add to the totals shown.

France is the largest foreign supplier of methionine in the United States, accounting for 97 percent of total imports in 1984. Imports from France decreased steadily from 24.2 million pounds in 1982 to 22.9 million pounds in 1984, representing a decline of 5 percent in 2 years. Such imports continued to decrease in 1985, falling from 7.0 million pounds in January-March 1984 to 6.1 million pounds during the corresponding period of 1985, or by 13 percent.

In 1984, the customs districts of New Orleans, Savannah, and Baltimore, accounted for the bulk of U.S. imports of methionine from France, as shown in the following tabulation (in percent):
Reexports of animal feed grade DL-methionine by importers of the French product were **. These reexports went primarily to **. In addition, Rhône-Poulenc reported that its customers reexported an additional **.

Degussa's share of the U.S. DL-methionine market ** during the period, ** from ** percent in 1982 to ** percent in 1984 (table 11). The firm's share of the market in January-March 1985 was ** percentage points ** than in the corresponding period of 1984. The share of the DL-methionine market held by imports from France ** from ** percent in 1982 to ** percent in 1984. In January-March 1985, the share held by French imports was ** percentage points ** the share the imports held in the corresponding period of 1984.


<table>
<thead>
<tr>
<th>Customs district</th>
<th>Share of total imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Orleans, LA</td>
<td>46</td>
</tr>
<tr>
<td>Savannah, GA</td>
<td>15</td>
</tr>
<tr>
<td>Baltimore, MD</td>
<td>15</td>
</tr>
<tr>
<td>Charleston, SC</td>
<td>11</td>
</tr>
<tr>
<td>Los Angeles, CA</td>
<td>8</td>
</tr>
<tr>
<td>San Francisco, CA</td>
<td>3</td>
</tr>
<tr>
<td>Subtotal</td>
<td>98</td>
</tr>
<tr>
<td>All other</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
</tr>
</tbody>
</table>

U.S. producers' share of the combined DL-methionine and hydroxy analog market ** from ** percent in 1982 to ** percent in 1984. The share held by U.S. producers ** by ** percentage points during the January-March periods. Monsanto **. Its share ** from ** percent in 1982 to ** percent in January-March 1985. Imports from France accounted for a ** portion of the combined market during the period, ** from ** percent in 1982 to ** percent in 1984. This share ** in January-March 1985, when it was ** percentage points ** the share in the corresponding period of 1984.

Prices

Pricing policies.—Prices of DL-methionine and the hydroxy analog are quoted on a delivered basis. Delivered prices cover freight costs to any point in the United States east of the Rockies. Prices are higher on the west coast due to higher transportation costs. 1/

1/ Meetings with Mr. Greg Metzler, marketing manager at Degussa, and telephone conversations with counsel for Degussa.
Sales of CL-methionine are made on both a spot and a contract basis, with ** percent of sales made under contract in recent years. 1/ Contracts are a recent phenomenon in this market, increasing significantly since 1983. 2/ Contracts between buyers and sellers are typically supply contracts, which guarantee the buyer a certain supply of material over the life of the contract. Under such contracts, prices are guaranteed by the sellers not to increase for a period of 30 days. In most cases, selling prices are negotiated for each shipment, in particular since the decline in market prices that started in 1983. The inclusion of "meet or release" clauses in these contracts is common, providing that during the term of the contract, if the buyer is able to purchase a particular shipment or order from another source at a lower price, the seller must either meet the lower price or release the buyer from its obligation to purchase that particular order. Supply contracts generally last from 1 to 3 years. 3/

The domestic producers and the importers market DL-methionine and the hydroxy analog either through distributors, commissioned salesmen, independent feed dealers, or through their own sales personnel. Individual shipments range from 500 to 190,000 pounds, 4/ and prices generally tend to be lower for large shipments.

Nonprice incentives are also prevalent in the market for DL-methionine and the hydroxy analog. Chief among these promotion practices are the provision of free goods. Contracts frequently specify conditions under which a customer may receive free goods. Typically, DL-methionine or the hydroxy analog is provided without charge after the customer has taken delivery of a specified quantity at the contracted price. Because provision of free goods effectively reduces the unit cost to the customer, this practice may also be used to meet competitive offers without formally reducing the price. 5/

In addition to free DL-methionine and hydroxy analog, all firms have provided their customers with free engineering advice, low-interest loans, and free bulk chemical handling equipment. Degussa, for example, in its 1984 annual report stated that the firm had "custom designed and supervised installation of more than 100 bulk handling facilities in the U.S." 6/

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1/ Ibid.
2/ See transcript p. 46.
3/ Meetings with Mr. Greg Metzler, and telephone conversations with counsel for Degussa.
4/ Petition, p. 5.
5/ For example, free goods accounted for ** percent of Monsanto's total shipments of hydroxy analog in 1983, and ** percent in 1984. Additionally, ** percent of total 1983 free goods were shipped in ** of that year, with additional large shipments in **.
6/ Questionnaire respondents reported that it is not possible for them to accurately reflect the value of free services and equipment in the pricing data provided to the Commission.
Market structure.—According to parties to the investigation, there is a substantial imbalance between world supply and demand for this product. Petitioners claim that this situation has created pressure on foreign producers to attempt to increase sales in the United States. 1/ Petitioners also state that as the product has become a commodity item, price has become the most important factor in buyers' decisions to buy from one source or the other. 2/ According to respondents, however, rapidly declining prices are due to the supply/demand imbalance created by expansion of capacity by U.S. producers of both DL-methionine and the hydroxy analog. 3/ Nevertheless, parties agree that the market is intensely price competitive, and that customers quickly learn of price changes. Degussa stated in an interview with the Commission staff that price information is disseminated very rapidly via what was termed "chicken talk" media (personal contacts among chicken growers). 4/

Price comparisons.—The Commission requested the domestic DL-methionine producer, Degussa, and the three importers (Rhone-Poulenc, Nutrius, and Mitsui) to provide the Commission with data concerning their delivered prices 5/ on their sales to their largest customers of the dry and liquid DL-methionine, by month, for the period January 1983 through March 1985. The Commission also requested Monsanto, the producer of the hydroxy analog, to provide similar price data on sales of that product. 6/

During the staff conference, Degussa emphasized the differences between DL-methionine and the hydroxy analog, stating that, "Monsanto's MHA [hydroxy analog] product is chemically similar but very different..." and that, "there are some applications for which the two products are not readily interchangeable." 7/ In contrast, Rhone-Poulenc maintained that the hydroxy analog is—

1/ Petition, pp. 5 and 6.
2/ Petition, p. 3.
3/ Transcript, e.g., p. 58.
4/ Conversation with Mr. Metzler.
5/ Parties were also requested to provide f.o.b. price data. It was subsequently determined that prices are normally quoted on a delivered basis and that reported f.o.b. prices were constructed from the delivered prices.
6/ Each firm accounted differently for the effect of free goods on its prices. Rhone-Poulenc adjusted its prices when such goods were earned. Degussa averaged the cost over the life of each contract. Monsanto did not adjust prices it reported for sales to individual customers. The prices discussed in this section are the weighted-average for sales to all Monsanto customers. Monsanto adjusted these prices in the months in which free goods were actually shipped.
7/ Transcript, pp. 17 and 18.
interchangeable in use with the DL-methionine. Each product, MHA and DL-methionine, is used in overwhelming proportions as an additive to animal feed, primarily in the poultry arena. That MHA competes with DL-methionine cannot be seriously doubted by anyone in the U.S. market. Monsanto's pricing of MHA over the last several years has forced U.S. prices down generally. 1/

Testimony by parties established that there is no general agreement regarding the factor by which hydroxy analog prices should be adjusted before comparison with DL-methionine prices. Monsanto publicly claims that the bioefficacy 2/ of its hydroxy analog product is equal to that of DL-methionine on an equimolar basis (or 86-88 percent as effective on a pound-for-pound basis). Degussa and Rhone-Poulenc claim that, in reality, the factor should be as low as 70 percent on a pound-for-pound basis. Rhone-Poulenc, however, also states that the market has largely accepted the Monsanto claims. Because of these conflicting viewpoints, Degussa's DL-methionine and Monsanto's prices of the hydroxy analog are discussed separately. 3/ Margins of underselling/overselling were calculated using Degussa's prices only.

Prices of the dry forms.—Dry DL-methionine represents *** percent of Degussa's sales in the U.S. market and *** of Rhone-Poulenc's sales (*** percent), whereas Monsanto's sales consist of *** percent dry and *** percent liquid. 4/

The major suppliers of DL-methionine and the hydroxy analog provided price data for the entire period covered by the investigation. 5/ Prices of both DL-methionine and the hydroxy analog followed a generally declining trend starting in mid-to-late 1983. Testimony at the conference confirmed this decline and indicated it was coincidental with the increase in hydroxy analog production by Monsanto, and announcements by that firm of lower prices. 6/ Monsanto sent a letter to its customers in September 1983 claiming credit for declining market prices, and also announcing price reductions of an additional 17 to 19 percent. In March 1985, Monsanto again announced price reductions to about $0.78 per pound on an equimolar basis at a time when other suppliers' prices were $*** to $*** per pound (app. C.). As shown in table 12, Degussa's prices *** from $*** per pound in *** to $*** per pound in ***, or by *** percent. Thereafter, prices *** in ***, representing a *** of ** percent. Importers' average prices ***, *** by *** percent, from $*** per pound in ** to $*** per pound in ***, then *** (by *** percent) to $*** per pound in ***.

1/ Transcript, pp. 73 and 74.
2/ The efficiency of the animal in converting the product to an amino acid.
3/ Monsanto provided the price data in this section on an equimolar basis.
4/ All firms reported prices for both the liquid and dry forms on a dry-weight basis.
5/ Nutrius and Mitsui provided data ***.
6/ Transcript, p. 39.
Table 12.—Dry DL-methionine and the hydroxy analog: Domestic producers' and importers' prices, and imports margins of underselling/overselling, by months, January 1983–March 1985

* * * * * * * *

Imports undersold Degussa's product in 9 of the 27 months for which data were available by margins ranging from 1 percent to 6 percent. In the remaining 18 months, import prices were equal to or higher than Degussa's prices by 1 percent to 6 percent. 1/

Monsanto's average prices to all customers for the dry hydroxy analog ***, from $*** per pound in *** and $*** per pound in ***. Thereafter, prices *** by *** percent to $*** per pound in ***. On an equimolar basis, Monsanto's prices were equal to or lower than Degussa's DL-methionine prices in 18 of 27 periods.

Prices of the liquid forms.—As shown in table 13, Degussa provided price data covering each month of the period of investigation; Rhone-Poulenc provided data covering only 17 months of the 27 months for which data were request ed. Degussa's prices *** by *** percent from $*** per pound in *** to $*** per pound in ***. Thereafter, prices *** by *** percent to $*** per pound in ***.

Table 13.—Liquid DL-methionine and the hydroxy analog: Domestic producers' and importers' prices, and imports' margins of underselling/overselling, by months, January 1983–March 1985

* * * * * * * *

Import prices *** from $*** per pound in *** to $*** per pound in ***, representing a *** of *** percent. Imports undersold the domestic product in 6 of the 17 months for which data were available by margins ranging from 2 percent to 6 percent. In the remaining 11 months, import prices were equal to or higher than domestic prices by 1 percent to 20 percent.

Monsanto's average prices of the liquid hydroxy analog, on a dry-weight equimolar basis, *** from $*** per pound in *** to $*** per pound in ***, representing a *** of *** percent. Monsanto's prices for liquid hydroxy analog were lower than Degussa's prices for liquid DL-methionine in 20 of 27 periods, and were also lower than prices for dry DL-methionine in 16 of 27 periods.

1/ Because of the several methods used by respondents to the questionnaire in adjusting prices for free goods, comparisons of prices in specific months may not be meaningful. Degussa's adjustment method has the effect of eliminating some of the price fluctuation, while Rhone-Poulenc's adjustments cause prices to appear lower when free goods were earned and higher in other periods. Monsanto's price adjustments substantially lowered its reported prices in those periods when free goods were actually shipped. Most notable of these were in ***.
Freight costs

Degussa stated that imports do not enjoy a freight advantage over the domestic product, and that freight costs are not a factor that affects price competitiveness. Freight costs reportedly range from *** cents to *** cents per pound for delivery to the mid-Atlantic and Southern States, *** cents to *** cents per pound to New England and the Midwest, and *** cents per pound to California.

Exchange rates

The value of the U.S. dollar appreciated steadily relative to the French franc during January 1983-December 1984 by approximately 26 percent in nominal terms and by 12 percent in real terms (table 14).

Table 14.—Indexes of nominal and real exchange rates between the U.S. dollar and the French franc, by quarters, January 1983-March 1985

(January-March 1983=100)

<table>
<thead>
<tr>
<th>Period</th>
<th>Nominal exchange rates</th>
<th>Real exchange rates 1/</th>
</tr>
</thead>
<tbody>
<tr>
<td>January-March</td>
<td>100.00</td>
<td>100.00</td>
</tr>
<tr>
<td>April-June</td>
<td>92.20</td>
<td>95.57</td>
</tr>
<tr>
<td>July-September</td>
<td>86.52</td>
<td>92.12</td>
</tr>
<tr>
<td>October-December</td>
<td>84.32</td>
<td>92.58</td>
</tr>
<tr>
<td>1984:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>January-March</td>
<td>82.92</td>
<td>93.21</td>
</tr>
<tr>
<td>April-June</td>
<td>82.66</td>
<td>94.21</td>
</tr>
<tr>
<td>July-September</td>
<td>76.87</td>
<td>90.34</td>
</tr>
<tr>
<td>October-December</td>
<td>73.56</td>
<td>88.04</td>
</tr>
<tr>
<td>1985:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>January-March 2/</td>
<td>71.02</td>
<td>3/</td>
</tr>
</tbody>
</table>

1/ The real exchange rate index was obtained by deflating the nominal index by relative producers' prices.
2/ Data are for January-February 1985.
3/ Not available.


Lost sales and price depression

In its questionnaire response, Degussa provided the Commission with a list of *** contract customers of DL-methionine it allegedly lost in *** to low-priced imports from France. In addition, Degussa supplied information concerning the loss of *** spot sales. The alleged lost business, which included quantities to be delivered on long-term contracts of up to 24 months duration, totaled *** pounds. Degussa reported that its allegations were only a partial list of the major lost sales. The company stated that in early 1984 it adopted a policy of meeting market prices in order to retain its customers. Degussa listed *** instances involving *** customers in which it
was forced to reduce its prices of DL-methionine in order to avoid losing a sale to low-priced imports from France.

Monsanto ***, it reported that—

Monsanto provided the Commission with information concerning ** instances involving *** customers in which it was forced to reduce its prices of the hydroxy analog in order to avoid losing business to imports of DL-methionine from France.

The Commission contacted 11 customers that were cited as either lost sales customers or price suppression customers. Details of these customers purchases of DL-methionine and the hydroxy analog are presented below.

***——*** alleged that it lost a sale to *** in ***. This sale involved a *** pounds of ***. *** stated that *** rejected its offer of $*** per pound (****) in favor of lower-priced imports from France.

Although *** would not discuss the specifics of its contract negotiations, it did indicate that it now purchases the French product at prices that are comparable with prices offered by Degussa. *** further stated that at any given time one supplier or another may be the lowest priced supplier. This purchaser feels that, in the long run, the prices of all the suppliers usually even out.

***——*** alleged that in *** it lost a sale to *** of *** pounds of ***. *** offered to sell *** at $*** per pound ***. According to ****, the French won the business with an offer of $*** per pound.

The *** buyer at ***. *** it reported that in ****, Rhone-Poulenc offered *** a contract which provided that Rhone-Poulenc would sell DL-methionine to *** at the market prices that would be in effect at the time of shipment.

According to ****, in ****, *** offered this customer a contract at $*** per pound. *** advised that ***'s offer was $0.20 below Degussa's current price. During this same period, Monsanto also offered *** a long-term contract for the hydroxy analog. *** did not provide information concerning the terms of Monsanto's offer.

***. This purchaser reported that the recent prices offered by Rhone-Poulenc "were in response to price offerings that had become common knowledge to the poultry industry." *** further stated that Rhone-Poulenc would not lower its prices until it could confirm that more than one account had been offered the lower prices.

***——*** alleged that in ****, *** awarded a contract to Rhone-Poulenc for *** pounds of ***. Rhone-Poulenc's winning bid, according to ****, was for $*** per pound. In comparison, ***'s losing bid was $*** per pound.
The DL-methionine purchaser for *** reported that in ***, it signed a ***-year contract with Rhone-Poulenc because it offered the lowest price. The purchaser advised that ***, he felt that the low prices of Monsanto's liquid hydroxy analog are currently driving down the prices of DL-methionine.

***.---*** alleged that in ***, it was forced to reduce its price of ***, to ***, in order to avoid losing a sale of *** pounds. In its allegation, *** stated that, in order to obtain the sale, it reduced its price from $*** per pound to $*** per pound, matching the French quotation.

*** is a ***. It ***, In ***, it purchased, ***, about *** pounds of ***. A spokesman for *** did not discuss the specific allegation cited above. However, he stated that there have been only 2 or 3 instances in which a supplier has lowered its price in order to remain competitive.

*** reported that it has purchase contracts with ***. Its largest supplier is ***. *** signed a supply contract with Rhone-Poulenc in ***, after examining bids from each of the three suppliers. A spokesman for *** stated that Rhone-Poulenc won the business because it offered ***. In addition, the spokesman advised that *** selected Rhone-Poulenc because the French firm sells a variety of feed ingredients other than methionine. *** stated that each of the three bids for the *** contract were very close. *** made its award only after evaluating some very minor difference in the terms offered by the three bidders.

***.---*** alleged that in ***, it was not able to obtain a ***-year contract to supply *** with ***, because of low-priced imports from France. According to ***'s allegation, Rhone-Poulenc won the ***-pound contract when it offered to sell *** DL-methionine for $*** per pound ***. ***'s losing offer was for $*** per pound for ***. *** is ***. ***

*** stated that Rhone-Poulenc won the ***-year contract in *** for about *** pounds of *** DL-methionine because it offered the lowest price. However, *** felt that Degussa and Monanto were ***. ***.

*** advised that after it entered into the contract with Rhone-Poulenc, Degussa and Monsanto offered product at low prices ***. As a consequence, *** has frequently requested Rhone-Poulenc to lower its prices. *** asserted that Monsanto is currently the price leader in this market.

***.---***. *** alleged that in ***, it was not able to sell *** pounds of *** to *** for $*** per pound because the company brought the French product for $*** per pound instead. In addition, ***.

*** has a supply contract with ***, effective ***. This firm's contract with Degussa has a "meet or release" clause that allows it to purchase an order from another supplier at a lower price, if Degussa does not meet the price. A spokesman for the firm stated that price is the most important factor it takes into consideration when selecting a supplier in this
market. As a consequence, *** buys its requirements from whichever supplier offers the lowest price. *** did not provide information concerning ***, and it did not state which supplier offers the lowest prices in the market.

*** alleged that in ***, it was forced to reduce its price of *** in order to obtain a ***-year contract to sell *** pounds to ***. *** reported that in order to obtain this business it lowered its original bid from $*** per pound to $*** per pound, meeting the French price.

A spokesman for *** did not provide any information concerning its contract with ***, He stated that since the contract expired ***, his firm has been buying DL-methionine on a spot basis. The firm will continue to buy spot for the time being because prices are changing so rapidly. *** advised that the prices offered by the three major suppliers in the market are very close. As a consequence, the company stated that it frequently selects a supplier on the basis of which salesman it likes.

*** provided information concerning *** instances in which it alleged that, because of low-price imports of DL-methionine from France, it was forced to reduce its prices of *** in order to avoid losing sales to ***. These allegations involved a total of *** pounds purchased during ***,

*** stated that it has a contract to purchase liquid hydroxy analog from Monsanto. The firm did not provide any information concerning its contract and did not discuss the allegations cited above with the Commission staff.

*** alleged that it was forced to reduce its prices *** times in ***, in order to sell *** to ***, These allegations involved a total of *** pounds purchased during ***,

A company spokesman stated that *** has a contract with Monsanto. However, he did not provide information concerning the contract or the allegations of price depression cited above.

*** alleged that during ***, because of low-priced imports from France, it was forced to reduce its prices of ***, *** times in order to avoid losing sales to ***, These *** allegations involved a total of *** pounds of ***,

*** currently has a contract with *** that was signed in ***, *** stated that it has a policy to purchase only U.S.-produced products. Thus, only Degussa and Monsanto participated in bidding for the *** contract. *** awarded the contract to Monsanto because "no one can touch its price." A spokesman for *** also stated that the firm was pleased with ***'s service and with the performance of the product.

*** did not discuss the specific instances of price depression cited by ***. However, ***, it stated ***—
never been approached by an official from Rhone-Poulenc regarding under market prices. In fact I have never been able to do business with them because they were not competitive [sic] in their pricing.

***---*** provided the Commission with allegations concerning *** instances during *** in which it was forced to reduce its prices of *** because Rhone-Poulenc offered to sell low-priced DL-methionine from France to ***. These *** allegations involved a total of *** pounds of the product.

In ***, *** supplied *** with *** equipment in return for a contract to purchase *** from ***. In ***, it negotiated another contract with ***. Since this contract ran out in ***, *** has been buying *** on a spot basis.

*** reports that Monsanto has "continuously" lowered its prices in order to match prices offered by competitors. *** also reported, however, that it would be difficult for it to switch from liquid hydroxy analog to liquid DL-methionine because it has equipment that is suitable to be used only with the liquid hydroxy analog.
APPENDIX A

THE FEDERAL REGISTER NOTICES
Injury, or the establishment of an industry in the United States is materially retarded, by reason by imports from France of animal feed grade DL-methionine, provided for in item 2504 of the Tariff Schedules of the United States, which are alleged to be sold in the United States at less than fair value. As provided in section 733(a), the Commission must complete preliminary antidumping investigations in 45 days, or in this case by May 20, 1985.


Effective Date: April 3, 1985.


Supplementary Information:

Background

This investigation is being instituted in response to a petition filed on April 3, 1985 by Degussa Corp., a U.S. producer of animal feed grade DL-methionine.

Participation in the Investigation

Persons wishing to participate in this investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in § 201.11 of the Commission's rules (19 CFR 201.11), not later than seven (7) days after publication of this notice in the Federal Register. Any entry of appearance filed after this date will be referred to the Chairman, who will determine whether to accept the late entry for good cause shown by the person desiring to file the entry.

Service List

Pursuant to § 201.11(d) of the Commission's rules (19 CFR 201.11(d)), the Secretary will prepare a service list containing the names and addresses of all persons, or their representatives, who are parties to this investigation upon the expiration of the period for filing entries of appearance. In accordance with § 201.16(c) of the rules (19 CFR 201.16(c), as amended by 49 FR 32589, Aug. 15, 1984), each document filed by a party to the investigation must be served on all other parties to the investigation (as identified by the service list), and a certificate of service must accompany the document. The Secretary will not accept a document for filing without a certificate of service.

Conference

The Director of Operations of the Commission has scheduled a conference in connection with this investigation for 9:30 a.m. on April 26, 1985 at the U.S. International Trade Commission Building, 701 E Street NW, Washington, DC. Parties wishing to participate in the conference should contact Abigail Eltzroth (202-523-0289) not later than April 24 to arrange for their appearance. Parties in support of the imposition of antidumping duties in this investigation and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference.

Written Submissions

Any person may submit to the Commission on or before April 30 a written statement of the information pertinent to the subject of the investigation, as provided in § 207.15 of the Commission's rules (19 CFR 207.15). A signed original and fourteen (14) copies of each submission must be delivered with the Secretary to the Commission in accordance with § 201.8 of the rules (19 CFR 201.8, as amended by 49 FR 32589, Aug. 15, 1984). All written submissions except for confidential business data will be available for public inspection during regular business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary to the Commission.

Any business information for which confidential treatment is desired must be submitted separately. The envelope and all pages of such submissions must be cleared labeled "Confidential Business Information." Confidential submissions and requests for confidential treatment must conform with the requirements of § 201.6 of the Commission's rules (19 CFR 201.6, as amended by 49 FR 32589, Aug. 15, 1984).

Authority

This investigation is being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to § 207.12 of the Commission's rules (19 CFR 207.12).


By order of the Commission.

Kenneth R. Mason,
Secretary.
Notice

DEPARTMENT OF COMMERCE

International Trade Administration

(A-427-603)

Animal-Food Grade DL-Methionine From France; Initiation of Antidumping Duty Investigation

AGENCY: International Trade Administration, Import Administration, Commerce.

ACTION: Notice.

SUMMARY: On the basis of a petition filed in proper form with the United States Department of Commerce, we are initiating an antidumping duty investigation to determine whether imports of animal-food grade DL-Methionine (DLM) from France are being, or are likely to be, sold in the United States at less than fair value. We are notifying the United States International Trade Commission (ITC) of this action so that it may determine whether imports of this product are causing material injury, or threaten material injury, to a United States industry. If this investigation proceeds normally, the ITC will make its preliminary determination on or before May 8, 1985, and we will make our own determination on or before September 11, 1985.


FOR FURTHER INFORMATION CONTACT:

SUPPLEMENTARY INFORMATION: The Petition

On April 4, 1985, we received a petition in proper form filed by Degussa Corporation. In compliance with the filing requirements of § 353.36 of the Commerce Regulations (19 CFR 353.36), the petition alleged that imports of the subject merchandise from France are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Tariff Act of 1930, as amended (the Act), and that these imports are causing material injury, or threaten material injury, to a United States industry.

The petitioner based the United States price on actual sales and offers for sale of DLM, to U.S. purchasers, less U.S. and ocean freight, insurance, U.S. and French handling, distribution's discount, and U.S. Customs duties. The petitioner based the foreign market value on actual sale prices to French purchasers, less warehousing and handling.

By comparing the values calculated by the foregoing method, the petitioner alleged dumping margins ranging from 43 to 83 percent.

Initiation of Investigation

Under section 752(c) of the Act, we must determine, within 20 days after a petition is filed, whether it sets forth the allegations necessary for the initiation of an antidumping duty investigation and whether it contains information reasonably available to the petitioner supporting the allegations.

We examined the petition on DLM and have found that it meets the requirements of section 752(b) of the Act. Therefore, in accordance with section 732 of the Act, we are initiating an antidumping duty investigation to determine whether imports of DLM from France are being, or are likely to be, sold in the United States at less than fair value. If our investigation proceeds...
normally we will make our preliminary determination by September 11, 1885.

Scope of Investigation

The product under investigation is animal-food grade DL-Methionine, currently classified in the Tariff Schedules of the United States, Annotated (TSUSA) under Item 425.0420.

Notification of ITC

Section 732(d) of the Act requires us to notify the ITC of this action and to provide it with the information we used to arrive at this determination. We will notify the ITC and make available to it all nonprivileged and nonconfidential information. We will also allow the ITC access to all privileged and confidential information in our files, provided it confirms that it will not disclose such information either publicly or under an administrative protective order without the consent of the Deputy Assistant Secretary for Import Administration.

Preliminary Determination by ITC

The ITC will determine by May 5, 1985, whether there is a reasonable indication that imports of DLM from France are causing material injury or threaten material injury to a United States industry. If its determination is negative the investigation will terminate; otherwise, it will proceed according to the statutory procedures. April 22, 1985.

Alan F. Holmer,
Deputy Assistant Secretary for Import Administration

[FR Doc. 85-10309 Filed 4-22-85; 8:45 am]
BILLING CODE 5110-06-M
APPENDIX B

WITNESSES AT THE COMMISSION'S CONFERENCE
Investigation No. 731-TA-255 (Preliminary)

ANIMAL FEED GRADE DL-METHIONINE FROM FRANCE

Those listed below appeared as witnesses at the United States International Trade Commission's conference held in connection with the subject investigation on April 26, 1985, in the Hearing Room of the USITC Building, 701 E Street, NW., Washington, DC.

In support of the imposition of antidumping duties

Wilmer, Cutler & Pickering—Counsel
Washington, DC
on behalf of—

Degussa Corp.

Gregory D. Metzler, Marketing Manager
Feed Additives Department, Chemicals Division
Degussa Corp.

John D. Greenwald )
Christopher Lipsett )—OF COUNSEL
Daniel Drory )

In opposition to the imposition of antidumping duties

Ablondi & Foster—Counsel
Washington, DC
on behalf of—

Rhone-Poulenc Inc.

Myron Segraves, General Manager
Commercial Operations, Feed Additives Division
Rhone-Poulenc Inc.

Louis J. Dye, President
Nutri-Scan Inc.

Italo H. Ablondi )
David Foster )—OF COUNSEL
Sturgis Sobin )
APPENDIX C

MONSANTO'S LETTERS
Dear Monsanto Customer:

For several years the real value of supplemented methionine sources has been exemplified by the growing worldwide customer preference for ALIMET® feed supplement over other sources. This value is further highlighted by the presence of our new ALIMET plant under construction and to be completed by year end. This plant, at Chocolate Bayou, Texas, will be the largest in the world for the production of a synthetic methionine source and will utilize raw material integration and innovative low-cost technology. It is literally the "state-of-the-art". We believe the pricing actions which have taken place for the past several years in the U.S. market, and particularly the past several months, are the direct result of the ALIMET success story and our new plant's presence.

While our new ALIMET plant is not yet onstream, we wish to begin providing evidence of the economic value it will bring to you, our customer. Therefore, effective immediately the prices for MHA® (methionine hydroxy analogue - calcium) and ALIMET feed supplement (methionine hydroxy analogue - liquid) are revised downward as follows:

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>CURRENT PRICE - $/LB.</th>
<th>9/1/83 PRICE - $/LB.</th>
<th>% DECREASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALIMET Bulk - Min. 40k lb. T/T</td>
<td>1.618</td>
<td>1.33</td>
<td>17.8</td>
</tr>
<tr>
<td>Drums or Semi-bulk tanks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Min. 24k lb. T/L</td>
<td>1.618</td>
<td>1.33</td>
<td>17.8</td>
</tr>
<tr>
<td>- Less than 24k lb. T/L</td>
<td>1.645</td>
<td>1.36</td>
<td>17.3</td>
</tr>
<tr>
<td>MHA Bulk - Min. 40k lb. T/L</td>
<td>1.507</td>
<td>1.24</td>
<td>17.7</td>
</tr>
<tr>
<td>Semi-bulk - Min. 24k lb. T/L</td>
<td>1.507</td>
<td>1.24</td>
<td>17.7</td>
</tr>
<tr>
<td>Semi-bulk - LTL</td>
<td>1.532</td>
<td>1.265</td>
<td>17.4</td>
</tr>
<tr>
<td>50 lb. bag - Min. 24k lb. T/L</td>
<td>1.532</td>
<td>1.24</td>
<td>19.1</td>
</tr>
<tr>
<td>50 lb. bag - LTL</td>
<td>1.557</td>
<td>1.265</td>
<td>18.8</td>
</tr>
</tbody>
</table>

All other terms and conditions of sale remain unchanged.

Very truly yours,

J. E. Drake
Product Manager, ALIMET/MHA

JED/cc
©Trademark of Monsanto Company
TO ALL PRICE BOOK HOLDERS...

Effective September 1, 1983, the price of MHA and ALIMET feed supplements will be adjusted as follows:

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>CURRENT PRICE $/LB.</th>
<th>9/1/83 PRICE $/LB.</th>
<th>% DECREASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALIMET</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bulk - Min. 40k lb. T/T</td>
<td>1.618</td>
<td>1.33</td>
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</tr>
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<td>18.8</td>
</tr>
</tbody>
</table>

All other terms and conditions of sale remain unchanged.

J. E. Drake
Product Manager, ALIMET/MHA

JED/ce
9/9/83

©Trademark of Monsanto Company
Dear Customer:

Effective March 1, 1985 Monsanto will reduce the prices of its ALIMET® and MHA® feed supplements according to the attached price schedule. This action is in keeping with Monsanto's commitment made to you five years ago to bring to the animal protein production industry the world's lowest cost source of synthetic methionine activity.

In December, 1979 Monsanto announced its intentions to construct at our Chocolate Bayou, Texas plant site the world's largest facility for the production of synthetic methionine activity. Today, this 130 million pound plant combines new, innovative, low cost technology together with raw material integration and economies of scale. During the past five years, the dramatic market acceptance of ALIMET, our liquid source of methionine activity, has made it the product of choice for methionine supplementation. Over 50% of the U.S. market currently uses a liquid methionine source and the volume is growing. In Canada, Europe, Latin America, Australia and South Asia the market acceptance of ALIMET is likewise growing.

Our ALIMET manufacturing facility has now been in operation for a year and our 1979 expectations have been more than confirmed. Performance is outstanding and our energy efficient, "state of the art" process and control technology is providing production costs below even our original expectations. The excellence of our ALIMET manufacturing operations is allowing us to provide customers a superior product at an exceptional value.

©Trademark of Monsanto Company
As the direct result of this outstanding plant performance, Monsanto is pleased to provide you with reduced prices for both its ALIMET and MHA® feed supplements. These prices are listed on the attached schedule.

We appreciate the opportunity to bring you this additional value and look forward to our future business relationship with your company.

Please contact your local Monsanto sales representative or sales office if you have any questions.

Very truly yours,

John E. Drake
Product Manager, ALIMET/MHA

JED/cc
Attachment
**PRICE SCHEDULE**

**ALIMET®/MHA® FEED SUPPLEMENTS**

**EFFECTIVE MARCH 1, 1985**

**Terms:** Net 30 days

**Delivery:** F.O.B. Alvin, Texas; Anniston, Alabama; Nitro, West Virginia; Fremont, California or at seller's option, other authorized Monsanto shipping points. Freight prepaid and allowed on minimum 2,000 lb. (net weight) shipments of ALIMET and MHA.

**Price:**

<table>
<thead>
<tr>
<th>Product</th>
<th>88% ALIMET (88% Activity)</th>
<th>97% MHA (86% Activity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bulk Tanktruck</td>
<td>$.70/lb.</td>
<td></td>
</tr>
<tr>
<td>Min. 40,000 lb.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-bulk Tank</td>
<td>$.72/lb.</td>
<td></td>
</tr>
<tr>
<td>Min. 2,000 lb.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>50 lb. Multiwall Paper Bags</td>
<td>$.685/lb.</td>
<td>$.705/lb.</td>
</tr>
<tr>
<td>Min. 24,000 lb. truckload</td>
<td></td>
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<tr>
<td>Min. 2,000 lb. LTL</td>
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<tr>
<td>2,000 lb. Semi-bulk Bags</td>
<td>$.685/lb.</td>
<td>$.705/lb.</td>
</tr>
<tr>
<td>Min. 24,000 lb. truckload</td>
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<tr>
<td>Min. 2,000 lb. LTL</td>
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</tbody>
</table>

1. The above prices are applicable to ALIMET and MHA shipments to all states within the continental United States except Arizona, California, Idaho, Nevada, Oregon, Utah and Washington. Add $.05/lb. for shipments to these states.

2. Mixed load shipments of Monsanto feed ingredient products are permitted to obtain minimum shipment quantity.